

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : SIC-1318

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Smart Chemical Solutions, LLC
3505 Olsen Blvd
Suite 201
Amarillo, TX 79109
T (806) 367-8031

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

Acute toxicity (inhalation:dust,mist) Category 4	H332	Harmful if inhaled
Serious eye damage/eye irritation Category 1	H318	Causes serious eye damage
Hazardous to the aquatic environment - Acute Hazard Category 2	H401	Toxic to aquatic life

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

: Danger

Hazard statements (GHS US) :

: H318 - Causes serious eye damage
H332 - Harmful if inhaled
H401 - Toxic to aquatic life

Precautionary statements (GHS US) :

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P261 - Avoid breathing dust, fume, gas, mist, vapors, spray.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
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.
P314 - Get medical advice/attention if you feel unwell.
P405 - Store locked up.

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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 which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

10.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)

34.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)

1.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Diethylenetriaminepentaacetic acid, pentasodium salt	CAS-No.: 140-01-2	11.4 – 24
Potassium Carbonate	CAS-No.: 584-08-7	1 – 10
Nitrilotriacetic acid, trisodium salt	CAS-No.: 5064-31-3	0.3 – 0.6

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 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. Call a poison center/doctor/physician if you feel unwell.
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	: Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after eye contact : Serious damage to eyes.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

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5.3. Special protective equipment and precautions for fire-fighters

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

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. 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 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.

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 locked up. Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available

8.2. Appropriate engineering controls

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

Environmental exposure controls : Avoid release to the environment.

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8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear.
Color	: Colorless
Odor	: slight
Odor threshold	: No data available
pH	: 9.43 – 10.43
Melting point	: Not applicable
Freezing point	: -5 °F
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Density	: 9.981 – 10281
Solubility	: No data available
Partition coefficient n-octanol/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
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

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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

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

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ATE US (dust, mist)	4.545 mg/l/4h
Unknown acute toxicity (GHS US)	10.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 34.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 1.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

Potassium Carbonate (584-08-7)

LD50 oral rat	> 2000 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 2000 mg/kg body weight (US EPA, 24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 4.96 mg/l (US EPA, 4.5 h, Rat, Male / female, Experimental value, Inhalation (dust), 14 day(s))
ATE US (dust, mist)	1.5 mg/l/4h

Diethylenetriaminepentaacetic acid, pentasodium salt (140-01-2)

LD50 oral rat	4550 mg/kg Source: IUCLID
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))
ATE US (oral)	4550 mg/kg body weight
ATE US (gases)	4500 ppmV/4h

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Diethylenetriaminepentaacetic acid, pentasodium salt (140-01-2)

ATE US (vapors) 11 mg/l/4h

ATE US (dust, mist) 1.5 mg/l/4h

Nitritotriacetic acid, trisodium salt (5064-31-3)

LD50 oral rat 1740 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))

LD50 dermal rabbit > 2000 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Dermal)

LC50 Inhalation - Rat > 5 mg/l (4 h, Rat, Male, Experimental value, Inhalation (aerosol), 14 day(s))

ATE US (oral) 1740 mg/kg body weight

Skin corrosion/irritation : Not classified
pH: 9.43 – 10.43

Potassium Carbonate (584-08-7)

pH 11.6 (10 %)

Nitritotriacetic acid, trisodium salt (5064-31-3)

pH 11 (1 %)

Serious eye damage/irritation : Causes serious eye damage.
pH: 9.43 – 10.43

Potassium Carbonate (584-08-7)

pH 11.6 (10 %)

Nitritotriacetic acid, trisodium salt (5064-31-3)

pH 11 (1 %)

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Suspected of causing cancer.

Nitritotriacetic acid, trisodium salt (5064-31-3)

NOAEL (chronic,oral,animal/male,2 years) 100 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 451 (Carcinogenicity Studies), Remarks on results: other:

Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Diethylenetriaminepentaacetic acid, pentasodium salt (140-01-2)

LOAEC (inhalation, rat, dust/mist/fume, 90 days) 0.015 mg/l air Animal: rat, Animal sex: female, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)

NOAEL (oral, rat, 90 days) ≈ 75 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)

STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure.

Nitritotriacetic acid, trisodium salt (5064-31-3)

NOAEL (oral, rat, 90 days) 9 mg/kg body weight Animal: rat, Animal sex: male

NOAEL (dermal, rat/rabbit, 90 days) 50 mg/kg body weight Animal: rabbit

STOT-repeated exposure Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life.

Potassium Carbonate (584-08-7)

LC50 - Fish [1]	68 mg/l (FIFRA 72-1, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	200 mg/l (FIFRA 72-1, 48 h, Daphnia pulex, Static system, Fresh water, Experimental value, Locomotor effect)

Diethylenetriaminepentaacetic acid, pentasodium salt (140-01-2)

LC50 - Fish [1]	> 1000 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	310 mg/l (Invertebrata, Fresh water)
EC50 72h - Algae [1]	2.6 mg/l Source: IUCLID
LOEC (chronic)	134 mg/l Test organisms (species): other: Duration: '18 d'
NOEC (chronic)	67 mg/l Test organisms (species): other: Duration: '18 d'
NOEC chronic fish	100 mg/l Test organisms (species): other: Duration: '28 d'

Nitrilotriacetic acid, trisodium salt (5064-31-3)

LC50 - Fish [1]	114 mg/l (APHA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
EC50 - Crustacea [1]	98 mg/l (96 h, Gammarus sp., Flow-through system, Fresh water, Experimental value)
EC50 72h - Algae [1]	> 91.5 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
ErC50 algae	> 91.5 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
NOEC (chronic)	9.3 mg/l Test organisms (species): other aquatic arthropod: Duration: '147 d'
NOEC chronic fish	> 54 mg/l Test organisms (species): Pimephales promelas Duration: '224 d'

12.2. Persistence and degradability

Potassium Carbonate (584-08-7)

Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

Diethylenetriaminepentaacetic acid, pentasodium salt (140-01-2)

Persistence and degradability	Not readily biodegradable in water.
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Nitrilotriacetic acid, trisodium salt (5064-31-3)

Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Chemical oxygen demand (COD)	0.625 g O ₂ /g substance

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12.3. Bioaccumulative potential

Potassium Carbonate (584-08-7)

Partition coefficient n-octanol/water (Log Pow) -6.19

Bioaccumulative potential Not bioaccumulative.

Diethylenetriaminepentaacetic acid, pentasodium salt (140-01-2)

Partition coefficient n-octanol/water (Log Pow) -2 (Literature study, 25 °C)

Bioaccumulative potential Not bioaccumulative.

Nitrilotriacetic acid, trisodium salt (5064-31-3)

BCF - Fish [1] 1 – 3 (96 h, Brachydanio rerio, Fresh water, Experimental value)

Partition coefficient n-octanol/water (Log Pow) -13.2 – -2.62 (Calculated, 25 °C)

Bioaccumulative potential Not bioaccumulative.

12.4. Mobility in soil

Potassium Carbonate (584-08-7)

Ecology - soil Low potential for adsorption in soil.

Diethylenetriaminepentaacetic acid, pentasodium salt (140-01-2)

Surface tension No data available in the literature

Organic Carbon Normalized Adsorption Coefficient (Log Koc) 3.571 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

Ecology - soil Low potential for mobility in soil.

Nitrilotriacetic acid, trisodium salt (5064-31-3)

Organic Carbon Normalized Adsorption Coefficient (Log Koc) 1.419 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

Ecology - soil Highly mobile in soil.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

DOT	IMDG	IATA
14.1. UN number		
Not regulated	Not regulated	Not regulated
14.2. Proper Shipping Name		
Not regulated	Not regulated	Not regulated

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DOT	IMDG	IATA
14.3. Transport hazard class(es)		
Not regulated	Not regulated	Not regulated
Not regulated	Not regulated	Not regulated
14.4. Packing group		
Not regulated	Not regulated	Not regulated
14.5. Environmental hazards		
Not regulated	Not regulated	Not regulated
No supplementary information available		

14.6. Special precautions for user

DOT

Not regulated

IMDG

Not regulated

IATA

Not regulated

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. US 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:

Potassium Carbonate	CAS-No. 584-08-7	1 – 10%
Diethylenetriaminepentaacetic acid, pentasodium salt	CAS-No. 140-01-2	11.4 – 24%
Nitilotriacetic acid, trisodium salt	CAS-No. 5064-31-3	0.3 – 0.6%

This product or mixture is not known to 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

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SECTION 16: Other information

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Full text of H-phrases

H318	Causes serious eye damage
H332	Harmful if inhaled
H401	Toxic to aquatic life

Safety Data Sheet (SDS), USA