

VAL-U-RELEASE

Safety Data Sheet

SECTION 1: Product and company identification

Product name : VAL-U-RELEASE
Use of the substance/mixture : Release Agent
Product code : 0700
Company : VAL-U-CHEM
PO Box 82310
Phoenix, AZ 85071 - USA
T 602-957-2808
Emergency number : 602-957-2808

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Met. Corr. 1 H290
Skin Irrit. 2 H315
Eye Dam. 1 H318
Carc. 2 H351

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS05

GHS08

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

May be corrosive to metals
Causes skin irritation
Causes serious eye damage
Suspected of causing cancer

Precautionary statements (GHS-US) :

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep only in original container.
Wash thoroughly after handling
Wear eye protection, protective clothing, protective gloves.
If on skin: Wash with plenty of soap and water.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If exposed or concerned: Get medical advice/attention.
Immediately call a doctor, a POISON CENTER
Specific treatment (see supplemental first aid instruction on this label)
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
Absorb spillage to prevent material-damage.
Store locked up.
Store in corrosive resistant container with a resistant inner liner.
Dispose of contents/container to comply with local/regional/national/international 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. Substances

Not applicable

Full text of H-phrases: see section 16

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
tetrasodium ethylenediaminetetracetate	(CAS-No.) 64-02-8	1-5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318

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Name	Product identifier	%	GHS-US classification
potassium hydroxide	(CAS-No.) 1310-58-3	1-5	Met. Corr. 1, H290 Acute Tox. 3 (Oral), H301 Skin Corr. 1A, H314
trisodium nitrilotriacetate	(CAS-No.) 5064-31-3	0.05-1	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Carc. 2, H351

A specific chemical identity and/or percentage of composition has been withheld as a trade secret. Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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 victim to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact	: If skin irritation or rash occurs: Get medical advice/attention. Take off immediately all contaminated clothing and wash it before reuse. Wash with water and soap.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
First-aid measures after ingestion	: Rinse mouth with water. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

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

Symptoms/effects	: Causes serious eye damage. Causes skin irritation. Suspected of causing cancer.
Symptoms/effects after inhalation	: None under normal use.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye damage. Corrosion of the eye tissue. Permanent eye damage.
Symptoms/effects after ingestion	: Gastrointestinal complaints. Cramps. Nausea.

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 : All extinguishing media allowed.

5.2. Special hazards arising from the substance or mixture

Reactivity : Upon combustion: CO and CO2 are formed.

5.3. Advice for firefighters

Firefighting instructions	: Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Take account of environmentally hazardous firefighting water.
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

General measures : Isolate from fire, if possible, without unnecessary risk.

6.1.1. For non-emergency personnel

Protective equipment	: Protective goggles. Gloves. Protective clothing.
Emergency procedures	: Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing. Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Stop leak if safe to do so. Stop release. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent soil and water pollution.

6.3. Methods and material for containment and cleaning up

For containment	: Contain released product, pump into suitable containers.
Methods for cleaning up	: This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

No additional information available

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Comply with the legal requirements. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing.
- Hygiene measures : Wash thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Comply with applicable regulations.
- Storage conditions : Keep container closed when not in use. Store in original container.
- Incompatible products : Strong acids. Strong oxidizers.
- Storage area : Keep only in the original container. Store in a dry area. Store in a cool area.
- Special rules on packaging : meet the legal requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

potassium hydroxide (1310-58-3)

ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³
ACGIH	Remark (ACGIH)	URT, eye, & skin irr

tetrasodium ethylenediaminetetracetate (64-02-8)

Not applicable

trisodium nitrilotriacetate (5064-31-3)

Not applicable

8.2. Exposure controls

- Personal protective equipment : Use appropriate personal protective equipment when risk assessment indicates this is necessary. Gloves. Safety glasses. Protective clothing.



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : clear. Yellow liquid.
- Odor : slight soy odor
- Odor threshold : No data available
- pH : 10 - 12.5
- Melting point : No data available
- Freezing point : No data available
- Boiling point : No data available
- Flash point : > 200 °F Closed Cup
- Relative evaporation rate (butyl acetate=1) : No data available
- Flammability (solid, gas) : No data available
- Explosion limits : No data available
- 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 : 1.03 g/ml
- Solubility : Soluble in water.

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Log Pow	: No data available
Log Kow	: 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
VOC content	: < 0.5 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Upon combustion: CO and CO2 are formed.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

May be corrosive to metals. Strong acids. Oxidizing agents.

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 : Not classified

potassium hydroxide (1310-58-3)

LD50 oral rat	273 mg/kg (Rat)
ATE CLP (oral)	273 mg/kg body weight

tetrasodium ethylenediaminetetracetate (64-02-8)

LD50 oral rat	> 2000 mg/kg (Rat)
ATE CLP (oral)	500 mg/kg body weight

trisodium nitrilotriacetate (5064-31-3)

LD50 oral rat	1740 mg/kg rat, male and female
LD50 dermal rabbit	> 2000 mg/kg
ATE CLP (oral)	1740 mg/kg body weight

Skin corrosion/irritation	: Causes skin irritation. pH: 10 - 12.5
Serious eye damage/irritation	: Causes serious eye damage. pH: 10 - 12.5
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.

trisodium nitrilotriacetate (5064-31-3)

IARC group	2B - Possibly carcinogenic to humans
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Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: None under normal use.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye damage. Corrosion of the eye tissue. Permanent eye damage.

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Symptoms/effects after ingestion : Gastrointestinal complaints. Cramps. Nausea.
Likely routes of exposure : Skin and eye contact

SECTION 12: Ecological information

12.1. Toxicity

potassium hydroxide (1310-58-3)	
LC50 fish 1	80 mg/l (96 h, Gambusia affinis)
tetrasodium ethylenediaminetetracetate (64-02-8)	
LC50 fish 1	121 mg/l (96 h, Lepomis macrochirus, Literature study)
EC50 Daphnia 1	625 mg/l (24 h, Daphnia magna, Literature study)
trisodium nitrilotriacetate (5064-31-3)	
LC50 fish 1	114 mg/l Pimephales promelas (fathead minnow); Test Type: flow-through test
EC50 Daphnia 1	> 100 mg/l Daphnia magna (Water flea); Test Type: static test
ErC50 (algae)	91.5 mg/l Desmodesmus subspicatus (green algae); Exposure time: 72 h; Test Type: static test; Method: OECD Test Guideline 201

12.2. Persistence and degradability

potassium hydroxide (1310-58-3)	
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
tetrasodium ethylenediaminetetracetate (64-02-8)	
Persistence and degradability	Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	< 0.002 g O ₂ /g substance
Chemical oxygen demand (COD)	0.54 - 0.58 g O ₂ /g substance

12.3. Bioaccumulative potential

potassium hydroxide (1310-58-3)	
Bioaccumulative potential	Not bioaccumulative.
tetrasodium ethylenediaminetetracetate (64-02-8)	
Log Pow	-2.6
Bioaccumulative potential	Not bioaccumulative.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging 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 : Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

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SECTION 15: Regulatory information

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

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.

potassium hydroxide (1310-58-3)

Not subject to reporting requirements of the United States SARA Section 313

CERCLA RQ 1000 lb

WARNING

This product can expose you to Formaldehyde, which is known to the State of California to cause cancer, and methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

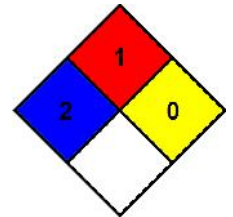
Full text of H-phrases:

H290	May be corrosive to metals
H301	Toxic if swallowed
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H319	Causes serious eye irritation
H351	Suspected of causing cancer

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Prepared by: Technical Department

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. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of this material.