

# 28-0-16

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Issue date: 2/19/2021 Revision date: 4/22/2025 Supersedes: 2/19/2021 Version: 2.0

### SECTION 1 Identification

#### 1.1. Product identifier

Product form : Mixture  
Product name : 28-0-16  
Product code : M80372

#### 1.2. Other means of identification

No additional information available

#### 1.3. Recommended use of the chemical and restrictions on use

No additional information available

#### 1.4. Supplier's details

Simplot AB Retail, Inc.  
P.O. Box 9296  
Boise, ID, 83707

#### 1.5. Emergency phone number

Emergency number : CHEMTREC 1-800-424-9300

### SECTION 2 Hazard Identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Serious eye damage/eye irritation, Category 2B	H320	Causes eye irritation.
Carcinogenicity, Category 1A	H350	May cause cancer.

Full text of H statements : see section 16

#### 2.2. Label elements

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger

Hazard statements (GHS US) : H302 - Harmful if swallowed  
H320 - Causes eye irritation  
H350 - May cause cancer.

Precautionary statements (GHS US) : P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection.  
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308+P313 - If exposed or concerned: Get medical advice/attention.

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P330 - Rinse mouth.  
P337+P313 - If eye irritation persists: Get medical advice or attention.  
P405 - Store locked up.  
P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

### 2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

### 2.4. Hazards not otherwise classified

No additional information available

### 2.5. Unknown acute toxicity

No additional information available

## SECTION 3 Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
urea (57-13-6)	CAS-No.: 57-13-6	50-70	Eye Irrit. 2B, H320
Iron Sucrate	CAS-No.: 8047-67-4	1-10	Acute Tox. 3 (Oral), H301 Carc. 2, H351
quartz	CAS-No.: 14808-60-7	<0.2	Eye Irrit. 2B, H320 Carc. 1A, H350 STOT SE 3, H335 STOT RE 2, H373

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

## SECTION 4 First aid measures

### 4.1. Description of necessary first-aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.  
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Wash skin with plenty of water.  
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
First-aid measures after ingestion : Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

### 4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : None under normal conditions. Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.  
Symptoms/effects after skin contact : None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.  
Symptoms/effects after eye contact : Mild eye irritation.  
Symptoms/effects after ingestion : Harmful if swallowed.

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### 4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

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

### 5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.  
Explosion hazard : No direct explosion hazard.  
Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.  
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6 Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

#### For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.  
Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene.

#### For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".  
Emergency procedures : Evacuate unnecessary personnel.

Environmental precautions : Avoid release to the environment. Notify authorities if product enters sewers or public waters.

### 6.2. Methods and materials for containment and cleaning up

For containment : Using a clean shovel, put the material in a dry container and cover without compressing it.  
Methods for cleaning up : Mechanically recover the product. Notify authorities if product enters sewers or public waters.  
Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

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### SECTION 7 Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Avoid contact with skin and eyes.
- Hygiene measures : Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
- Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

#### 7.2. Conditions for safe storage, including incompatibilities

- Technical measures : Keep in a cool, well-ventilated place away from heat.
- Storage conditions : Store locked up.
- Packaging materials : Store always product in container of same material as original container.

### SECTION 8 Exposure controls/personal protection

#### 8.1. Control parameters

quartz (14808-60-7)	
USA - OSHA - Occupational Exposure Limits	
Local name	Quartz (Respirable) (Silica: Crystalline)
Remark (OSHA)	Table Z-3. For OSHA PEL (TWA): Use formulas: (250 / (%SiO <sub>2</sub> +5)) for mppcf and (10 mg/m <sup>3</sup> / (%SiO <sub>2</sub> +2)) for mg/m <sup>3</sup> . CAS No. source: eCFR Table Z-1.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts

#### 8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Environmental exposure controls : Avoid release to the environment.

#### 8.3. Individual protection measures, such as personal protective equipment

##### Personal protective equipment:

Wear recommended personal protective equipment.

<b>Hand protection:</b>
Protective gloves
<b>Eye protection:</b>
Safety glasses
<b>Skin and body protection:</b>
Wear suitable protective clothing
<b>Respiratory protection:</b>
[In case of inadequate ventilation] wear respiratory protection.

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### Personal protective equipment symbol(s):



## SECTION 9 Physical and chemical properties

### 9.1. Basic physical and chemical properties

Physical state	: Solid
Color	: Mixture contains one or more component(s) which have the following color(s): White Colorless Pure substance: colourless to white Unpurified: grey-blue or red Colourless to white Black
Odor	: There may be no odor warning properties, odor is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odor: Odourless In moist air: Ammonia odour
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable
Explosion limits	: Not applicable
Particle characteristics	: No data available

#### urea (57-13-6)

Particle characteristics	No data available
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#### Iron Sucrate

Particle characteristics	No data available
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#### quartz

Particle characteristics	No data available
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### 9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

## SECTION 10 Stability and reactivity

### 10.1. Reactivity

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

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### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

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

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11 Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

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ATE US (oral)	1151.968 mg/kg body weight
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#### urea (57-13-6) (57-13-6)

LD50 oral rat	8471 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; 14300 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rat	> 3200 mg/kg (Rat; Literature study)
LD50 dermal rabbit	> 21000 mg/kg (Rabbit; Literature study)
ATE US (oral)	8471 mg/kg body weight

#### Iron Sucrate (8047-67-4)

ATE US (oral)	100 mg/kg body weight
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Skin corrosion/irritation : Not classified

#### urea (57-13-6) (57-13-6)

pH	7.2 (10 %)
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#### quartz (14808-60-7)

pH	6 – 7
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Serious eye damage/irritation : Causes eye irritation.

#### urea (57-13-6) (57-13-6)

pH	7.2 (10 %)
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#### quartz (14808-60-7)

pH	6 – 7
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Respiratory or skin sensitization : Not classified

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Germ cell mutagenicity : Not classified

Carcinogenicity : May cause cancer.

<b>Iron Sucrate (8047-67-4)</b>	
IARC group	3 - Not classifiable
<b>quartz (14808-60-7)</b>	
IARC group	1 - Carcinogenic to humans

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

<b>quartz (14808-60-7)</b>	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

<b>quartz (14808-60-7)</b>	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

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Viscosity, kinematic	Not applicable

<b>urea (57-13-6) (57-13-6)</b>	
Viscosity, kinematic	Not applicable (solid)

<b>Iron Sucrate (8047-67-4)</b>	
Viscosity, kinematic	No data available

<b>quartz (14808-60-7)</b>	
Viscosity, kinematic	No data available

Symptoms/effects after inhalation : None under normal conditions. Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.

Symptoms/effects after skin contact : None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.

Symptoms/effects after eye contact : Mild eye irritation.

Symptoms/effects after ingestion : Harmful if swallowed.

## SECTION 12 Ecological information

### 12.1. Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

<b>urea (57-13-6) (57-13-6)</b>	
LC50 - Fish [1]	> 6810 mg/l (96 h; Leuciscus idus; Nominal concentration)
EC50 - Crustacea [1]	> 10000 mg/l (48 h; Daphnia magna; Nominal concentration)
LC50 - Fish [2]	17500 mg/l (96 h; Poecilia reticulata)

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urea (57-13-6) (57-13-6)	
EC50 - Crustacea [2]	> 10000 mg/l (24 h; Daphnia magna)
EC50 72h - Algae [1]	24541.9 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	42184 mg/l Source: Ecological Structure Activity Relationships
TLM - Fish [1]	17500 ppm (96 h; Poecilia reticulata)
Threshold limit - Other aquatic organisms [1]	120000 mg/l (16 h; Bacteria; Toxicity test)
Threshold limit - Other aquatic organisms [2]	> 10000 mg/l (Pseudomonas putida)
Threshold limit - Algae [1]	> 10000 mg/l (168 h; Scenedesmus quadricauda; Growth rate)
Threshold limit - Algae [2]	47 mg/l (192 h; Microcystis aeruginosa; Growth rate)

### 12.2. Persistence and degradability

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Persistence and degradability	Rapidly degradable
urea (57-13-6) (57-13-6)	
Persistence and degradability	Inherently biodegradable, Hydrolysis in water, Not established.
ThOD	0.27 g O <sub>2</sub> /g substance
Iron Sucrate (8047-67-4)	
Persistence and degradability	Not established.
quartz (14808-60-7)	
Persistence and degradability	Biodegradability: not applicable, Not established.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

### 12.3. Bioaccumulative potential

urea (57-13-6) (57-13-6)	
BCF - Fish [1]	1 (72 h; Brachydanio rerio; Fresh water)
BCF - Other aquatic organisms [1]	11700 (Chlorella sp.)
Partition coefficient n-octanol/water (Log Pow)	< -1.73 (Experimental value; EU Method A.8: Partition Coefficient)
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.
Iron Sucrate (8047-67-4)	
Bioaccumulative potential	Not established.
quartz (14808-60-7)	
Partition coefficient n-octanol/water (Log Pow)	Not applicable
Bioaccumulative potential	No bioaccumulation data available. Not established.

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### 12.4. Mobility in soil

#### urea (57-13-6) (57-13-6)

Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	-1.43 – -1.19 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.

### 12.5. Other adverse effects

Ozone : Not classified  
Fluorinated greenhouse gases : No

## SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.  
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Sewage disposal recommendations : Disposal must be done according to official regulations.  
Product/Packaging disposal recommendations : Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations.  
Additional information : Do not re-use empty containers.

## SECTION 14 Transport information

### 14.1. UN number

UN-No. (DOT) : Not applicable  
UN-No. (TDG) : Not applicable  
UN-No. (IMDG) : Not applicable  
UN-No. (IATA) : Not applicable

### 14.2. UN Proper Shipping Name

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

### 14.3. Transport hazard class(es)

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

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

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

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

### 14.4. Packing group

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

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Packing group (IATA) : Not applicable

### 14.5. Environmental hazards

Other information : No supplementary information available.

### 14.6. Transport in bulk

Not applicable

### 14.7. Special precautions for user

#### DOT

Not applicable

#### TDG

Not applicable

#### IMDG

Not applicable

#### IATA

Not applicable

## SECTION 15 Regulatory information

### 15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Iron Sucrate	CAS-No. 8047-67-4	1-10%
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### 15.2. International regulations

#### CANADA

##### urea (57-13-6) (57-13-6)

Listed on the Canadian DSL (Domestic Substances List)

##### Iron Sucrate (8047-67-4)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

##### quartz (14808-60-7)

Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations

No additional information available

#### National regulations

##### urea (57-13-6) (57-13-6)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

##### quartz (14808-60-7)

Listed on IARC (International Agency for Research on Cancer)

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### 15.3. 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

Component	State or local regulations
quartz(14808-60-7)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

### SECTION 16 Other information

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Full text of hazard classes and H-statements	
H301	Toxic if swallowed
H302	Harmful if swallowed
H320	Causes eye irritation
H335	May cause respiratory irritation
H350	May cause cancer.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure

Safety Data Sheet (SDS), USA

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