

SECTION 1: Identification

1.1. Identification

Product form : Mixtures
Trade name : KSC PHYT-ACTYL I
Name : KSC I PHYTACTYL
Product code : SALE01

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use : Fertilizers

1.3. Details of the supplier of the safety data sheet

Distributor

TIMAC Agro USA, INC
P.O. Box 888 - Route 724 & I-176
READING, - USA
T 1-800-545-5474
info-fds@roullier.com

Manufacturer

TIMAC Agro España S.A.
Polígono de Arazuri-Orcoyen, calle C, nº32
ORCOYEN (NAVARRA), 31160 - España
T +34 948 324 500 - F +34 948 324 032
info-fds@timacagro.es - www.timacagro.es

1.4. Emergency telephone number

Emergency number : USA POISON CONTROL : 1-800-222-1222

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Reproductive toxicity, H361
Category 2

Full text of H statements : see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS08

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : H361 - Suspected of damaging fertility or the unborn child
Precautionary statements (GHS-US) : P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P280 - Wear face shield, protective clothing, protective gloves
P308+P313 - If exposed or concerned: Get medical advice/attention
P405 - Store locked up
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

KSC PHYT-ACTYL I

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Name | Product identifier | % | GHS-US classification |
|---|---------------------|-------|--------------------------------------|
| disodium tetraborate pentahydrate, borax pentahydrate | (CAS No) 12179-04-3 | 0.673 | Eye Irrit. 2A, H319 Repr. 2, H361 |

Full text of hazard classes and H-statements : see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if ill effect develops.
- First-aid measures after skin contact : After contact with skin, wash immediately and thoroughly with plenty of water.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- First-aid measures after ingestion : Call a POISON CENTER or doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : If you feel unwell, seek medical advice.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water spray.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not flammable. Non oxidizing.
- Reactivity : No dangerous reactions known.

5.3. Advice for firefighters

- Precautionary measures fire : Keep away from combustible material.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus.
- Specific methods : Use extinguishing media appropriate for surrounding fire.
- Other information : Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Evacuate area.

6.1.1. For non-emergency personnel

- Emergency procedures : Do not breathe dust. Evacuate unnecessary personnel. Mechanically ventilate the spillage area.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Collect spillage.
- Methods for cleaning up : Clean up immediately by sweeping or vacuum. Minimize generation of dust. Collect up the product and place it in a spare container suitably labelled.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

KSC PHYT-ACTYL I

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

- Precautions for safe handling : Provide local exhaust or general room ventilation. Avoid dust formation. Use personal protective equipment as required.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Provide local exhaust or general room ventilation. The floor of the depot should be impermeable and designed to form a water-tight basin. Comply with applicable regulations.
- Storage conditions : Store in dry, cool, well-ventilated area. Protect from moisture.
- Incompatible products : Refer to the detailed list of incompatible materials in section 10 Stability/Reactivity.
- Heat and ignition sources : Keep away from open flames, hot surfaces and sources of ignition.
- Prohibitions on mixed storage : Keep away from food, drink and animal feeding stuffs.
- Storage area : Store away from heat. Store in a well-ventilated place.
- Special rules on packaging : Keep only in original container. Store in a closed container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3) | | |
|--|--|---------------------------|
| ACGIH | ACGIH TWA (mg/m ³) | 8H 2 mg/m ³ |
| ACGIH | ACGIH STEL (mg/m ³) | 15Min 6 mg/m ³ |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 10 mg/m ³ |
| NIOSH | NIOSH REL (TWA) (mg/m ³) | 10 mg/m ³ |
| NIOSH | NIOSH REL (STEL) (mg/m ³) | 10 mg/m ³ |
| NIOSH | NIOSH REL (ceiling) (mg/m ³) | 10 mg/m ³ |

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station. Local exhaust and general ventilation must be adequate to meet exposure standards.
- Personal protective equipment : Safety glasses. Gloves. Protective clothing. Dust formation: dust mask.



- Hand protection : protective gloves.
- Eye protection : Safety glasses.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : Dust formation: dust mask. Dust / anti-aerosol filter type P2 (according to standard EN 143).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Solid
- Colour : light yellow
- Odour : characteristic
- Odour threshold : No data available
- pH : No data available
- pH solution : 5.3 - 7.3 water, 10%
- Melting point : No data available
- Freezing point : No data available
- Boiling point : No data available
- Flash point : No data available
- Relative evaporation rate (butylacetate=1) : No data available
- Flammability (solid, gas) : No data available

KSC PHYT-ACTYL I

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| | |
|----------------------------------|---|
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : No data available |
| Density | : 1.2 kg/l |
| Solubility | : Soluble in water. |
| Log Pow | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive limits | : No data available |
| Explosive properties | : No data available. If significant formation of dust, dust-air mixture may be flammable/explosive. |
| Oxidising properties | : According to tests O.1 and/or O.2 (in compliance with test procedures in the Manual of Tests and Criteria, Part III, section 34.4), the product is non oxidising. |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Gel.

10.5. Incompatible materials

Reducing agents. Sawdust. Organic materials.

10.6. Hazardous decomposition products

Gaseous ammonia. Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified
(Based on available data, the classification criteria are not met)

| KSC PHYT-ACTYL I | |
|--|---|
| Additional information | No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation |
| disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3) | |
| LD50 oral rat | 3200 - 3400 mg/kg bodyweight EPA (Environmental Protection Agency) |
| LD50 dermal rabbit | > 2000 mg/kg bodyweight EPA (Environmental Protection Agency) |
| LC50 inhalation rat (mg/l) | > 2 mg/l (OECD 403 method) |
| ATE US (oral) | 3200.000 mg/kg bodyweight |
| Additional information | Safety Data Sheet Supplier |

Skin corrosion/irritation : Not classified
(Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation)

KSC PHYT-ACTYL I

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| | |
|-----------------------------------|--|
| Serious eye damage/irritation | : Not classified (Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation) |
| Respiratory or skin sensitisation | : Not classified (Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation) |
| Germ cell mutagenicity | : Not classified (Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation)No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation |
| Carcinogenicity | : Not classified (Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation) |

KSC PHYT-ACTYL I

| | |
|--|---|
| IARC group | The principal components are not included in the I.A.R.C. list of carcinogenic substances |
| Reproductive toxicity | : Suspected of damaging fertility or the unborn child. (Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation. Contains a toxic to reproduction component (H360FD) at a concentration below the threshold for classifying the mixture)No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation Contains a toxic to reproduction component (H360FD) at a concentration below the threshold for classifying the mixture |
| Specific target organ toxicity (single exposure) | : Not classified (Based on available data, the classification criteria are not met) |

KSC PHYT-ACTYL I

| | |
|--|---|
| Additional information | No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation |
| Specific target organ toxicity (repeated exposure) | : Not classified (Based on available data, the classification criteria are not met) |

KSC PHYT-ACTYL I

| | |
|------------------------|---|
| Additional information | No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation |
| Aspiration hazard | : Not classified (Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation) |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|-------------------|---|
| Ecology - general | : No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation. Based on available data, the classification criteria are not met. Do not allow into drains or water courses. |
|-------------------|---|

disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3)

| | |
|---|---|
| LC50 fish 1 | 96h - 74 mg/l Dab, Limanda limanda |
| EC50 Daphnia 1 | 24h - 242 mg/l Daphnids, Daphnia magna Straus |
| NOEC (chronic) | 11.2 mg/l EPA OPPTS 850.1400 (Fish Early-life Stage Toxicity Test) |
| Additional ecotoxicological information | LC50: 88 mg/l (24 days) |

KSC PHYT-ACTYL I

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.2. Persistence and degradability

KSC PHYT-ACTYL I

| | |
|-------------------------------|---------------------------|
| Persistence and degradability | Product is biodegradable. |
|-------------------------------|---------------------------|

12.3. Bioaccumulative potential

KSC PHYT-ACTYL I

| | |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |
|---------------------------|------------------|

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other adverse effects : May cause eutrophication at very low concentration.
Effect on the global warming : No known effects from this product.
GWPmix comment : No known effects from this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of in accordance with relevant local regulations. Dispose of this material and its container to hazardous or special waste collection point.
Sewage disposal recommendations : If spilled : see chapter 6.
Ecology - waste materials : Do not allow to enter drains or water courses.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Other information : No supplementary information available.

Transportation of Dangerous Goods

Transport by sea

Air transport

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

| | | |
|---|-------------------|--------|
| disodium tetraborate pentahydrate, borax pentahydrate | CAS No 12179-04-3 | 0.673% |
|---|-------------------|--------|

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

KSC PHYT-ACTYL I

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

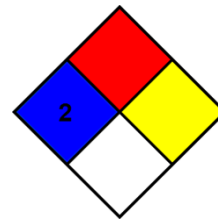
Revision date : 02/20/2017

Data sources : Section 1.2, 8.1, 11 & 12 are based on components' Chemical Safety Report and/or datas from components' supplier.

Full text of H-statements:

| | |
|------|---|
| H319 | Causes serious eye irritation |
| H361 | Suspected of damaging fertility or the unborn child |

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.



HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Indication of changes:

| | Revision date | Added | |
|--|---|----------|--|
| | Incompatible materials | Modified | |
| | First-aid measures general | Added | |
| | Other information | Added | |
| | Methods for cleaning up | Added | |
| | For containment | Added | |
| | Environmental precautions | Added | |
| | Emergency procedures | Added | |
| | General measures | Added | |
| | Reference to other sections (8, 13) | Added | |
| | Additional information | Added | |
| | Possibility of hazardous reactions | Added | |
| | Chemical stability | Added | |
| | Hazardous decomposition products | Added | |
| | Conditions to avoid | Added | |
| | Product form | Added | |
| | Additional information | Added | |
| | Display TSCA summary in 15.1 | Added | |
| | Display SARA 313 summary in 15.1 | Added | |
| | Display California Proposition 65 summary in 15.3 | Added | |
| | Ecology - waste materials | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |

KSC PHYT-ACTYL I

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| | | | |
|-----|--|----------|--|
| | Reason for no classification | Added | |
| | Additional information | Added | |
| | Additional information | Added | |
| | Reason for no classification | Added | |
| | Other adverse effects | Added | |
| | IARC group | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | Additional information | Added | |
| | Supersedes | Added | |
| | Specific methods | Added | |
| | First-aid measures after inhalation | Added | |
| | First-aid measures after skin contact | Added | |
| | pH solution | Added | |
| | Date of issue | Added | |
| | Density | Added | |
| | Oxidising properties | Added | |
| | Waste treatment methods | Added | |
| | Solubility | Added | |
| | Sewage disposal recommendations | Added | |
| | Protective equipment | Added | |
| | Symptoms/injuries | Added | |
| | Reactivity | Added | |
| | First-aid measures after eye contact | Added | |
| | Other medical advice or treatment | Added | |
| | Physical state | Added | |
| | Product code | Added | |
| | Name | Added | |
| | pH | Removed | |
| 2.3 | Other hazards not contributing to the classification | Added | |
| 3 | Composition/information on ingredients | Modified | |
| 5.1 | Unsuitable extinguishing media | Added | |
| 5.1 | Suitable extinguishing media | Added | |
| 5.2 | Fire hazard | Modified | |
| 5.3 | Other information | Added | |
| 5.3 | Protection during firefighting | Added | |
| 5.3 | Precautionary measures fire | Added | |
| 5.3 | Firefighting instructions | Added | |

KSC PHYT-ACTYL I

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| | | | |
|------|-----------------------------------|-------|--|
| 7.1 | Hygiene measures | Added | |
| 7.1 | Precautions for safe handling | Added | |
| 7.1 | Additional hazards when processed | Added | |
| 7.2 | Storage conditions | Added | |
| 7.2 | Technical measures | Added | |
| 7.2 | Incompatible products | Added | |
| 7.2 | Heat and ignition sources | Added | |
| 7.2 | Special rules on packaging | Added | |
| 8.2 | Appropriate engineering controls | Added | |
| 8.2 | Respiratory protection | Added | |
| 8.2 | Personal protective equipment | Added | |
| 8.2 | Hand protection | Added | |
| 8.2 | Eye protection | Added | |
| 8.2 | Skin and body protection | Added | |
| 12.1 | Ecology - general | Added | |
| 12.2 | Persistence and degradability | Added | |
| 12.3 | Bioaccumulative potential | Added | |
| 16 | Data sources | Added | |

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

SECTION 1: Identification

1.1. Identification

Product form : Fertilizer
 Trade name : KSC PHYT-ACTYL IV POLKA
 Name : KSC PHYT-ACTYL IV POLKA
 Product code : SALE14

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Fertilizer

1.3. Details of the supplier of the safety data sheet

TIMAC Agro USA, INC
 P.O. Box 888 - Route 724 & I-176
 READING, - USA
 T 1-800-545-5474
info-fds@roullier.com

1.4. Emergency telephone number

| Country | Official advisory body | Address | Emergency number | Comment |
|---------------------------|---|---------------------------------|---|---------|
| | USA POISON CONTROL CENTER (24h/7d) | | 1-800-222-1222 | |
| Europe/Middle-East/Africa | 3E | | +1-760-476-3961 (Access code : 333021) | (24/7) |
| United Kingdom | Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust | Avonley Road SE14 5ER London | 0870 243 2241 | |

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Irrit. 2 H315 -
 Eye Dam. 1 H318 -

Full text of H-statements: see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger
 Hazard statements (GHS-US) : H315 - Causes skin irritation
 H318 - Causes serious eye damage
 Precautionary statements (GHS-US) : P280 - Wear face shield, protective gloves
 P302+P352 - If on skin: Wash with plenty of soap and water
 P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P310 - Immediately call a doctor, a POISON CENTER

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

2.4. Unknown acute toxicity (GHS US)

Not applicable

KSC PHYT-ACTYL IV POLKA

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

| Name | Product identifier | % | GHS-US classification |
|---|---------------------|--------|---|
| potassium carbonate, prilled | (CAS No) 584-08-7 | 9.8 | Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 |
| potassium hydrogensulphate | (CAS No) 7646-93-7 | 3.7383 | Skin Corr. 1B, H314 STOT SE 3, H335 |
| disodium tetraborate pentahydrate, borax pentahydrate | (CAS No) 12179-04-3 | 0.673 | Eye Irrit. 2A, H319 Repr. 1B, H360 |

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Get medical advice and attention if you feel unwell.
- First-aid measures after inhalation : IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing. Respiratory problems: consult a doctor/medical service.
- First-aid measures after skin contact : After contact with skin, wash immediately and thoroughly with plenty of water. Seek medical attention if irritation develops.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist.
- First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Never attempt to induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : If you feel unwell, seek medical advice.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : water in large amounts.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not flammable. Non-oxidizing.
- Reactivity : No dangerous reactions known. In case of fire: May release hazardous fumes.

5.3. Advice for firefighters

- Precautionary measures fire : Keep away from combustible material.
- Firefighting instructions : All fire-fighting personnel must wear safety suits.
- Protection during firefighting : Do not enter or remain in the danger zone without protection clothing. Self-contained breathing apparatus.
- Specific methods : Use extinguishing media appropriate for surrounding fire.
- Other information : Avoid pouring fire water down the drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Ensure adequate ventilation.

6.1.1. For non-emergency personnel

- Protective equipment : Wear suitable protective clothing. Keep away from all inflammation sources.
- Emergency procedures : Remove ignition sources. Evacuate unnecessary personnel. Avoid contact with skin and eyes.

6.1.2. For emergency responders

- Protective equipment : For further information refer to section 8: "Exposure controls/personal protection". Wear suitable protective clothing and eye or face protection. Do not attempt to take action without suitable protective equipment.

KSC PHYT-ACTYL IV POLKA

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.2. Environmental precautions

Do not allow to enter drains or water courses. Relevant water authorities should be notified of any large spillage to water course or drain.

6.3. Methods and material for containment and cleaning up

- For containment : Do not absorb in saw-dust or other combustible absorbents.
- Methods for cleaning up : Recuperate the compound in an appropriate container for evacuation and disposal. Clean contaminated surfaces with an excess of water.
- Other information : Remove ignition sources.

6.4. Reference to other sections

SECTION 13. SECTION 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- Precautions for safe handling : Ensure adequate ventilation.
- Hygiene measures : Always wash hands after handling the product. Wash contaminated clothing before reuse. Do not eat, drink or smoke during use. Use good personal hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Store in original container. Keep out of reach of children.
- Storage conditions : Keep container closed when not in use. Store in dry, cool, well-ventilated area. Keep only in the original container.
- Incompatible products : Organic materials. For further information, refer to section 10 : "Stability and Reactivity".
- Incompatible materials : Refer to section 10 on incompatible materials.
- Heat and ignition sources : Keep away from sources of ignition - No smoking.
- Prohibitions on mixed storage : Keep away from food, drink and animal feeding stuffs.
- Storage area : Keep out of frost. Keep away from food, drink and animal feeding stuffs. Store at ambient temperature. Store away from heat/moisture. Store in a dry area. Store in a well-ventilated place.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3) | | |
|--|-------------------------------------|---------------------------|
| ACGIH | ACGIH TWA (mg/m ³) | 8H 2 mg/m ³ |
| ACGIH | ACGIH STEL (mg/m ³) | 15Min 6 mg/m ³ |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 10 mg/m ³ |

8.2. Exposure controls

- Appropriate engineering controls : Provide good ventilation in process area to prevent formation of vapour. General protective and hygienic measures.
- Personal protective equipment : Safety glasses. Gloves. Protective clothing. Dust formation: dust mask.



- Materials for protective clothing : Wear suitable protective clothing.
- Hand protection : Wear suitable gloves resistant to chemical penetration. (according to standard EN 374).
- Eye protection : Safety glasses with side guards should be worn to prevent injury from airborne particles and/or other eye contact with this product. (according to standard EN 166).
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation. In case of vapour formation use adequate respirator. Dust / anti-aerosol filter type P2 (according to standard EN 143).
- Other information : Always wash hands and face immediately after handling this product, and once again before leaving the workplace. If on skin, take off contaminated clothing. Do not drink, eat or smoke in the workplace.

KSC PHYT-ACTYL IV POLKA

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|---|
| Physical state | : Solid |
| Colour | : yellow-orange |
| Odour | : characteristic |
| Odour threshold | : No data available |
| pH | : No data available |
| pH solution | : 5.3 - 7.3 water, 10% |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Flammability (solid, gas) | : No data available |
| Explosive limits | : No data available |
| Explosive properties | : No data available. If significant formation of dust, dust-air mixture may be flammable/explosive. |
| Oxidising properties | : No data available |
| Vapour pressure | : No data available |
| Relative density | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Density | : 1.3 kg/l |
| Solubility | : Soluble in water. |
| Log Pow | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known. In case of fire: May release hazardous fumes.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

None to our knowledge.

10.4. Conditions to avoid

Moisture. Heat.

10.5. Incompatible materials

Reducing agents. Sawdust.

10.6. Hazardous decomposition products

Gaseous ammonia. Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified
(Based on available data, the classification criteria are not met)

KSC PHYT-ACTYL IV POLKA

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| KSC PHYT-ACTYL IV POLKA | |
|-------------------------|---|
| Additional information | No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation |

| potassium carbonate, prilled (584-08-7) | |
|---|--------------|
| LD50 oral rat | > 2000 mg/kg |
| LD50 dermal rat | > 2000 mg/kg |
| LC50 inhalation rat (mg/l) | > 5 mg/l/4h |

| disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3) | |
|--|--|
| LD50 oral rat | 3200 - 3400 mg/kg bodyweight EPA (Environmental Protection Agency) |
| LD50 dermal rabbit | > 2000 mg/kg bodyweight EPA (Environmental Protection Agency) |
| LC50 inhalation rat (mg/l) | > 2 mg/l (OECD 403 method) |
| ATE US (oral) | 3200.000 mg/kg bodyweight |
| Additional information | Safety Data Sheet Supplier |

| | |
|-----------------------------------|---|
| Skin corrosion/irritation | : Causes skin irritation. (No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation) |
| Serious eye damage/irritation | : Causes serious eye damage. (No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation) |
| Respiratory or skin sensitisation | : Not classified (Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation) |
| Germ cell mutagenicity | : Not classified (Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation) |
| Carcinogenicity | : Not classified (Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation) |

| KSC PHYT-ACTYL IV POLKA | |
|-------------------------|--|
| IARC group | The principal components are not included in the I.A.R.C. list of carcinogenic substances. |

| | |
|--|--|
| Reproductive toxicity | : Not classified (Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation. Contains a toxic to reproduction component (H360FD) at a concentration below the threshold for classifying the mixture.) |
| Specific target organ toxicity (single exposure) | : Not classified (Based on available data, the classification criteria are not met) |

| KSC PHYT-ACTYL IV POLKA | |
|-------------------------|---|
| Additional information | No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation |

| | |
|--|--|
| Specific target organ toxicity (repeated exposure) | : Not classified (Based on available data, the classification criteria are not met) |
|--|--|

| KSC PHYT-ACTYL IV POLKA | |
|-------------------------|---|
| Additional information | No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation |

| | |
|-------------------|---|
| Aspiration hazard | : Not classified (Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation) |
|-------------------|---|

KSC PHYT-ACTYL IV POLKA

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation. Based on available data, the classification criteria are not met. Do not allow to enter drains or water courses.

potassium carbonate, prilled (584-08-7)

| | |
|----------------|-----------------------------|
| LC50 fish 1 | 68 mg/l Oncorhynchus mykiss |
| EC50 Daphnia 1 | 200 ml/l Daphnia pulex |

disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3)

| | |
|---|--|
| LC50 fish 1 | 96h - 74 mg/l Dab, Limanda limanda |
| EC50 Daphnia 1 | 24h - 242 mg/l Daphnids, Daphnia magna Straus |
| Additional ecotoxicological information | LC50, Oncorhynchus mykiss (Rainbow trout): 88 mg/l (24 days) |

12.2. Persistence and degradability

KSC PHYT-ACTYL IV POLKA

| | |
|-------------------------------|---|
| Persistence and degradability | Main components of the mixture have a good degradation. |
|-------------------------------|---|

12.3. Bioaccumulative potential

KSC PHYT-ACTYL IV POLKA

| | |
|---------------------------|---|
| Bioaccumulative potential | No study has been carried out for the moment on this mixture. |
|---------------------------|---|

12.4. Mobility in soil

KSC PHYT-ACTYL IV POLKA

| | |
|----------------|---|
| Ecology - soil | No study has been carried out for the moment on this mixture. |
|----------------|---|

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

Other information : No study has been carried out for the moment on this mixture.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of in accordance with relevant local regulations. Dispose of this material and its container to hazardous or special waste collection point.

Sewage disposal recommendations : If spilled : see chapter 6.

Additional information : Remove to an authorized waste treatment plant.

Ecology - waste materials : Do not allow into drains or water courses.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT
Not regulated for transport

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

KSC PHYT-ACTYL IV POLKA

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

disodium tetraborate pentahydrate, borax pentahydrate

CAS No 12179-04-3

0.673%

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

| | |
|-----------------------|--|
| Indication of changes | : This sheet was updated (refer to the date at the top of this page). Added. First aid measures. Regulatory information. Handling and storage. |
| Revision date | : 07/08/2016 |
| Data sources | : Section 1.2, 8.1, 11 & 12 are based on components' Chemical Safety Report and/or datas from components' supplier. |
| Other information | : according to Regulation (EC) No. 1907/2006 (REACH). according to the United Nations GHS (Rev. 5, 2013). according to Regulation (EU) 2015/830. |

Full text of H-statements:

| | |
|---------------|--|
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Eye Irrit. 2A | Serious eye damage/eye irritation, Category 2A |
| Repr. 1B | Reproductive toxicity, Category 1B |
| Skin Corr. 1B | Skin corrosion/irritation, Category 1B |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation |
| H314 | Causes severe skin burns and eye damage |
| H315 | Causes skin irritation |
| H318 | Causes serious eye damage |
| H319 | Causes serious eye irritation |
| H335 | May cause respiratory irritation |
| H360 | May damage fertility or the unborn child |

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

KSC PHYT-ACTYL V

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 4/23/2015 Revision date: 3/11/2021 Supersedes: 7/22/2019 Version: 5.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Trade name : KSC PHYT-ACTYL V
Product code : SALE05

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Fertilizer

1.3. Supplier

Distributor

Timac Agro USA, INC.
Route 724 & I-176
P.O. Box 888
Reading, PA 19607 - USA
T 1-800-545-5474
info-fds@roullier.com

Manufacturer

TIMAC Agro España S.A.
Polígono de Arazuri-Orcoyen, calle C, nº32
ORCOYEN (NAVARRA), 31160 - España
T +34 948 324 500 - F +34 948 324 032
info-fds@timacagro.es - www.timacagro.es

1.4. Emergency telephone number

| Country | Organization/Company | Address | Emergency number | Comment |
|----------|----------------------|---------|---|---------|
| Americas | 3E | | +1-760-476-3962 (Access code : 333021) | (24/7) |

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

| | | |
|--|------|---|
| Skin corrosion/irritation Category 2 | H315 | Causes skin irritation |
| Serious eye damage/eye irritation Category 2 | H319 | Causes serious eye irritation |
| Reproductive toxicity Category 1B | H360 | May damage fertility or the unborn child (oral) |

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H315 - Causes skin irritation
H319 - Causes serious eye irritation
H360 - May damage fertility or the unborn child (oral)

Precautionary statements (GHS US) :

P201 - Obtain special instructions before use.
P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective clothing, eye protection, face protection.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.

KSC PHYT-ACTYL V

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : None under normal conditions.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | GHS US classification |
|---|---------------------|---------|--|
| Potassium nitrate (Crystals) | CAS-No.: 7757-79-1 | < 60 | Ox. Sol. 3, H272 |
| Potassium carbonate | CAS-No.: 584-08-7 | 1 – 20 | Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 |
| Disodium tetraborate pentahydrate, borax pentahydrate | CAS-No.: 12179-04-3 | 0.1 – 1 | Eye Irrit. 2A, H319 Repr. 1B, H360 |

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|--|
| First-aid measures general | : Prompt treatment is essential to minimize damage. If you feel unwell, seek medical advice (show the label where possible). |
| First-aid measures after inhalation | : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if ill effect develops. |
| First-aid measures after skin contact | : After contact with skin, wash immediately and thoroughly with plenty of water. If skin irritation occurs: Get medical advice/attention. |
| First-aid measures after eye contact | : Wash immediately with plenty water (during 20 minutes), also under eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult an eye specialist. If possible show him this sheet. Failing this, show him the packaging or label. |
| First-aid measures after ingestion | : If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting without medical advice. If swallowed, seek medical advice immediately and show this container or label. |

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : (see section(s) : 2.1/2.3).

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

KSC PHYT-ACTYL V

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : water, carbon dioxide (CO₂), powder and foam. Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : None known.

5.2. Specific hazards arising from the chemical

- Fire hazard : Not flammable. Contact with combustible material may cause fire.
- Explosion hazard : No direct explosion hazard.
- Hazardous decomposition products in case of fire : On thermal decomposition (pyrolysis), releases : nitro-compounds. Carbon oxides (CO, CO₂). fume.

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Contain the extinguishing fluids by bunding.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus. Complete protective clothing. EN 469.
- Other information : Do not allow run-off from fire fighting to enter drains or water courses. Relevant water authorities should be notified of any large spillage to water course or drain.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Remove ignition sources. Avoid dust formation. Evacuate area.

6.1.1. For non-emergency personnel

- Protective equipment : Wear recommended personal protective equipment.
- Emergency procedures : Do not get in eyes, on skin, or on clothing. Do not breathe dust. Evacuate unnecessary personnel. Mark the danger area. Mechanically ventilate the spillage area. Keep upwind. Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Ventilate area. Stop leak if safe to do so. Dike and contain spill.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Collect spillage.
- Methods for cleaning up : Clean up immediately by sweeping or vacuum. Minimize generation of dust. Gather the product and place it in a spare container that has been suitably labeled.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

KSC PHYT-ACTYL V

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| | |
|-------------------------------|---|
| Precautions for safe handling | : Ensure good ventilation of the work station. Avoid dust formation. Avoid shock and friction. Avoid contact with skin, eyes and clothing. Use personal protective equipment as required. |
| Hygiene measures | : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Handle in accordance with good industrial hygiene and safety practice. |

7.2. Conditions for safe storage, including any incompatibilities

| | |
|------------------------------|--|
| Technical measures | : The floor of the depot should be impermeable and designed to form a water-tight basin. Comply with applicable regulations. |
| Storage conditions | : Store in dry, cool, well-ventilated area. Protect from moisture. Keep out of reach of children. |
| Incompatible products | : Refer to the detailed list of incompatible materials in section 10 Stability/Reactivity. |
| Storage temperature | : Store at ambient temperature |
| Heat-ignition | : Keep away from open flames, hot surfaces and sources of ignition. |
| Information on mixed storage | : Keep away from food, drink and animal feeding stuffs. |
| Special rules on packaging | : Keep only in original container. Store in a closed container. |

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| | |
|---|---|
| KSC PHYT-ACTYL V | |
| No additional information available | |
| Potassium nitrate (Crystals) (7757-79-1) | |
| USA - ACGIH - Occupational Exposure Limits | |
| ACGIH OEL TWA | 15 mg/m ³ |
| Potassium carbonate (584-08-7) | |
| No additional information available | |
| Disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3) | |
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | Sodium tetraborate, pentahydrate |
| ACGIH OEL TWA | 2 mg/m ³ (I - Inhalable particulate matter) |
| ACGIH OEL STEL | 6 mg/m ³ (I - Inhalable particulate matter) |
| Remark (ACGIH) | TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen) |
| Regulatory reference | ACGIH 2021 |
| USA - OSHA - Occupational Exposure Limits | |
| OSHA PEL (TWA) [1] | 5 mg/m ³ |

8.2. Appropriate engineering controls

| | |
|----------------------------------|--|
| Appropriate engineering controls | : Ensure good ventilation of the work station. Local exhaust and general ventilation must be adequate to meet exposure standards. |
| Environmental exposure controls | : Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems. Assure that emissions are compliant with all applicable air pollution control regulations. Comply with applicable regulations. |

KSC PHYT-ACTYL V

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

8.3. Individual protection measures/Personal protective equipment

| | | |
|---|-----------------------------|------------------------|
| Eye protection: | | |
| Safety glasses with side guards should be worn to prevent injury from airborne particles and/or other eye contact with this product | | |
| Type | Field of application | Characteristics |
| Safety glasses | Dust | With side shields |
| Skin and body protection: | | |
| Wear suitable protective clothing. Long sleeved protective clothing | | |
| Type | | |
| Gloves | | |
| Respiratory protection: | | |
| Where excessive dust may result, wear approved mask | | |
| Device | Filter type | Condition |
| Disposable half mask, Reusable half mask | Type P2 | Dust protection |

Personal protective equipment symbol(s):



Other information:

See Heading 7 : 7.1. Precautions for safe handling.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|------------------------|
| Physical state | : Solid |
| Appearance | : Powder. |
| Color | : red |
| Odor | : characteristic |
| Odor threshold | : No data available |
| pH | : No data available |
| pH solution | : 5.5 – 7.5 Water, 10% |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Flammability (solid, gas) | : Not flammable. |
| Vapor pressure | : No data available |
| Relative vapor density at 20 °C | : No data available |
| Relative density | : No data available |
| Density | : 1.3 |
| Solubility | : Water: Soluble |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : No data available |

KSC PHYT-ACTYL V

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| | |
|----------------------|--|
| Viscosity, dynamic | : No data available |
| Explosion limits | : No data available |
| Explosive properties | : Product is not explosive. |
| Oxidizing properties | : On basis of test data : Non oxidizing (Test O.1 Test for oxidizing solids / Test O.3 Gravimetric test for oxidizing solids - Part III, section 34.4 of the UN Manual of Tests and Criteria). |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Reacts violently with : Acids. Combustible materials. Metals. Reducing agents.

10.4. Conditions to avoid

No flames, no sparks. Eliminate all sources of ignition. Avoid shock and friction. High temperature.

10.5. Incompatible materials

Acids. Reducing agents. Flammable or combustible materials. Aluminum. Zinc and its alloys.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. In case of fire: See Heading 5.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|-----------------------------|---|
| Acute toxicity (oral) | : Not classified (Based on available data, the classification criteria are not met) |
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |

| KSC PHYT-ACTYL V | |
|--|---|
| Additional information | No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation |
| Potassium nitrate (Crystals) (7757-79-1) | |
| LD50 oral rat | > 2000 mg/kg (OECD 425 method) |
| LD50 dermal rat | > 5000 mg/kg body weight (OECD 402 method) |
| LC50 Inhalation - Rat | > 527 mg/m ³ (OECD 403 method) |
| Potassium carbonate (584-08-7) | |
| LD50 oral rat | > 2000 mg/kg |
| LD50 dermal rat | > 2000 mg/kg |

KSC PHYT-ACTYL V

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3) | |
|---|---|
| LD50 oral rat | 3200 – 3400 mg/kg body weight U.S EPA FIFRA |
| LD50 dermal rabbit | > 2000 mg/kg body weight U.S EPA FIFRA |
| Skin corrosion/irritation | : Causes skin irritation. (Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation) |
| Serious eye damage/irritation | : Causes serious eye irritation. |
| Respiratory or skin sensitization | : Not classified (Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation) |
| Germ cell mutagenicity | : Not classified (Based on available data, the classification criteria are not met) No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation |
| Carcinogenicity | : Not classified (Based on available data, the classification criteria are not met) No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation |
| Potassium nitrate (Crystals) (7757-79-1) | |
| NOAEL (chronic,oral,animal/male,2 years) | ≥ 1500 mg/kg body weight (OECD 422 method) |
| Potassium carbonate (584-08-7) | |
| NOAEL (chronic,oral,animal/male,2 years) | 2667 mg/kg body weight (Results obtained on a similar product) (Potassium bicarbonate ; 30 months) |
| NOAEL (chronic,oral,animal/female,2 years) | 3331 mg/kg body weight (Results obtained on a similar product) (Potassium bicarbonate ; 30 months) |
| Reproductive toxicity | : May damage fertility or the unborn child (oral). |
| STOT-single exposure | : Not classified (Based on available data, the classification criteria are not met) |
| KSC PHYT-ACTYL V | |
| Additional information | No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation |
| Potassium carbonate (584-08-7) | |
| STOT-single exposure | May cause respiratory irritation. |
| STOT-repeated exposure | : Not classified (Based on available data, the classification criteria are not met) |
| KSC PHYT-ACTYL V | |
| Additional information | No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation |
| Potassium nitrate (Crystals) (7757-79-1) | |
| NOAEL (subacute,oral,animal/male,28 days) | > 1500 mg/kg body weight |
| Potassium carbonate (584-08-7) | |
| NOAEL (oral,rat,90 days) | 2667 – 3331 mg/kg bodyweight/day (Results obtained on a similar product) (Potassium bicarbonate ; 18 months) |
| NOAEC (inhalation,rat,vapor,90 days) | 0.062 mg/l (OECD 412 method) |
| Aspiration hazard | : Not classified (Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation) |
| Viscosity, kinematic | : No data available |
| Symptoms/effects | : (see section(s) : 2.1/2.3). |

KSC PHYT-ACTYL V

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 12: Ecological information

12.1. Toxicity

- Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
- Ecology - water : Do not allow large quantities, as are, to spread into the environment. Do not discharge into drains or rivers.

| Potassium nitrate (Crystals) (7757-79-1) | |
|--|--|
| LC50 - Fish [1] | 1378 mg/l <i>Poecilia reticula</i> , (OECD 203 method) |
| EC50 - Crustacea [1] | 490 mg/l |
| ErC50 algae | > 1700 mg/l (OECD 209 method) |

| Potassium carbonate (584-08-7) | |
|------------------------------------|---|
| LC50 - Fish [1] | 68 mg/l <i>Oncorhynchus mykiss</i> (Rainbow trout), 96h (FIFRA 72-1) |
| LC50 - Other aquatic organisms [1] | 5595 mg/l <i>Eisenia</i> sp. (Results obtained on a similar product) |
| EC50 - Crustacea [1] | 200 mg/l <i>Daphnia pulex</i> , 48h (FIFRA 72-1) |
| NOEC (acute) | 4238 mg/kg <i>Eisenia</i> sp. (Results obtained on a similar product) |

| Disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3) | |
|--|---|
| LC50 - Fish [1] | 537 mg/l <i>Pimephales promelas</i> - K and al., 2010) |
| EC50 - Crustacea [1] | 896 mg/l <i>daphnia</i> , (Gersich, 1984a) |
| ErC50 algae | 270 mg/l <i>Pseudokirchneriella subcapitata</i> (Hansveit and Oldersma, 2000) |

12.2. Persistence and degradability

| KSC PHYT-ACTYL V | |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |

| Potassium nitrate (Crystals) (7757-79-1) | |
|--|--|
| Persistence and degradability | degradable in water in anaerobic conditions. |

| Disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3) | |
|--|--------------------------------|
| Persistence and degradability | Not established. Not relevant. |

12.3. Bioaccumulative potential

| KSC PHYT-ACTYL V | |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |

| Potassium nitrate (Crystals) (7757-79-1) | |
|---|--------------------------------|
| Partition coefficient n-octanol/water (Log Pow) | Not applicable |
| Partition coefficient n-octanol/water (Log Kow) | Not applicable |
| Bioaccumulative potential | Low bioaccumulation potential. |

12.4. Mobility in soil

| Potassium nitrate (Crystals) (7757-79-1) | |
|--|---|
| Ecology - soil | Small adsorption. Material highly soluble in water. |

KSC PHYT-ACTYL V

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3)

| | |
|----------------|-------------------------------------|
| Ecology - soil | Soluble in water. Small adsorption. |
|----------------|-------------------------------------|

12.5. Other adverse effects

Other adverse effects : May cause eutrophication at very low concentration.
Effect on the ozone layer : None known
Effect on global warming : None known
Other information : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional legislation (waste) : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Discharging into rivers and drains is forbidden.
Additional information : Do not re-use empty containers.

SECTION 14: Transport information

In accordance with Department of Transport / Transportation of Dangerous Goods / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable
Proper Shipping Name (TDG) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : Not applicable

TDG
Transport hazard class(es) (TDG) : Not applicable

IMDG
Transport hazard class(es) (IMDG) : Not applicable

IATA
Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable
Packing group (TDG) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

KSC PHYT-ACTYL V

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

14.6. Special precautions for user

DOT

No data available

TDG

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

CANADA

Potassium nitrate (Crystals) (7757-79-1)

Listed on the Canadian DSL (Domestic Substances List)

Potassium carbonate (584-08-7)

Listed on the Canadian DSL (Domestic Substances List)

Disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

KSC PHYT-ACTYL V

Ensure all national/local regulations are observed

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 03/11/2021

KSC PHYT-ACTYL V

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Data sources : Section 1.2, 8.1, 11 & 12 are based on components' Chemical Safety Report and/or datas from components' supplier.

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

| Full text of H-phrases | |
|------------------------|--|
| H272 | May intensify fire; oxidizer |
| H302 | Harmful if swallowed |
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H335 | May cause respiratory irritation |
| H360 | May damage fertility or the unborn child |

| Abbreviations and acronyms | |
|----------------------------|---|
| ATE | Acute Toxicity Estimate |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| LC50 | Median lethal concentration |
| CLP | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 |
| DMEL | Derived Minimal Effect level |
| DNEL | Derived-No Effect Level |
| EC50 | Median effective concentration |
| SDS | Safety Data Sheet |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| LD50 | Median lethal dose |
| LOAEL | Lowest Observed Adverse Effect Level |
| NOAEC | No-Observed Adverse Effect Concentration |
| NOAEL | No-Observed Adverse Effect Level |
| NOEC | No-Observed Effect Concentration |
| OECD | Organisation for Economic Co-operation and Development |
| PBT | Persistent Bioaccumulative Toxic |
| PNEC | Predicted No-Effect Concentration |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |
| STP | Sewage treatment plant |
| vPvB | Very Persistent and Very Bioaccumulative |

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

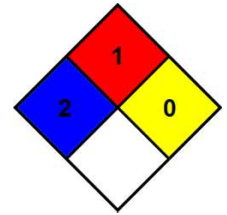
NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

KSC PHYT-ACTYL V

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating
Health : 2 Moderate Hazard - Temporary or minor injury may occur
Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)
Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal protection : B
: B - Safety glasses, Gloves

| Indication of changes: | | | |
|------------------------|-----------------------------------|----------|----------|
| Section | Changed item | Change | Comments |
| | Hazard statements (GHS US) | Modified | |
| | Precautionary statements (GHS US) | Modified | |
| | Revision date | Modified | |
| | Supersedes | Modified | |
| 1 | Use of the substance/mixture | Added | |
| 2.1 | GHS-US classification | Modified | |

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SECTION 1: Identification

1.1. Identification

Product form : Mixtures
 Trade name : KSC VI PHYTACTYL
 Name : KSC VI PHYTACTYL
 Product code : SALE06

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use : Fertilizers

1.3. Details of the supplier of the safety data sheet

Distributor

TIMAC Agro USA, INC
 P.O. Box 888 - Route 724 & I-176
 READING, - USA
 T 1-800-545-5474
info-fds@roullier.com

Manufacturer

TIMAC Agro España S.A.
 Polígono de Arazuri-Orcoyen, calle C, nº32
 ORCOYEN (NAVARRA), 31160 - España
 T +34 948 324 500 - F +34 948 324 032
info-fds@timacagro.es - www.timacagro.es

1.4. Emergency telephone number

Emergency number : USA POISON CONTROL : 1-800-222-1222

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Reproductive toxicity, H361
 Category 2

Full text of H statements : see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS08

Signal word (GHS-US) : Warning
 Hazard statements (GHS-US) : H361 - Suspected of damaging fertility or the unborn child
 Precautionary statements (GHS-US) : P201 - Obtain special instructions before use
 P202 - Do not handle until all safety precautions have been read and understood
 P280 - Wear face shield, protective clothing, protective gloves
 P308+P313 - If exposed or concerned: Get medical advice/attention
 P405 - Store locked up
 P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

KSC VI PHYTACTYL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Name | Product identifier | % | GHS-US classification |
|---|---------------------|-------|--|
| potassium nitrate / Nitric acid potassium salt (1:1) | (CAS No) 7757-79-1 | 9.329 | Ox. Sol. 3, H272 |
| Potassium carbonate / Carbonic acid, potassium salt (1:2) | (CAS No) 584-08-7 | 2.78 | Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 |
| disodium tetraborate pentahydrate, borax pentahydrate | (CAS No) 12179-04-3 | 0.673 | Eye Irrit. 2A, H319 Repr. 2, H361 |

Full text of hazard classes and H-statements : see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if ill effect develops.
- First-aid measures after skin contact : After contact with skin, wash immediately and thoroughly with plenty of water.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- First-aid measures after ingestion : Call a POISON CENTER or doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : If you feel unwell, seek medical advice.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water spray.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not flammable. Non oxidizing material according to EC criteria.
- Reactivity : No dangerous reactions known.

5.3. Advice for firefighters

- Precautionary measures fire : Keep away from combustible material.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus.
- Other information : Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Evacuate area.

6.1.1. For non-emergency personnel

- Emergency procedures : Do not breathe dust. Evacuate unnecessary personnel. Mechanically ventilate the spillage area.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Collect spillage.
- Methods for cleaning up : Clean up immediately by sweeping or vacuum. Minimize generation of dust. Collect up the product and place it in a spare container suitably labelled.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

KSC VI PHYTACTYL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- Precautions for safe handling : Provide local exhaust or general room ventilation. Avoid dust formation. Use personal protective equipment as required.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Provide local exhaust or general room ventilation. The floor of the depot should be impermeable and designed to form a water-tight basin. Comply with applicable regulations.
- Storage conditions : Store in dry, cool, well-ventilated area. Protect from moisture.
- Incompatible products : Refer to the detailed list of incompatible materials in section 10 Stability/Reactivity.
- Heat and ignition sources : Keep away from open flames, hot surfaces and sources of ignition.
- Prohibitions on mixed storage : Keep away from food, drink and animal feeding stuffs.
- Storage area : Store away from heat. Store in a well-ventilated place. Keep out of reach of children.
- Special rules on packaging : Keep only in original container. Store in a closed container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3) | | |
|--|--|---------------------------|
| ACGIH | ACGIH TWA (mg/m ³) | 8H 2 mg/m ³ |
| ACGIH | ACGIH STEL (mg/m ³) | 15Min 6 mg/m ³ |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 10 mg/m ³ |
| NIOSH | NIOSH REL (TWA) (mg/m ³) | 10 mg/m ³ |
| NIOSH | NIOSH REL (STEL) (mg/m ³) | 10 mg/m ³ |
| NIOSH | NIOSH REL (ceiling) (mg/m ³) | 10 mg/m ³ |
| Potassium carbonate / Carbonic acid, potassium salt (1:2) (584-08-7) | | |
| ACGIH | ACGIH STEL (mg/m ³) | 3 mg/m ³ |
| potassium nitrate / Nitric acid potassium salt (1:1) (7757-79-1) | | |
| ACGIH | ACGIH TWA (mg/m ³) | 15 mg/m ³ |
| Not applicable | | |

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station. Local exhaust and general ventilation must be adequate to meet exposure standards.
- Personal protective equipment : Safety glasses. Gloves. Protective clothing. Dust formation: dust mask.



- Hand protection : protective gloves.
- Eye protection : Safety glasses.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : Dust formation: dust mask.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Solid
- Colour : green
- Odour : characteristic
- Odour threshold : No data available

KSC VI PHYTACTYL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| | |
|--|---|
| pH | : No data available |
| pH solution | : 5.2 - 7.2 water, 10% |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Flammability (solid, gas) | : No data available |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : No data available |
| Density | : 1.2 kg/l |
| Solubility | : Soluble in water. |
| Log Pow | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive limits | : No data available |
| Explosive properties | : No data available. If significant formation of dust, dust-air mixture may be flammable/explosive. |
| Oxidising properties | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Gel.

10.5. Incompatible materials

Reducing agents. Sawdust. Organic materials.

10.6. Hazardous decomposition products

Gaseous ammonia. Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified
(Based on available data, the classification criteria are not met)

| KSC VI PHYTACTYL | |
|--|---|
| Additional information | No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation |
| disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3) | |
| LD50 oral rat | 3200 - 3400 mg/kg bodyweight EPA (Environmental Protection Agency) |
| LD50 dermal rabbit | > 2000 mg/kg bodyweight EPA (Environmental Protection Agency) |
| LC50 inhalation rat (mg/l) | > 2 mg/l (OECD 403 method) |
| ATE US (oral) | 3200.000 mg/kg bodyweight |

KSC VI PHYTACTYL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| | |
|---|----------------------------|
| disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3) | |
| Additional information | Safety Data Sheet Supplier |

| | |
|---|--------------------------------|
| Potassium carbonate / Carbonic acid, potassium salt (1:2) (584-08-7) | |
| LD50 oral rat | > 1870 mg/kg (OECD 401 method) |
| LD50 dermal rabbit | > 2000 mg/kg US EPA |
| LC50 inhalation rat (mg/l) | air 4.96 mg/l/4h US EPA |
| ATE US (oral) | 500.000 mg/kg bodyweight |

| | |
|---|--|
| potassium nitrate / Nitric acid potassium salt (1:1) (7757-79-1) | |
| LD50 oral rat | > 2000 mg/kg (OECD 425 method) |
| LD50 dermal rat | > 5000 mg/kg bodyweight (OECD 402 method) |
| LC50 inhalation rat (mg/l) | air 4H > 527 mg/m ³ (OECD 403 method) |

| | |
|-----------------------------------|--|
| Skin corrosion/irritation | : Not classified (Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation) |
| Serious eye damage/irritation | : Not classified (Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation) |
| Respiratory or skin sensitisation | : Not classified (Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation) |
| Germ cell mutagenicity | : Not classified (Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation)No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation |
| Carcinogenicity | : Not classified (Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation) |

| | |
|---|-------------------------|
| potassium nitrate / Nitric acid potassium salt (1:1) (7757-79-1) | |
| NOAEL (chronic, oral, animal/male, 2 years) | > 1500 mg/kg bodyweight |

| | |
|--|--|
| Reproductive toxicity | : Suspected of damaging fertility or the unborn child. (No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation)No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation |
| Specific target organ toxicity (single exposure) | : Not classified (Based on available data, the classification criteria are not met) |

| | |
|-------------------------|---|
| KSC VI PHYTACTYL | |
| Additional information | No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation |

| | |
|--|--|
| Specific target organ toxicity (repeated exposure) | : Not classified (Based on available data, the classification criteria are not met) |
|--|--|

| | |
|-------------------------|---|
| KSC VI PHYTACTYL | |
| Additional information | No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation |

| | |
|---|---------------------------|
| Potassium carbonate / Carbonic acid, potassium salt (1:2) (584-08-7) | |
| NOAEL (subacute, oral, animal/male, 28 days) | 2667 mg/kg bodyweight rat |

KSC VI PHYTACTYL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| | |
|---|----------------------------------|
| potassium nitrate / Nitric acid potassium salt (1:1) (7757-79-1) | |
| NOAEL (subacute, oral, animal/male, 28 days) | > 1500 mg/kg bodyweight OECD 422 |

Aspiration hazard : Not classified
(Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation)

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation. Based on available data, the classification criteria are not met. Do not allow into drains or water courses.

| | |
|---|---|
| disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3) | |
| LC50 fish 1 | 96h - 74 mg/l Dab, Limanda limanda |
| EC50 Daphnia 1 | 24h - 242 mg/l Daphnids, Daphnia magna Straus |
| NOEC (chronic) | 11.2 mg/l EPA OPPTS 850.1400 (Fish Early-life Stage Toxicity Test) |
| Additional ecotoxicological information | LC50: 88 mg/l (24 days) |

| | |
|---|--|
| Potassium carbonate / Carbonic acid, potassium salt (1:2) (584-08-7) | |
| LC50 fish 1 | FIFRA 72-1 68 mg/l Oncorhynchus mykiss (Rainbow trout) |
| EC50 Daphnia 1 | FIFRA 72-1 200 mg/l |

| | |
|---|--|
| potassium nitrate / Nitric acid potassium salt (1:1) (7757-79-1) | |
| LC50 fish 1 | 96h OCDE 203 > 98.9 mg/l Oncorhynchus mykiss (Rainbow trout) |
| LC50 other aquatic organisms 1 | 490 mg/l (Daphnia magna, 48h) |
| EC50 Daphnia 1 | 48H 490 mg/l Daphnia magna (NF EN ISO 6341) |
| EC50 other aquatic organisms 1 | 10d > 1700 mg/l algae |
| LC50 fish 2 | 96H 2400 - 4200 mg/l Lepomis macrochirus |
| EC50 Daphnia 2 | 72h 226 mg/l |

12.2. Persistence and degradability

| | |
|-------------------------------|---------------------------|
| KSC VI PHYTACTYL | |
| Persistence and degradability | Product is biodegradable. |

| | |
|---|--|
| potassium nitrate / Nitric acid potassium salt (1:1) (7757-79-1) | |
| Persistence and degradability | Degradable in water in anaerobic conditions. |

12.3. Bioaccumulative potential

| | |
|---------------------------|------------------|
| KSC VI PHYTACTYL | |
| Bioaccumulative potential | Not established. |

| | |
|---|--------------------------------|
| Potassium carbonate / Carbonic acid, potassium salt (1:2) (584-08-7) | |
| Bioaccumulative potential | Low bioaccumulation potential. |

| | |
|---|---|
| potassium nitrate / Nitric acid potassium salt (1:1) (7757-79-1) | |
| Bioaccumulative potential | Low bioaccumulation potential. Data sources : Safety Data Sheet Supplier. |

12.4. Mobility in soil

| | |
|---|----------------------|
| Potassium carbonate / Carbonic acid, potassium salt (1:2) (584-08-7) | |
| Ecology - soil | Hygroscopic product. |

| | |
|---|---|
| potassium nitrate / Nitric acid potassium salt (1:1) (7757-79-1) | |
| Ecology - soil | Soluble in water. Safety Data Sheet Supplier. |

12.5. Other adverse effects

Other adverse effects : Nitrates are responsible for the proliferation of algae in water, thus limiting or suppressing the development of other aquatic species (eutrophication).

Effect on the global warming : No known effects from this product.

GWPmix comment : No known effects from this product.

KSC VI PHYTACTYL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Waste treatment methods : Dispose of in accordance with relevant local regulations. Dispose of this material and its container to hazardous or special waste collection point.
- Sewage disposal recommendations : If spilled : see chapter 6.
- Ecology - waste materials : Do not allow to enter drains or water courses.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not applicable

Transportation of Dangerous Goods

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

| | | |
|---|-------------------|--------|
| disodium tetraborate pentahydrate, borax pentahydrate | CAS No 12179-04-3 | 0.673% |
|---|-------------------|--------|

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

No additional information available

Potassium carbonate / Carbonic acid, potassium salt (1:2) (584-08-7)

| | |
|----------------------|---|
| WHMIS Classification | Class D Division 2 Subdivision B - Toxic material causing other toxic effects Class E - Corrosive Material |
|----------------------|---|

potassium nitrate / Nitric acid potassium salt (1:1) (7757-79-1)

| | |
|----------------------|------------------------------|
| WHMIS Classification | Class C - Oxidizing Material |
|----------------------|------------------------------|

EU-Regulations

No additional information available

National regulations

KSC VI PHYTACTYL

Ensure all national/local regulations are observed

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Revision date : 02/20/2017

KSC VI PHYTACTYL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Data sources : Section 1.2, 8.1, 11 & 12 are based on components' Chemical Safety Report and/or datas from components' supplier.

Full text of H-statements:

| | |
|------|---|
| H272 | May intensify fire; oxidiser |
| H302 | Harmful if swallowed |
| H319 | Causes serious eye irritation |
| H361 | Suspected of damaging fertility or the unborn child |

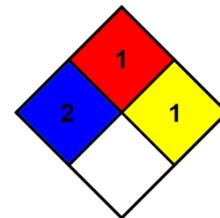
Abbreviations and acronyms:

| | |
|-------|---|
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| LC50 | Median lethal concentration |
| EC50 | Median effective concentration |
| LD50 | Median lethal dose |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |
| ATE | Acute Toxicity Estimate |
| SDS | Safety Data Sheet |
| OECD | Organisation for Economic Co-operation and Development |
| CLP | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 |
| vPvB | Very Persistent and Very Bioaccumulative |

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity : 1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.



HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical : 1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

Indication of changes:

| | | | |
|--|---|-------|--|
| | NFPA reactivity | Added | |
| | NFPA health hazard | Added | |
| | NFPA fire hazard | Added | |
| | Physical | Added | |
| | Health | Added | |
| | Flammability | Added | |
| | Display TSCA summary in 15.1 | Added | |
| | Display SARA 313 summary in 15.1 | Added | |
| | Display California Proposition 65 summary in 15.3 | Added | |
| | Ecology - waste materials | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |

KSC VI PHYTACTYL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| | | | |
|------|-------------------------------------|----------|--|
| | classification | | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | Additional information | Added | |
| | Additional information | Added | |
| | Additional information | Added | |
| | First-aid measures general | Added | |
| | Hazard pictograms (GHS-US) | Added | |
| | Precautionary statements (GHS-US) | Added | |
| | Hazard statements (GHS-US) | Added | |
| | First-aid measures after inhalation | Modified | |
| | Other adverse effects | Modified | |
| | Name | Modified | |
| | Signal word (GHS-US) | Added | |
| 2.1 | GHS-US classification | Added | |
| 5.2 | Fire hazard | Modified | |
| 7.2 | Storage area | Added | |
| 7.2 | Prohibitions on mixed storage | Added | |
| 7.2 | Technical measures | Added | |
| 7.2 | Storage conditions | Modified | |
| 8.2 | Appropriate engineering controls | Added | |
| 12.1 | Ecology - general | Added | |
| 16 | Abbreviations and acronyms | Added | |
| 16 | Data sources | Added | |

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Trade name : KSC PHYT-ACTYL MIX
 Product code : SALE07

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Fertilizer

1.3. Supplier

Importer

Timac Agro USA, INC.
 Route 724 & I-176
 P.O. Box 888
 Reading, PA 19607 - USA
 T 1-800-545-5474
info-fds@roullier.com

Manufacturer

TIMAC Agro España S.A.
 Polígono de Arazuri-Orcoyen, calle C, nº32
 ORCOYEN (NAVARRA), 31160 - España
 T +34 948 324 500 - F +34 948 324 032
info-fds@timacagro.es - www.timacagro.es

1.4. Emergency telephone number

| Country | Organization/Company | Address | Emergency number | Comment |
|----------|----------------------|---------|---|---------|
| Americas | 3E | | +1-760-476-3962 (Access code : 333021) | (24/7) |

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Reproductive toxicity H360 May damage fertility or the unborn child (oral)
 Category 1B

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger
 Hazard statements (GHS US) : H360 - May damage fertility or the unborn child (oral)
 Precautionary statements (GHS US) : P201 - Obtain special instructions before use.
 P202 - Do not handle until all safety precautions have been read and understood.
 P280 - Wear face shield, protective clothing, protective gloves.
 P308+P313 - If exposed or concerned: Get medical advice/attention.
 P405 - Store locked up.
 P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : None under normal conditions.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

KSC PHYT-ACTYL MIX

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Name | Product identifier | % | GHS US classification |
|---|----------------------|-------|---|
| Disodium tetraborate pentahydrate, borax pentahydrate | (CAS-No.) 12179-04-3 | 3.367 | Eye Irrit. 2A, H319 Repr. 1B, H360 |
| EDTA-CuNa2 | (CAS-No.) 14025-15-1 | 3.448 | Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 |

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures general : Prompt treatment is essential to minimize damage.
- First-aid measures after inhalation : Move to fresh air in case of accidental inhalation. Get medical advice/attention. If possible show him this sheet. Failing this, show him the packaging or label.
- First-aid measures after skin contact : Wash skin with plenty of water and soap. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse thoroughly and plentifully with water, also under the eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult an eye specialist immediately.
- First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting without medical advice. Seek medical advice (show the label where possible).

4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects : (see section(s) : 2.1/2.3).

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : water, carbon dioxide (CO₂), powder and foam. Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : None known.

5.2. Specific hazards arising from the chemical

- Fire hazard : Not flammable. Non oxidizing material according to EC criteria.
- Explosion hazard : No direct explosion hazard.
- Hazardous decomposition products in case of fire : May release hazardous fumes.

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Contain the extinguishing fluids by bunding. Eliminate all ignition sources if safe to do so.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus. Complete protective clothing. EN 469.
- Other information : Do not allow run-off from fire fighting to enter drains or water courses. Relevant water authorities should be notified of any large spillage to water course or drain.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Remove ignition sources. Avoid dust formation. Evacuate area.

6.1.1. For non-emergency personnel

- Emergency procedures : Avoid contact with eyes. Do not breathe dust. Evacuate unnecessary personnel. Mark the danger area. Mechanically ventilate the spillage area. Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Ventilate area. Stop leak if safe to do so. Dike and contain spill.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Collect spillage.

KSC PHYT-ACTYL MIX

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

- Methods for cleaning up : Clean up immediately by sweeping or vacuum. Minimize generation of dust. Gather the product and place it in a spare container that has been suitably labeled.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Do not breathe dust. Avoid contact with eyes. Use personal protective equipment as required. Do not handle until all safety precautions have been read and understood.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : The floor of the depot should be impermeable and designed to form a water-tight basin. Comply with applicable regulations.
- Storage conditions : Store in dry, cool, well-ventilated area. Protect from moisture. Keep out of reach of children. Store locked up.
- Incompatible products : Refer to the detailed list of incompatible materials in section 10 Stability/Reactivity.
- Storage temperature : Store at ambient temperature
- Heat-ignition : Keep away from open flames, hot surfaces and sources of ignition.
- Information on mixed storage : Keep away from food, drink and animal feeding stuffs.
- Storage area : Store away from heat. Store in a well-ventilated place.
- Special rules on packaging : Keep only in original container. Store in a closed container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| | |
|---|---|
| KSC PHYT-ACTYL MIX | |
| No additional information available | |
| EDTA-CuNa2 (14025-15-1) | |
| No additional information available | |
| Disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3) | |
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | Sodium tetraborate, pentahydrate |
| ACGIH TWA (mg/m ³) | 2 mg/m ³ (I - Inhalable particulate matter) |
| ACGIH STEL (mg/m ³) | 6 mg/m ³ (I - Inhalable particulate matter) |
| Remark (ACGIH) | TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen) |
| Regulatory reference | ACGIH 2020 |
| USA - OSHA - Occupational Exposure Limits | |
| OSHA PEL (TWA) (mg/m ³) | 5 mg/m ³ |

8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station. Local exhaust and general ventilation must be adequate to meet exposure standards.
- Environmental exposure controls : Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems. Assure that emissions are compliant with all applicable air pollution control regulations. Comply with applicable regulations.

8.3. Individual protection measures/Personal protective equipment

Materials for protective clothing:

Wear suitable protective clothing

KSC PHYT-ACTYL MIX

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Eye protection:

Safety glasses with side guards should be worn to prevent injury from airborne particles and/or other eye contact with this product

| Type | Use | Characteristics |
|----------------|------|-------------------|
| Safety glasses | Dust | With side shields |

Skin and body protection:

Skin protection appropriate to the conditions of use should be provided. In case of repeated or prolonged contact wear gloves

| Type |
|--------|
| Gloves |

Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

| Device | Filter type | Condition |
|-----------|-------------|-----------------|
| Dust mask | Type P2 | Dust protection |

Personal protective equipment symbol(s):



Other information:

See Heading 7 : 7.1. Precautions for safe handling.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|-----------------------------|
| Physical state | : Solid |
| Appearance | : Powder. |
| Color | : green |
| Odor | : characteristic |
| Odor threshold | : No data available |
| pH | : No data available |
| pH solution | : 5.1 – 7.1 Water, 10% |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Flammability (solid, gas) | : Not flammable. |
| Vapor pressure | : No data available |
| Relative vapor density at 20 °C | : No data available |
| Relative density | : No data available |
| Specific gravity / density | : 1.3 |
| Solubility | : Water: Soluble |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosion limits | : No data available |
| Explosive properties | : Product is not explosive. |

KSC PHYT-ACTYL MIX

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Oxidizing properties : Non oxidizing material according to EC criteria.

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Acids. Bases. Metals. Oxidizing agent. Reducing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. In case of fire: See Heading 5.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)
Additional information : No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation

| EDTA-CuNa2 (14025-15-1) | |
|--|---|
| LD50 oral rat | 890 mg/kg (OECD 403 method) |
| LC50 Inhalation - Rat | > 5.3 mg/l/4h (OECD 436 method) |
| Disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3) | |
| LD50 oral rat | 3200 – 3400 mg/kg body weight U.S EPA FIFRA |
| LD50 dermal rabbit | > 2000 mg/kg body weight U.S EPA FIFRA |

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)
No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation

Respiratory or skin sensitization : Not classified (Based on available data, the classification criteria are not met)
No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)
No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation

Reproductive toxicity : May damage fertility or the unborn child (oral).

Specific target organ toxicity – single exposure : Not classified (Based on available data, the classification criteria are not met)
No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation

KSC PHYT-ACTYL MIX

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| | |
|--|---|
| Specific target organ toxicity – repeated exposure | : Not classified (Based on available data, the classification criteria are not met) No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation |
| Aspiration hazard | : Not classified (Based on available data, the classification criteria are not met. No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation) |
| Viscosity, kinematic | : No data available |
| Symptoms/effects | : (see section(s) : 2.1/2.3). |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|-------------------|--|
| Ecology - general | : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment. |
| Ecology - water | : Do not allow large quantities, as are, to spread into the environment. Do not discharge into drains or rivers. |

| EDTA-CuNa2 (14025-15-1) | |
|-------------------------|---|
| LC50 fish 1 | 555 mg/l <i>Lepomis macrochirus</i> |
| EC50 Daphnia 1 | 109.2 mg/l (OECD 202 method) |
| ErC50 (algae) | 662.6 mg/l <i>Pseudokirchneriella subcapitata</i> - (OECD 201 method) |
| NOEC chronic fish | 37.2 mg/l (OECD 210 method) |
| NOEC chronic crustacea | 29.5 mg/l (OECD 211 method) |

| Disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3) | |
|--|---|
| LC50 fish 1 | 537 mg/l <i>Pimephales promelas</i> - K and al., 2010) |
| EC50 Daphnia 1 | 896 mg/l daphnia, (Gersich, 1984a) |
| ErC50 (algae) | 270 mg/l <i>Pseudokirchneriella subcapitata</i> (Hansveit and Oldersma, 2000) |

12.2. Persistence and degradability

| KSC PHYT-ACTYL MIX | |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |

| EDTA-CuNa2 (14025-15-1) | |
|-------------------------------|----------------------------|
| Persistence and degradability | Not readily biodegradable. |

| Disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3) | |
|--|--------------------------------|
| Persistence and degradability | Not established. Not relevant. |

12.3. Bioaccumulative potential

| KSC PHYT-ACTYL MIX | |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |

| EDTA-CuNa2 (14025-15-1) | |
|---|----------------------------------|
| Partition coefficient n-octanol/water (Log Pow) | -10.416 |
| Bioaccumulative potential | Slightly or not bioaccumulative. |

12.4. Mobility in soil

| EDTA-CuNa2 (14025-15-1) | |
|-------------------------|---------------------------------------|
| Ecology - soil | Product adsorbs little onto the soil. |

| Disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3) | |
|--|-------------------------------------|
| Ecology - soil | Soluble in water. Small adsorption. |

12.5. Other adverse effects

| | |
|-------------------|---------------------------|
| Other information | : No other effects known. |
|-------------------|---------------------------|

KSC PHYT-ACTYL MIX

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 13: Disposal considerations

13.1. Disposal methods

- Regional legislation (waste) : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Discharging into rivers and drains is forbidden.
Additional information : Do not re-use empty containers.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Other information : No supplementary information available.

Transportation of Dangerous Goods

Transport by sea

Air transport

SECTION 15: Regulatory information

15.1. US Federal regulations

EDTA-CuNa2 (14025-15-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

EDTA-CuNa2 (14025-15-1)

Listed on the Canadian DSL (Domestic Substances List)

Disodium tetraborate pentahydrate, borax pentahydrate (12179-04-3)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

KSC PHYT-ACTYL MIX

Ensure all national/local regulations are observed

15.3. US State regulations

No additional information available

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 09/18/2020

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H-phrases:

| | |
|------|--|
| H302 | Harmful if swallowed |
| H319 | Causes serious eye irritation |
| H360 | May damage fertility or the unborn child |

Indication of changes:

| Section | Changed item | Change | Comments |
|---------|------------------------------|--------|----------|
| | Reason for no classification | Added | |
| | Additional information | Added | |
| | Additional information | Added | |

KSC PHYT-ACTYL MIX

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| | | | |
|------|--|----------|--|
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | Hazard statements (GHS US) | Added | |
| | Signal word (GHS US) | Added | |
| | Precautionary statements (GHS US) | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | Reason for no classification | Added | |
| | ATE US (oral) | Added | |
| | Hazard pictograms (GHS US) | Added | |
| | Supersedes | Added | |
| | Revision date | Added | |
| 2.1 | GHS-US classification | Added | |
| 3 | Composition/Information on ingredients | Modified | |
| 4 | First-aid measures general | Modified | |
| 4 | First-aid measures after skin contact | Modified | |
| 4 | First-aid measures after inhalation | Modified | |
| 5.2 | Hazardous decomposition products in case of fire | Modified | |
| 5.2 | Fire hazard | Modified | |
| 5.3 | Firefighting instructions | Modified | |
| 6 | Emergency procedures | Modified | |
| 6 | General measures | Modified | |
| 7.1 | Precautions for safe handling | Modified | |
| 7.1 | Hygiene measures | Modified | |
| 7.2 | Storage conditions | Modified | |
| 7.2 | Storage area | Modified | |
| 7.2 | Technical measures | Modified | |
| 7.2 | Special rules on packaging | Modified | |
| 8.2 | Materials for protective clothing | Added | |
| 8.2 | Respiratory protection | Modified | |
| 9 | pH | Removed | |
| 9 | pH solution | Added | |
| 9 | Specific gravity / density | Modified | |
| 10 | Incompatible materials | Modified | |
| 10 | Conditions to avoid | Modified | |
| 10 | Chemical stability | Modified | |
| 11 | Additional information | Added | |
| 11 | Additional information | Added | |
| 11 | Additional information | Added | |
| 11 | Additional information | Added | |
| 11 | Additional information | Added | |
| 12.1 | Ecology - general | Modified | |
| 12.2 | Persistence and degradability | Modified | |
| 13 | Additional information | Modified | |
| 13 | Ecology - waste materials | Removed | |
| 13 | Waste disposal recommendations | Added | |
| 13 | Waste treatment methods | Modified | |
| 13 | Regional legislation (waste) | Added | |

SDS US (GHS HazCom 2012)

KSC PHYT-ACTYL MIX

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.