

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**OTHER INFORMATION**

• Causes mild skin irritation

Unknown acute toxicity

3.07525% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/information on Ingredients

Chemical name	CAS-No	Weight %	Trade secret
Triethanolamine	102-71-6	1 - 5	*
Lactam	Proprietary	0.1 - 3	*
Ethyl alcohol	64-17-5	0.1 - <1	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

NOTE Remaining components are either not hazardous or below threshold limits.

4. First aid measures**FIRST AID MEASURES****General advice**

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Immediate medical attention is not required.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

IF ON SKIN

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water.

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Ingestion

Do NOT induce vomiting. Drink plenty of water. Immediate medical attention is not required. Rinse mouth.

Self-protection of the first aider

Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed**Most Important Symptoms and Effects**

Hives.

Indication of any immediate medical attention and special treatment needed**Notes to Physician**

May cause sensitization of susceptible persons. Use of epinephrine may be indicated.

5. Fire-fighting measures**Suitable extinguishing media**

Use Carbon dioxide (CO2) Dry chemical Alcohol resistant foam

Unsuitable extinguishing media None.**Specific hazards arising from the chemical**

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

Wear self-contained breathing apparatus and protective suit.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Avoid contact with skin and eyes.

Environmental precautions**Environmental precautions**

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Methods and material for containment and cleaning up**Methods for containment**

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

After cleaning, flush away traces with water. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Prevent product from entering drains.

7. Handling and Storage

Precautions for safe handling**Handling**

Use personal protective equipment as required. Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities**Storage**

Keep out of the reach of children. Keep container tightly closed. Keep containers tightly closed in a cool, well-ventilated place.

Incompatible Products

Strong oxidizing agents.

8. Exposure Controls/Personal Protection

Control parameters**Exposure guidelines**

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Triethanolamine 102-71-6	TWA: 5 mg/m ³	-	-

Appropriate engineering controls**Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Showers. Eyewash stations.

Individual protection measures, such as personal protective equipment**Eye/Face Protection**

Tight sealing safety goggles.

Skin and body protection

For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.

Respiratory protection

None under normal use conditions.

Hygiene Measures

Wash contaminated clothing before reuse. When using do not eat or drink.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state	liquid	Odor	Acrylic
Appearance	black	Odor Threshold	No information available
color	No information available		
<u>Property</u>	<u>Values</u>	<u>Remarks/ • method</u>	
pH	8 - 10		
Melting point / freezing point			
Boiling point / boiling range	No information available		
Flash Point	> 100 °C		Seta closed cup
Evaporation Rate	No information available		
flammability (solid, gas)	No information available		
Flammability Limit in Air			
Upper Flammability Limit	No information available		
Lower Flammability Limit	No information available		
Vapor Pressure	No information available		
Vapor Density	No information available		
Specific gravity	1.0 - 1.1		None known
Water solubility	Practically insoluble (~0.4 ug/mL)		
Solubility in other solvents	No information available		
Partition coefficient: n-octanol/water	No information available		
Autoignition temperature	>200 °C		
Decomposition temperature	No information available		
Kinematic viscosity	No information available		
Dynamic viscosity	No information available		
Explosive properties	No information available		
Oxidizing properties	No information available		

OTHER INFORMATION

Softening point	No information available
Molecular weight	No information available
VOC Content	No information available
Density	No information available
Bulk density	No information available

10. Stability and Reactivity**Reactivity**

No data available

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

Carbon oxides.

11. Toxicological Information

Information on likely routes of exposure

Product Information	The product has not been tested
Inhalation	May cause irritation of respiratory tract. Avoid breathing vapors or mists.
Eye contact	Contact with eyes may cause irritation. Avoid contact with eyes. May cause irreversible damage to eyes.
IF ON SKIN	May cause sensitization by skin contact. May cause irritation. Avoid contact with skin.
Ingestion	MAY BE HARMFUL IF SWALLOWED. May cause gastrointestinal discomfort if consumed in large amounts. Do NOT taste or swallow.

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

irritation	May cause irritation of respiratory tract. May cause skin and eye irritation.
Sensitization	No information available.
Mutagenic effects	No information available.
Carcinogenicity	The list below indicates any ingredient listed as a carcinogen: This product contains Ethanol which is classified as a possible carcinogen when ingested in the form of an alcoholic beverage. This is irrelevant as this product is used for ink jet ink applications not an alcoholic beverage.

Chemical name	ACGIH	IARC	NTP	OSHA
Ethyl alcohol 64-17-5	-	Group 1	Known	X

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Chronic toxicity	Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.
Target organ effects	Respiratory System, EYES, skin, Gastrointestinal tract (GI).
Aspiration hazard	No information available.

Numerical measures of toxicity - Product Information

Unknown acute toxicity 3.07525% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 52530 mg/kg

ATEmix (dermal) 109768 mg/kg ATEmix

(inhalation-dust/mist) 155.3 mg/l

12. Ecological Information

ecotoxicity

3.376036% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical name	Log Pow

Triethanolamine 102-71-6	-2.53
Lactam	-0.46
Ethyl alcohol 64-17-5	-0.32

Other adverse effects .?

13. Disposal Considerations

Waste treatment methods

Waste treatment methods

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Do not re-use empty containers.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status
Ethyl alcohol 64-17-5	Toxic; Ignitable

14. Transport Information

DOT Not regulated

IATA Not regulated

15. Regulatory information

International Inventories

Chemical name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Triethanolamine 102-71-6	X	X	X	X	X	X	X	X
Lactam	X	X	X	X	X	X	X	X
Ethyl alcohol 64-17-5	X	X	X	X	X	X	X	X

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Lactam -	1.0

SARA 311/312 Hazard Categories

Acute health hazard	ye s
Chronic Health Hazard	ye s
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Triethanolamine 102-71-6	X	X	X
Lactam	X	X	X
Ethyl alcohol 64-17-5	X	X	X
Magnesium nitrate 10377-60-3	X	X	X
Copper(II) nitrate, trihydrate (1:2:3) 10031-43-3	X	-	X

U.S. EPA Label Information

EPA Pesticide registration number Not applicable

16. Other information

NFPA	Health hazard 1	flammability 1	Instability 0	Physical and chemical properties -
HMIS	Health hazard 1	flammability 1	Physical hazards 0	Personal precautions X

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Revision note

No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet