

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Nutros

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

No additional information available

1.3. Details of the supplier of the safety data sheet

MarVista Resources
745 North Ave.
Corcoran, Ca. 93212 - USA
T 559-992-4535

1.4. Emergency telephone number

Emergency number : 24 Hour Emergency HAZMAT Response: (800) 229-5252: EPA National Response Center: (800) 424-8802

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Acute toxicity (oral) Category 4 H302
Serious eye damage/eye irritation Category 1 H318
Specific target organ toxicity (repeated exposure) Category 2 H373

Full text of H statements : see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Contains :

Cee Quest 70-55; manganese(II)sulfate, monohydrate; copper(II) sulfate, pentahydrate; zinc sulfate, monohydrate

Hazard statements (GHS-US) :

H302 - Harmful if swallowed
H318 - Causes serious eye damage
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS-US) :

P260 - Do not breathe spray, mist
P264 - Wash skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P280 - Wear protective gloves, protective clothing, eye protection
P301+P312 - If swallowed: Call a doctor, a POISON CENTER 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
P310 - Immediately call a doctor, a POISON CENTER
P314 - Get medical advice/attention if you feel unwell
P330 - Rinse mouth
P501 - Dispose of contents/container to comply with local, state, and federal regulations

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

Nutros

Safety Data Sheet

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

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Cee Quest 70-55		15 - 25	Acute Tox. 4 (Oral), H302 Eye Irrit. 2B, H320
manganese(II)sulfate, monohydrate	(CAS No) 10034-96-5	< 10	STOT RE 2, H373 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
copper(II) sulfate, pentahydrate	(CAS No) 7758-99-8	< 10	Acute Tox. 3 (Oral), H301 Aquatic Acute 2, H401
zinc sulfate, monohydrate	(CAS No) 7446-19-7	< 10	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-phrases: 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 : 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. Call a physician immediately.
- First-aid measures after ingestion : Rinse mouth.

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

- Symptoms/injuries : Causes serious eye irritation.
- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : May cause irritation to skin.
- Symptoms/injuries after eye contact : Serious damage to eyes.
- Symptoms/injuries after ingestion : May cause gastrointestinal discomfort.

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. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

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

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

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

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Nutros

Safety Data Sheet

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

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".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Do not breathe mist, spray. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

Special rules on packaging : correctly labelled. meet the legal requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Cee Quest 70-55		
Not applicable		
manganese(II)sulfate, monohydrate (10034-96-5)		
ACGIH	ACGIH TWA (mg/m ³)	0.1 mg/m ³
Not applicable		
zinc sulfate, monohydrate (7446-19-7)		
Not applicable		
copper(II) sulfate, pentahydrate (7758-99-8)		
NIOSH	NIOSH REL (TWA) (mg/m ³)	1 mg/m ³

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Hand protection : Protective gloves.

Eye protection : Safety glasses.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Color : Mixture contains one or more component(s) which have the following colour(s):
Rose Blue White Colourless to white Brown-black to black

Odor : There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure.
Mixture contains one or more component(s) which have the following odour(s):
Odourless Nutty. sweet

Odor threshold : No data available

pH : 2.6

Melting point : Not applicable

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

Explosion limits : No data available

Nutros

Safety Data Sheet

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

Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 1.27 g/ml
Solubility	: No data available
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

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

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

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

Nutros	
ATE US (oral)	1195.219 mg/kg body weight
Cee Quest 70-55	
ATE US (oral)	500.000 mg/kg body weight
zinc sulfate, monohydrate (7446-19-7)	
ATE US (oral)	500.000 mg/kg body weight
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 body weight

Skin corrosion/irritation : Not classified

pH: 2.6

Serious eye damage/irritation : Causes serious eye damage.

pH: 2.6

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Nutros

Safety Data Sheet

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

Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: May cause irritation to skin.
Symptoms/injuries after eye contact	: Serious damage to eyes.
Symptoms/injuries after ingestion	: May cause gastrointestinal discomfort.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
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manganese(II)sulfate, monohydrate (10034-96-5)	
LC50 fish 1	2850 mg/l (96 h; <i>Colisa fasciatus</i> ; Anhydrous form)
EC50 Daphnia 1	8.28 mg/l (48 h; <i>Daphnia magna</i> ; Anhydrous form)
LC50 fish 2	33.8 mg/l (96 h; <i>Pimephales promelas</i> ; Anhydrous form)
EC50 Daphnia 2	10 mg/l (24 h; <i>Daphnia magna</i> ; Anhydrous form)
Threshold limit algae 1	25.7 mg/l (<i>Phaeodactylum</i> ; Anhydrous form)
zinc sulfate, monohydrate (7446-19-7)	
LC50 fish 1	1.7 mg/l (96 h; <i>Poecilia reticulata</i> ; Anhydrous form)
EC50 Daphnia 1	0.56 mg/l (48 h; <i>Daphnia magna</i> ; Anhydrous form)
LC50 fish 2	2.4 mg/l (96 h; <i>Salmo gairdneri</i> (<i>Oncorhynchus mykiss</i>); Anhydrous form)
EC50 Daphnia 2	1 mg/l (24 h; <i>Daphnia magna</i> ; Anhydrous form)
copper(II) sulfate, pentahydrate (7758-99-8)	
LC50 fish 1	1.5 mg/l (24 h; <i>Lepomis macrochirus</i> ; Toxicity test)
EC50 Daphnia 1	0.109 - 0.798 mg/l (48 h; <i>Daphnia magna</i> ; Anhydrous form)
LC50 fish 2	0.17 mg/l (24 h; <i>Salmo gairdneri</i> (<i>Oncorhynchus mykiss</i>); Anhydrous form)
TLM fish 1	3.8 ppm 24 h; <i>Salmo gairdneri</i> (<i>Oncorhynchus mykiss</i>)
Threshold limit algae 1	0.01 - 0.28,72 h; <i>Selenastrum capricornutum</i> ; Anhydrous form
Threshold limit algae 2	0.368 mg/l (72 h; <i>Pseudokirchneriella subcapitata</i> ; Anhydrous form)

12.2. Persistence and degradability

manganese(II)sulfate, monohydrate (10034-96-5)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
zinc sulfate, monohydrate (7446-19-7)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
copper(II) sulfate, pentahydrate (7758-99-8)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable

Nutros

Safety Data Sheet

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

copper(II) sulfate, pentahydrate (7758-99-8)	
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

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.

copper(II) sulfate, pentahydrate (7758-99-8)	
Bioaccumulative potential	Bioaccumable.

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.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

No additional information available

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

manganese(II)sulfate, monohydrate (10034-96-5)
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

zinc sulfate, monohydrate (7446-19-7)
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

copper(II) sulfate, pentahydrate (7758-99-8)
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Nutros

Safety Data Sheet

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

National regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

Full text of H-phrases:

H301	Toxic if swallowed
H302	Harmful if swallowed
H318	Causes serious eye damage
H320	Causes eye irritation
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

NFPA health hazard

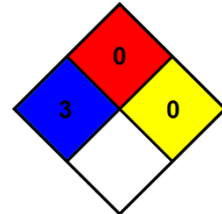
: 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard

: 0 - Materials that will not burn.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



SDS US (GHS HazCom 2012)

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