

Safety Data Sheet

SP-922

1. Product and company identification

Product name : SP-922
Material uses : Industrial applications: Scavengers
Internal code : OFS1063
System code : OFS1063
Supplier : Bachman Services, Inc.
 P.O. Box 96265
 Oklahoma City, Oklahoma 73143
Information contact : (800) 535-5053 [Emergency], (405) 677-8296 [Info]
e-mail address of person responsible for this SDS : sdsinfo@innospecinc.com

Emergency telephone number

In USA, Canada and North America, 24 hour / 7 day emergency information for our product is provided by the CHEMTREC® Emergency Call Center based in the USA


Country information	: Emergency telephone number
USA, Canada, Puerto Rico, Virgin Islands	: +1 800 424 9300
In case of difficulties, or for ships at sea	: +1 703 527 3887

In Europe, Middle East, Africa, Asia Pacific and South America 24 hour / 7 day emergency response for our products is provided by the NCEC CARECHEM 24 global network



Country information	Emergency telephone number	Location
South America (all countries)	: +1 215 207 0061	Philadelphia USA
Brazil	: +55 113 711 9144	Brazil
Mexico	: +52 555 004 8763	Mexico
Europe (all countries) Middle East, Africa (French, Portuguese, English)	: +44 (0) 1235 239 670	London, UK
Middle East, Africa (Arabic, French, English)	: +44 (0) 1235 239 671	Lebanon
Asia Pacific (all countries except China)	: +65 3158 1074	Singapore
China	: +86 10 5100 3039	Beijing China

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: FLAMMABLE LIQUIDS - Category 4 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 2 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
GHS label elements	
Hazard pictograms	: 
Signal word	: Danger
Hazard statements	: H227 - Combustible liquid. H330 - Fatal if inhaled. H302 - Harmful if swallowed. H319 - Causes serious eye irritation. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H372 - Causes damage to organs through prolonged or repeated exposure.
Precautionary statements	
Prevention	: P280 - Wear protective gloves. Wear eye or face protection. P284 - Wear respiratory protection. P210 - Keep away from flames and hot surfaces. - No smoking. P271 - Use only outdoors or in a well-ventilated area. P260 - Do not breathe vapor. P270 - Do not eat, drink or smoke when using this product. P264 - Wash hands thoroughly after handling. P272 - Contaminated work clothing should not be allowed out of the workplace.
Response	: P314 - Get medical attention if you feel unwell. P304 + P340 + P310 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. P302 + P352 + P362-2 + P363 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. P333 + P313 - If skin irritation or rash occurs: Get medical attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical attention.
Storage	: P405 - Store locked up. P403 - Store in a well-ventilated place. P235 - Keep cool.
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	: None known.

Section 2. Hazards identification

Target organs : Contains material which may cause damage to the following organs: kidneys, the nervous system, liver, gastrointestinal tract, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea, testes.

See toxicological information (Section 11)

Section 3. Composition/information on ingredients

Substance/mixture : Substance

Ingredient name	%	CAS number
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol; 1,3,5-tris(2-hydroxyethyl)hexahydro-1,3,5-triazine	60 - 100	4719-04-4
2-aminoethanol; ethanolamine	0.99 - 4.99	141-43-5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt

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Section 4. First aid measures

or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Fatal if inhaled. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : Harmful if swallowed. Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.
- Specific hazards arising from the chemical** : Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides

Section 5. Fire-fighting measures

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Flash point** : Closed cup: >72°C (>161.6°F)

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.

Section 7. Handling and storage

- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
2-aminoethanol; ethanolamine	<p>ACGIH TLV (United States, 4/2014). TWA: 3 ppm, 0 times per shift, 8 hours. TWA: 7.5 mg/m³, 0 times per shift, 8 hours. STEL: 6 ppm, 0 times per shift, 15 minutes. STEL: 15 mg/m³, 0 times per shift, 15 minutes.</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 3 ppm, 0 times per shift, 8 hours. TWA: 8 mg/m³, 0 times per shift, 8 hours. STEL: 6 ppm, 0 times per shift, 15 minutes. STEL: 15 mg/m³, 0 times per shift, 15 minutes.</p> <p>NIOSH REL (United States, 10/2013). TWA: 3 ppm, 0 times per shift, 10 hours. TWA: 8 mg/m³, 0 times per shift, 10 hours. STEL: 6 ppm, 0 times per shift, 15 minutes. STEL: 15 mg/m³, 0 times per shift, 15 minutes.</p> <p>OSHA PEL (United States, 2/2013). TWA: 3 ppm, 0 times per shift, 8 hours. TWA: 6 mg/m³, 0 times per shift, 8 hours.</p>

- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Section 8. Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or supplied-air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Clear.
- Odor** : Mild.
- Odor threshold** : Not available.
- pH** : 9.5 to 11
- Melting point** : Not available.
- Boiling point** : 104.44°C (220°F)
- Flash point** : Closed cup: >72°C (>161.6°F)
- Evaporation rate** : 1.7 compared with butyl acetate
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Greatest known range: Lower: 5.5% Upper: 17% (2-aminoethanol)
- Vapor pressure** : Highest known value: 3.2 kPa (23.8 mm Hg) (at 20°C) (water). Weighted average: 0.61 kPa (4.58 mm Hg) (at 20°C)
- Vapor density** : >1 (Air = 1)
- Density** : 1.137 g/cm³ [15°C (59°F)]

Section 9. Physical and chemical properties

Specific gravity	: 1.15
Density	: 9.49 lbs/gal
Solubility	: Easily soluble in the following materials: cold water, hot water, methanol, acetone.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Lowest known value: 410°C (770°F) (2-aminoethanol).
Decomposition temperature	: Not available.
Viscosity	: Kinematic (room temperature): 3.72 cm ² /s (372 cSt) Kinematic (40°C (104°F)): 0.25 cm ² /s (25 cSt)
Pour point	: -17.78°C

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Test	Species	Result	Dose
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	OECD 403 Acute Inhalation Toxicity	Rat - Male, Female	LC50 Inhalation Dusts and mists	371 mg/m ³
	OECD 402 Acute Dermal Toxicity	Rat - Male, Female	LD50 Dermal	>4000 mg/kg
	OECD 401 Acute Oral Toxicity	Rat - Male, Female	LD50 Oral	1000 mg/kg
2-aminoethanol	-	Rat	LD50 Oral	1720 mg/kg

Potential chronic health effects

Product/ingredient name	Test	Species	Result	Dose
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	OECD 408 Repeated Dose 90-Day Oral Toxicity Study in Rodents	Rat - Male, Female	Sub-chronic LOAEL Oral	285.2 mg/kg Nominal
	OECD 408 Repeated Dose 90-Day Oral Toxicity Study in Rodents	Rat - Male, Female	Sub-chronic NOEL Oral	14.1 to 21.1 mg/kg Nominal
	OECD 408 Repeated Dose 90-Day Oral Toxicity Study in Rodents	Rat - Male, Female	Sub-chronic NOAEL Oral	64.1 to 91 mg/kg Nominal

Irritation/Corrosion

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Section 11. Toxicological information

Product/ingredient name	Test	Species	Result
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol 2-aminoethanol	OECD 405 Acute Eye Irritation/Corrosion	Rabbit	Eyes - Mild irritant -
	OECD 404 Acute Dermal Irritation/Corrosion	Rabbit	Skin - Edema 0
	OECD 404 Acute Dermal Irritation/Corrosion	Rabbit	Skin - Erythema/Eschar 0
	OECD 437 Bovine Corneal Opacity and Permeability Test	Isolated bovine cornea	Eyes - Mild irritant -
	-	Rabbit	Eyes - Severe irritant -
	-	Rabbit	Skin - Moderate irritant -

Sensitization

Product/ingredient name	Test	Species	Result
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	Open Epicutaneous Test	Guinea pig	Sensitizing -

Mutagenicity

Product/ingredient name	Test	Experiment	Result
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative
	OECD 486 Unscheduled DNA Synthesis (UDS) Test with Mammalian Liver Cells <i>in vivo</i>	Experiment: In vitro Subject: Mammalian-Animal	Negative

Carcinogenicity

Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
2-aminoethanol; ethanolamine	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol; 1,3,5-tris(2-hydroxyethyl)hexahydro-1,3,5-triazine	Category 1	Inhalation	lungs

Aspiration hazard

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol; 1,3,5-tris(2-hydroxyethyl)hexahydro-1,3,5-triazine 2-aminoethanol; ethanolamine	Acute EC50 6.66 mg/l Nominal Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 11.9 mg/l Measured Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 16.07 mg/l Measured Fresh water	Fish - Brachydanio rerio (Danio rerio)	96 hours
	Acute EC50 8.42 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute LC50 >100000 µg/l Marine water	Crustaceans - Crangon crangon - Adult	48 hours

Persistence and degradability

Product/ingredient name	Test	Result
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol; 1,3,5-tris(2-hydroxyethyl)hexahydro-1,3,5-triazine	OECD 301A Ready Biodegradability - DOC Die-Away Test	90 to 100 % - Readily - 8 days
	OECD 301C Ready Biodegradability - Modified MITI Test (I)	85 to 95 % - Readily - 10 days

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol; 1,3,5-tris(2-hydroxyethyl)hexahydro-1,3,5-triazine 2-aminoethanol; ethanolamine	Fresh water <0.08 days Fresh water <0.08 days Fresh water <0.08 days	-	Readily
	-	-	Readily

Bioaccumulative potential




Product/ingredient name	LogP _{ow}	BCF	Potential
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol; 1,3,5-tris(2-hydroxyethyl)hexahydro-1,3,5-triazine 2-aminoethanol; ethanolamine	-2	-	low
	-1.31	-	low

Section 13. Disposal considerations

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 13. Disposal considerations

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	UN2810	UN2810	UN2810
UN proper shipping name	Toxic, liquids, organic, n.o.s. (2, 2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol)	TOXIC LIQUID, ORGANIC, N. O.S. (2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol)	Toxic liquid, organic, n.o.s. (2, 2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol)
Transport hazard class(es)	6.1 	6.1 	6.1 
Packing group	II	II	II
Environmental hazards	No.	No.	No.
Additional information	<p>Limited quantity Yes.</p> <p>Packaging instruction Passenger aircraft Quantity limitation: 5 L</p> <p>Cargo aircraft Quantity limitation: 60 L</p> <p>Special provisions IB2, T11, TP2, TP13, TP27</p>	<p>Emergency schedules (EmS) F-A, S-A</p> <p>Special provisions 274</p>	<p>Passenger and Cargo Aircraft Quantity limitation: 5 L Packaging instructions: 654</p> <p>Cargo Aircraft OnlyQuantity limitation: 60 L Packaging instructions: 662</p> <p>Limited Quantities - Passenger AircraftQuantity limitation: 1 L Packaging instructions: Y641</p> <p>Special provisions A3, A4, A137</p>

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 4(a) final test rules:** 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol
United States inventory (TSCA 8b): All components are listed or exempted.

[SARA 302/304](#)

[Composition/information on ingredients](#)

No products were found.

[SARA 311/312](#)

Section 15. Regulatory information

Classification : Fire hazard
 Immediate (acute) health hazard
 Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol; 1,3,5-tris(2-hydroxyethyl)hexahydro-1,3,5-triazine	60 - 100	No.	No.	No.	Yes.	Yes.
2-aminoethanol; ethanolamine	0.99 - 4.99	No.	No.	No.	Yes.	No.

State regulations

Massachusetts : The following components are listed: ETHANOLAMINE
New York : None of the components are listed.
New Jersey : The following components are listed: ETHANOLAMINE; ETHANOL, 2-AMINO-
Pennsylvania : The following components are listed: ETHANOL, 2-AMINO-
California Prop. 65 : CALIFORNIA PROPOSITION 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986. This product is not known to the State of California to cause cancer, birth defects or other reproductive harm.

International lists

National inventory

Australia inventory (AICS) : All components are listed or exempted.
Canada inventory : All components are listed or exempted.
China inventory (IECSC) : All components are listed or exempted.
Europe inventory : All components are listed or exempted.
Japan inventory (ENCS) : All components are listed or exempted.
New Zealand Inventory of Chemicals (NZIoC) : All components are listed or exempted.
Philippines inventory (PICCS) : All components are listed or exempted.
Korea inventory (KECI) : All components are listed or exempted.
Taiwan inventory (TCSI) : All components are listed or exempted.
United States inventory (TSCA 8b) : All components are listed or exempted.

Our REACH (pre-) registrations DO NOT cover the following:

- The manufacture of these products by our company outside the EU unless covered by the Only Representative provisions, and
 - The importation of these products into Europe by other companies. Re-importation by other companies is not covered by our (pre-) registrations
- Customers and other third parties importing and/or re-importing our products into Europe will need either:
- Their own (pre-) registration for substances contained in the imported product, or constituent monomers (imported above 1 tonne per year and >2% by weight) in the case of imported polymers, or
 - In the case of importation only, to make use of the "Only Representative" provisions, if available.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	*	3
Flammability		2
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Classification according to Directive 67/548/EEC [DSD] or Classification according to Directive 1999/45/EC [DPD]

Risk phrases	: R23- Toxic by inhalation. R48/23- Toxic: danger of serious damage to health by prolonged exposure through inhalation. R22- Harmful if swallowed. R43- May cause sensitization by skin contact.
Safety phrases	: S24- Avoid contact with skin. S37- Wear suitable gloves. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

History

Date of printing	: 2015-07-24
Date of issue/Date of revision	: 2015-07-24
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Version	: 1
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

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Section 16. Other information

✔ Indicates information that has changed from previously issued version.

[Notice to reader](#)

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.