

Apex 14-5-10 NPK MAX with GAL-Xe ONE

Safety Data Sheet

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

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Apex 14-5-10 NPK MAX with GAL-Xe ONE
Product code : M75029

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

JR Simplot Company
P.O. Box 70013
Boise, ID 83707
T 1-208-336-2110

1.4. Emergency telephone number

Emergency number : CHEMTREC 1-800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Serious eye damage/eye irritation, Category 2B H320

Full text of H statements : see section 16

2.2. Label elements

GHS-US labelling

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : H320 - Causes eye irritation
Precautionary statements (GHS-US) : P264 - Wash hands, forearms and face thoroughly after handling
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 attention

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

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Name	Product identifier	%	GHS-US classification
edta iron(iii) sodium salt	(CAS No) 15708-41-5		Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
copper(II) sulfate, pentahydrate	(CAS No) 7758-99-8		Acute Tox. 3 (Oral), H301 Skin Irrit. 2, H315 Eye Irrit. 2B, H320
zinc sulfate, monohydrate	(CAS No) 7446-19-7		Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Ferrous Sulfate Monohydrate	(CAS No) 17375-41-6		Acute Tox. 4 (Oral), H302 Eye Irrit. 2B, H320 STOT SE 3, H335
Proprietary			Not classified

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Allow breathing of fresh air. Allow the victim to rest.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- 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 : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

- Symptoms/injuries after eye contact : Causes eye irritation.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

copper(II) sulfate, pentahydrate (7758-99-8)		
Not applicable		
Ferrous Sulfate Monohydrate (17375-41-6)		
Not applicable		
edta iron(iii) sodium salt (15708-41-5)		
ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³
Not applicable		
zinc sulfate, monohydrate (7446-19-7)		
Not applicable		
Proprietary		
Not applicable		

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Respiratory protection : Wear appropriate mask.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Granules.

Colour : Mixture contains one or more component(s) which have the following colour(s):
Colourless or white Colourless to white Commercial substance: grey-green Colourless White
Colourless-white Blue Yellow-brown Rose

Odour : Fertilizer like odor

Odour threshold : No data available

pH : No data available

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

Explosive limits : No data available

Explosive properties : No data available

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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	: 65-69 lbs/ft3
Solubility	: Slowly soluble, coating insoluble. Water: Solubility in water of component(s) of the mixture : • ammonium nitrate: 190 g/100ml • Monoammonium Phosphate: 38 g/100ml • wax (paraffins- petroleum): insoluble • Calcium Phosphate: 1.8 g/100ml (30 °C) • potassium sulfate: 11 g/100ml • magnesium sulfate, monohydrate: soluble • copper(II) sulfate, pentahydrate: 23 g/100ml • edta iron(iii) sodium salt: < 10 g/100ml • manganese(II)sulfate, monohydrate: 100 g/100ml • zinc sulfate, monohydrate: 35 g/100ml
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 additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

copper(II) sulfate, pentahydrate (7758-99-8)	
LD50 oral rat	300 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value; 482 mg/kg bodyweight; Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit; Literature study; OECD 402: Acute Dermal Toxicity)
ATE US (oral)	300.000 mg/kg bodyweight
Ferrous Sulfate Monohydrate (17375-41-6)	
LD50 oral rat	319 mg/kg
ATE US (oral)	319.000 mg/kg bodyweight
edta iron(iii) sodium salt (15708-41-5)	
LD50 oral rat	5000 mg/kg (Rat)
ATE US (oral)	5000.000 mg/kg bodyweight
zinc sulfate, monohydrate (7446-19-7)	
LD50 oral rat	1710 mg/kg
ATE US (oral)	1710.000 mg/kg bodyweight

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Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries after eye contact	: Causes eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

copper(II) sulfate, pentahydrate (7758-99-8)	
LC50 fish 1	1.5 mg/l (24 h; Lepomis macrochirus; Toxicity test)
EC50 Daphnia 1	0.109 - 0.798 mg/l (48 h; Daphnia magna; Anhydrous form)
LC50 fish 2	0.17 mg/l (24 h; Salmo gairdneri (Oncorhynchus mykiss); Anhydrous form)
TLM fish 1	3.8 ppm 24 h; Salmo gairdneri (Oncorhynchus mykiss)
Threshold limit algae 1	0.01 - 0.28,72 h; Selenastrum capricornutum; Anhydrous form
Threshold limit algae 2	0.368 mg/l (72 h; Pseudokirchneriella subcapitata; Anhydrous form)
edta iron(iii) sodium salt (15708-41-5)	
LC50 fish 1	2592 mg/l (96 h; Pisces)
zinc sulfate, monohydrate (7446-19-7)	
LC50 fish 1	1.7 mg/l (96 h; Poecilia reticulata; Anhydrous form)
EC50 Daphnia 1	0.56 mg/l (48 h; Daphnia magna; Anhydrous form)
LC50 fish 2	2.4 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss); Anhydrous form)
EC50 Daphnia 2	1 mg/l (24 h; Daphnia magna; Anhydrous form)

12.2. Persistence and degradability

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Persistence and degradability	Not established.
copper(II) sulfate, pentahydrate (7758-99-8)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available. Not established.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
Ferrous Sulfate Monohydrate (17375-41-6)	
Persistence and degradability	Not established.
edta iron(iii) sodium salt (15708-41-5)	
Persistence and degradability	Biodegradable in water. Not established.
zinc sulfate, monohydrate (7446-19-7)	
Persistence and degradability	Biodegradability: not applicable. Not established.
Biochemical oxygen demand (BOD)	Not applicable

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zinc sulfate, monohydrate (7446-19-7)	
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
Proprietary	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Apex 14-5-10 NPK MAX with GAL-Xe ONE	
Bioaccumulative potential	Not established.
copper(II) sulfate, pentahydrate (7758-99-8)	
Bioaccumulative potential	Bioaccumable. Not established.
Ferrous Sulfate Monohydrate (17375-41-6)	
Bioaccumulative potential	Not established.
edta iron(iii) sodium salt (15708-41-5)	
Log Pow	-10.6
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.
zinc sulfate, monohydrate (7446-19-7)	
BCF fish 1	59 - 242 (Cyprinus carpio; Anhydrous form)
BCF fish 2	59 - 242 (Cyprinus carpio; Test duration: 8 weeks)
Bioaccumulative potential	Bioaccumable. Not established.
Proprietary	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

copper(II) sulfate, pentahydrate (7758-99-8)	
Ecology - soil	Toxic to flora.

12.5. Other adverse effects

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

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

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:

copper(II) sulfate, pentahydrate	CAS No 7758-99-8	%
Ferrous Sulfate Monohydrate	CAS No 17375-41-6	%
zinc sulfate, monohydrate	CAS No 7446-19-7	%
Proprietary	CAS No	%

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

Other information : None.

Full text of H-statements:

H301	Toxic if swallowed
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H320	Causes eye irritation
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

SDS US (GHS HazCom 2012)

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