

SECTION 1: Identification

1.1. Identification

Product form : Mixtures
Trade name : KSC PHYT-ACTYL V
Name : KSC V PHYTACTYL
Product code : SALE25

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

Serious eye damage/eye irritation, Category 2A H319

Full text of H statements : see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : H319 - Causes serious eye irritation
Precautionary statements (GHS-US) : P280 - Wear face shield, protective clothing, 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
P337+P313 - If eye irritation persists: Get medical advice/attention

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

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Name	Product identifier	%	GHS-US classification
potassium nitrate / Nitric acid potassium salt (1:1)	(CAS No) 7757-79-1	50 - 70	Ox. Sol. 3, H272
Potassium carbonate / Carbonic acid, potassium salt (1:2)	(CAS No) 584-08-7	>= 10	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, 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 : Get medical advice/attention if you feel unwell. Prompt treatment is essential to minimize damage.
- First-aid measures after inhalation : IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing.
- 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. If irritation persists, consult an eye specialist immediately.
- First-aid measures after ingestion : Call a POISON CENTER or doctor/physician if you feel unwell. Do not induce vomiting without medical advice. Give water to drink if victim completely conscious/alert.

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 : Remove ignition sources. Evacuate area.

6.1.1. For non-emergency personnel

- 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

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.

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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 : Ensure good ventilation of the work station. Avoid dust formation. 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 : Comply with applicable regulations.
- Storage conditions : Store in dry, cool, well-ventilated area.
- 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

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

ACGIH	ACGIH TWA (mg/m ³)	15 mg/m ³
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Not applicable

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

ACGIH	ACGIH STEL (mg/m ³)	3 mg/m ³
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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 : Where excessive dust may result, wear approved mask.
- 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.
- 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
- Colour : red
- Odour : characteristic
- Odour threshold : No data available
- pH : No data available
- pH solution : 5.5 - 7.5 water, 10%
- Melting point : No data available

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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	: 1.3 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 V	
ATE US (oral)	3095.000 mg/kg
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 / 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)
Potassium carbonate / Carbonic acid, potassium salt (1:2) (584-08-7)	
LD50 oral rat	> 1870 mg/kg (OECD 401 method)

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

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	: Causes serious eye 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)
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	: 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
Specific target organ toxicity (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

Specific target organ toxicity (repeated exposure)	: Not classified (Based on available data, the classification criteria are not met)
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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 / Nitric acid potassium salt (1:1) (7757-79-1)	
NOAEL (subacute, oral, animal/male, 28 days)	> 1500 mg/kg bodyweight OECD 422

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

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)
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : 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. Do not allow uncontrolled discharge of product into the environment.

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

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

12.2. Persistence and degradability

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

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

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

12.4. Mobility in soil

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

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

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.

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.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not applicable

Transportation of Dangerous Goods

Not applicable

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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

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

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

WHMIS Classification Class C - Oxidizing Material

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

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

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.

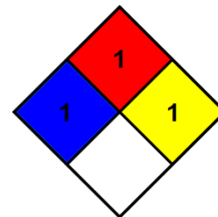
Full text of H-statements:

H272	May intensify fire; oxidiser
H302	Harmful if swallowed
H319	Causes serious eye irritation

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

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 : 1 Slight Hazard - Irritation or minor reversible injury possible

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.

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Indication of changes:

	Display additional SDS US addresses	Added	
	Recommended use	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	
	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	
	Reason for no classification	Added	
	Reason for no classification	Added	
	Reason for no classification	Added	
	Precautionary statements (GHS-US)	Added	
	ATE US (oral)	Added	
	NFPA reactivity	Added	
	NFPA health hazard	Added	
	NFPA fire hazard	Added	
	Additional information	Added	
	Additional information	Added	
	Additional information	Added	
	Physical	Added	
	Health	Added	
	Flammability	Added	
	First-aid measures general	Added	
	Supersedes	Added	
	Revision date	Added	
	Other adverse effects	Modified	
	First-aid measures after ingestion	Modified	
	First-aid measures after eye contact	Modified	
	Signal word (GHS-US)	Added	
	Hazard pictograms (GHS-US)	Added	
	Hazard statements (GHS-US)	Added	
2.1	GHS-US classification	Added	
7.2	Technical measures	Added	
7.2	Storage area	Added	
12.1	Ecology - general	Added	
16	Data sources	Added	

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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

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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

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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

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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

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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)
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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

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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.

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

WHMIS Classification	Class C - Oxidizing Material
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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

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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

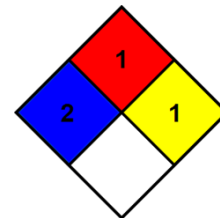
Abbreviations and acronyms:

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	

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	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 of the substance/mixture and of the company/undertaking**1.1. Product identifier**

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

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Main use category : Professional use
Use of the substance/mixture : Fertilizer

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet**Supplier**

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
31160 ORCOYEN (NAVARRA) - 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 Center: 1-800-222-1222 Americas : +1-760-476-3962 (Access code : 333021) - Europe/Middle-East/Africa : +1-760-476-3961 (Access code : 333021)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Not classified

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

No labelling applicable

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients**3.1. Substance**

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
EDTA Cu chelate, solid	(CAS No)14025-15-1 (EC no)237-864-5	3,448	Not classified

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according to Regulation (EC) No. 453/2010

Name	Product identifier	%	Classification according to Directive 67/548/EEC
disodium tetraborate pentahydrate substance listed as REACH Candidate (Disodium tetraborate, anhydrous)	(CAS No)12179-04-3 (EC no)215-540-4 (EC index no)005-011-02-9 (REACH-no)01-2119490790-32	3,367	Repr.Cat.2; R60 Repr.Cat.2; R61
Name	Product identifier	Specific concentration limits	
disodium tetraborate pentahydrate	(CAS No)12179-04-3 (EC no)215-540-4 (EC index no)005-011-02-9 (REACH-no)01-2119490790-32	(6,5 =< C) Repr. Cat. 2;R60-61	
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
EDTA Cu chelate, solid	(CAS No)14025-15-1 (EC no)237-864-5	3,448	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319
disodium tetraborate pentahydrate substance listed as REACH Candidate (Disodium tetraborate, anhydrous)	(CAS No)12179-04-3 (EC no)215-540-4 (EC index no)005-011-02-9 (REACH-no)01-2119490790-32	3,367	Eye Irrit. 2, H319 Repr. 1B, H360FD
Name	Product identifier	Specific concentration limits	
disodium tetraborate pentahydrate	(CAS No)12179-04-3 (EC no)215-540-4 (EC index no)005-011-02-9 (REACH-no)01-2119490790-32	(6,5 =< C) Repr. 1B, H360FD	

Full text of R- and H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Get medical advice and attention if you feel unwell.
- First-aid measures after skin contact : If case of redness or irritation, call a doctor.
- 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 : If swallowed, rinse mouth with water (only if the person is conscious). Take medical advice immediately.

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 spray.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : May intensify fire; oxidiser.
- Hazardous decomposition products 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 : Wearing autonomous, insulating breathing equipment is recommended when entering the danger zone.
- Other information : Avoid pouring fire water down the drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Wear suitable protective clothing.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment.

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according to Regulation (EC) No. 453/2010

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Minimize generation of dust.
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 : Concerning personal protective equipment to use, see item 8.
Precautions for safe handling : Avoid contact with skin and eyes. Wear suitable protective clothing and eye/face protection.
Hygiene measures : Always wash hands after handling the product. Keep away from food, drink and animal feedingstuffs.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry area. Keep in a cool, well-ventilated place away from heat.
Incompatible products : Organic materials. Refer to section 10 on incompatible materials.
Incompatible materials : Refer to section 10 on incompatible materials.
Heat and ignition sources : Keep away from sources of ignition - No smoking.

7.3. Specific end use(s)

SECTION 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

disodium tetraborate pentahydrate (12179-04-3)

DNEL/DMEL (Workers)

Acute - local effects, inhalation	17 mg/m ³
Long-term - systemic effects, dermal	32432 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	9,8 mg/m ³

EDTA Cu chelate, solid (14025-15-1)

DNEL/DMEL (Workers)

Acute - systemic effects, inhalation	1,8 mg/m ³
Long-term - systemic effects, dermal	3750 mg/kg bodyweight/day

8.2. Exposure controls

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.

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according to Regulation (EC) No. 453/2010

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
pH	: 5,1 - 7,1
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Self ignition temperature	: No data available
Decomposition temperature	: 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	: 1,3 kg/l
Solubility	: Soluble in water.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 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
Explosive limits	: 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

None to our knowledge.

10.4. Conditions to avoid

Moisture. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. oxidizing agents (peroxides, chromates, dichromates).

10.6. Hazardous decomposition products

Gaseous ammonia. Carbon dioxide (CO₂). Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

disodium tetraborate pentahydrate (12179-04-3)	
LD50 oral rat	3200 mg/kg
LD50 dermal rabbit	> 2000
LC50 inhalation rat (mg/l)	> 2 mg/l
ATE (oral)	3200,000 mg/kg bodyweight

EDTA Cu chelate, solid (14025-15-1)	
ATE (oral)	500,000 mg/kg bodyweight

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according to Regulation (EC) No. 453/2010

Skin corrosion/irritation	: Prolonged or repeated skin contact may cause irritation, contact dermatitis. pH: 5,1 - 7,1
Serious eye damage/irritation	: Not classified pH: 5,1 - 7,1
Respiratory or skin sensitisation	: May cause sensitization by inhalation
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Contains a toxic to reproduction component (H360FD) at a concentration below the threshold for classifying the mixture. (Based on available data, the classification criteria are not met)
Specific target organ toxicity (single exposure)	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (repeated exposure)	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

SECTION 12: Ecological information

12.1. Toxicity

disodium tetraborate pentahydrate (12179-04-3)	
LC50 fishes 1	370 mg/l Pimephales promelas
EC50 Daphnia 1	619 mg/l Daphnia magna
ErC50 (algae)	187 mg/l Pseudokirchneriella subcapitata

12.2. Persistence and degradability

KSC PHYT-ACTYL MIX	
Persistence and degradability	May cause long-term adverse effects in the environment. Main components of the mixture have a good degradation.

12.3. Bioaccumulative potential

KSC PHYT-ACTYL MIX	
Bioaccumulative potential	No study has been carried out for the moment on this mixture.

12.4. Mobility in soil

KSC PHYT-ACTYL MIX	
Ecology - soil	No study has been carried out for the moment on this mixture.

12.5. Results of PBT and vPvB assessment

Component	
disodium tetraborate pentahydrate (12179-04-3)	This substance/mixture does not meet the PBT criteria of REACH, annex XIII. This substance/mixture does not meet the vPvB criteria of REACH, annex XIII.

12.6. Other adverse effects

Other adverse effects : None known.

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, in accordance with local, regional, national and/or international regulation.
Sewage disposal recommendations	: If spilled : see chapter 6.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

No dangerous good in sense of transport regulations

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

KSC PHYT-ACTYL MIX

Safety Data Sheet

according to Regulation (EC) No. 453/2010

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

No additional information available

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

No additional information available

14.6.4. Inland waterway transport

No additional information 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. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Contains REACH Candidate List substance(s): Disodium tetraborate, anhydrous (EC 215-540-4, CAS 12179-04-3)

Seveso Information :

15.1.2. National regulations

Ensure all national/local regulations are observed

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out

disodium tetraborate pentahydrate

SECTION 16: Other information

Full text of R-, H- and EUH-phrases::

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
H302	Harmful if swallowed
H319	Causes serious eye irritation
H360FD	May damage fertility. May damage the unborn child
R60	May impair fertility
R61	May cause harm to the unborn child

SDS EU (REACH Annex II)

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 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

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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.

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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

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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)

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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.
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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)

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12.2. Persistence and degradability

KSC PHYT-ACTYL I

Persistence and degradability	Product is biodegradable.
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12.3. Bioaccumulative potential

KSC PHYT-ACTYL I

Bioaccumulative potential	Not established.
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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%
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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

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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

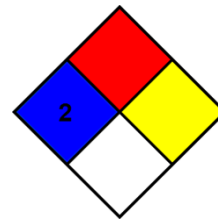
Revision date : 02/20/2017

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	

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	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	
	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	

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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

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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)

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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)
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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)
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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

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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