

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Product name : SoluClear 20-9-20 Low pH

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

Use of the substance/mixture : Fertilizer end-use, preparation of fertilizers mixtures.

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 Response Chemtrec: 1-800-262-8200

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Oxidizing solids H272
 Category 3
 Skin corrosion/irritation H314
 Category 1C
 Serious eye damage/eye irritation H319
 Category 2A
 Reproductive toxicity H360
 Category 1B

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 :

boric acid; Urea Phosphate

Hazard statements (GHS-US) :

H272 - May intensify fire; oxidizer
 H314 - Causes severe skin burns and eye damage
 H319 - Causes serious eye irritation
 H360 - May damage 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
 P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking
 P220 - Keep/Store away from combustible materials, combustibles
 P221 - Take any precaution to avoid mixing with combustible materials, combustibles
 P260 - Do not breathe dust
 P264 - Wash skin thoroughly after handling
 P280 - Wear eye protection, protective clothing, protective gloves
 P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
 P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
 P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
 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
 P310 - Immediately call a doctor, a POISON CENTER (800-222-1222)
 P321 - Specific treatment (see the first aid section on this label)

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P337+P313 - If eye irritation persists: Get medical advice/attention
P363 - Wash contaminated clothing before reuse
P370+P378 - In case of fire: Use appropriate media to extinguish
P405 - Store locked up
P501 - Dispose of contents/container to in a safe manner that complies with local, state, and federal regulations

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

Name	Product identifier	%	Classification (GHS-US)
ammonium nitrate,conc combustible substances<0,2%	(CAS No) 6484-52-2	20 - 40	Eye Irrit. 2B, H320
Urea Phosphate	(CAS No) 4861-19-2	5 - 24.9	Skin Corr. 1C, H314 Eye Irrit. 2B, H320
boric acid	(CAS No) 10043-35-3	< 3	Repr. 1B, H360

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.
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. Do NOT induce vomiting. Call a physician immediately.

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

Symptoms/injuries : If you feel unwell, seek medical advice (show the label where possible).
Symptoms/injuries after inhalation : May cause slight irritation.
Symptoms/injuries after skin contact : Burns.
Symptoms/injuries after eye contact : Serious damage to eyes. Irritation to eyes.
Symptoms/injuries after ingestion : Burns.

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.

5.2. Special hazards arising from the substance or mixture

Fire hazard : May intensify fire; oxidizer.
Reactivity : May cause or intensify fire; oxidizer.

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 : NO open flames, NO sparks, and NO smoking. Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust.

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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. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Recover mechanically the product. Notify authorities if product enters sewers or public waters.
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. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Do not breathe dust.
Hygiene measures : Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. 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 locked up. Store in a well-ventilated place. Keep cool.
Incompatible materials : Combustible materials.
Storage area : Store in a cool, dry place.
Special rules on packaging : Meet any applicable legal requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ammonium nitrate,conc combustible substances<0,2% (6484-52-2)		
Not applicable		
Urea Phosphate (4861-19-2)		
Not applicable		
boric acid (10043-35-3)		
ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³
ACGIH	ACGIH STEL (mg/m ³)	6 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 : Wear respiratory protection.
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 : Solid
Appearance : Crystalline powder.
Color : Pale blue
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

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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
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: Not applicable
Relative vapor density at 20 °C	: No data available
Solubility	: Soluble in water. Water: > 100 g/l
Log Pow	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

May cause or intensify fire; oxidizer.

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

Avoid contact with hot surfaces. Heat. No flames, No sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Combustible materials.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

ammonium nitrate, conc combustible substances < 0,2% (6484-52-2)	
LD50 oral rat	4820 mg/kg (Rat)
LD50 dermal rabbit	> 3000 mg/kg (Rabbit)
ATE US (oral)	4820.000 mg/kg body weight

boric acid (10043-35-3)	
LD50 oral rat	2660 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; >2600 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 2000 mg/kg Rabbit; Experimental value; FIFRA (40 CFR)
ATE US (oral)	2660.000 mg/kg body weight

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Skin corrosion/irritation	: Causes severe skin burns and eye damage.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: May damage fertility or the unborn child.
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: May cause slight irritation.
Symptoms/injuries after skin contact	: Burns.
Symptoms/injuries after eye contact	: Serious damage to eyes. Irritation to eyes.
Symptoms/injuries after ingestion	: Burns.

SECTION 12: Ecological information

12.1. Toxicity

ammonium nitrate,conc combustible substances<0,2% (6484-52-2)	
LC50 fish 1	74 mg/l (48 h; Cyprinus carpio; Lethal)
EC50 Daphnia 1	555 mg/l (Daphnia magna)
LC50 fish 2	800 mg/l (3.9 h; Pisces)
TLM fish 1	100 - 1000,96 h; Pisces
TLM other aquatic organisms 1	100 - 1000,96 h
Threshold limit algae 1	83 mg/l (Scenedesmus quadricauda; Growth rate)

boric acid (10043-35-3)	
LC50 fish 1	100 ppm (96 h; Salmo gairdneri (Oncorhynchus mykiss); Soft water)
EC50 Daphnia 1	658 - 875 mg/l (48 h; Daphnia magna)
LC50 fish 2	79 ppm (96 h; Salmo gairdneri (Oncorhynchus mykiss); Hard water)
EC50 Daphnia 2	19.7 mg/l (336 h; Daphnia magna)
TLM fish 1	1800 ppm (24 h; Gambusia affinis)
Threshold limit algae 1	5 mg/l (672 h; Elodea sp.)
Threshold limit algae 2	0.4 - 0.8,336 h; Chlorella sp.; Growth

12.2. Persistence and degradability

ammonium nitrate,conc combustible substances<0,2% (6484-52-2)	
Persistence and degradability	Biodegradable in water. Biodegradable in the soil.

boric acid (10043-35-3)	
Persistence and degradability	Biodegradability: not applicable. Biodegradability in soil: not applicable. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

ammonium nitrate,conc combustible substances<0,2% (6484-52-2)	
Log Pow	-3.1
Bioaccumulative potential	Bioaccumulation: not applicable.

boric acid (10043-35-3)	
BCF fish 1	0 (Salmo gairdneri (Oncorhynchus mykiss); Chronic)
BCF fish 2	< 0.1 (60 days; Oncorhynchus tshawytscha; Fresh weight)

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boric acid (10043-35-3)	
Log Pow	-1.09 (Experimental value; EU Method A.8: Partition Coefficient; 22 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

boric acid (10043-35-3)	
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.

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

Sewage disposal recommendations : Prevent liquid from entering sewers, watercourses, underground or low areas.
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN3085 Oxidizing solid, corrosive, n.o.s. (Nitrates, urea phosphate), 5.1, III

UN-No.(DOT) : UN3085

Proper Shipping Name (DOT) : Oxidizing solid, corrosive, n.o.s.
(Nitrates, urea phosphate)

Class (DOT) : 5.1 - Class 5.1 - Oxidizer 49 CFR 173.128

<tx:_T_04701> (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Hazard labels (DOT) : 5.1 - Oxidizer
8 - Corrosive



Packing group (DOT) : III - Minor Danger

DOT Packaging Non Bulk (49 CFR 173.xxx) : 213

DOT Packaging Bulk (49 CFR 173.xxx) : 240

DOT Symbols : G - Identifies PSN requiring a technical name

DOT Special Provisions (49 CFR 172.102) : 62 - Oxygen generators (see §171.8 of this subchapter) are not authorized for transportation under this entry
IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2)
IP3 - Flexible IBCs must be sift-proof and water-resistant or must be fitted with a sift-proof and water-resistant liner
T1 - 1.5 178.274(d)(2) Normal..... 178.275(d)(2)
TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter

DOT Packaging Exceptions (49 CFR 173.xxx) : 152

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DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 25 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 100 kg
DOT Vessel Stowage Location	: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded
DOT Vessel Stowage Other	: 13 - Keep as dry as reasonably practicable,34 - Stow "away from" foodstuffs,56 - Stow "separated from" ammonium compounds,58 - Stow "separated from" cyanides
Emergency Response Guide (ERG) Number	: 140
Other information	: No supplementary information available.

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

ammonium nitrate,conc combustible substances<0,2% (6484-52-2)

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

Urea Phosphate (4861-19-2)

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

boric acid (10043-35-3)

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

National regulations

No additional information available

15.3. US State regulations

ammonium nitrate,conc combustible substances<0,2% (6484-52-2)

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Full text of H-phrases:

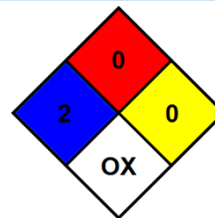
H272	May intensify fire; oxidizer
H314	Causes severe skin burns and eye damage
H319	Causes serious eye irritation
H320	Causes eye irritation
H360	May damage fertility or the unborn child

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NFPA health hazard	: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is 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.
NFPA specific hazard	: OX - This denotes an oxidizer, a chemical which can greatly increase the rate of combustion/fire.



SDS US (GHS HazCom 2012)

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