

SAFETY DATA SHEET



TIPA-85

Section 1. Identification

GHS product identifier	: TIPA-85
Other means of identification	: TRIISOPROPANOLAMINE 85% TIPA-85
Product use	: Used in cement grinding aids to improve the later strength of cement, grinding efficiency and reduce the dosage of main raw materials. Used in the synthesis of rubber and polyurethane as chain extenders. Used as alkali reserve in metalworking fluid. Used in the synthesis of pesticides and pharmaceutical intermediates.
Supplier's details	Kemele Co.,LTD C639 Jinke Development Zone Linyi ,China 276 Website: www.kmchem.com
e-mail address of person responsible for this SDS	: sales@kemele.com
Emergency telephone number (with hours of operation)	+86-539-333 33

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	: SERIOUS EYE DAMAGE - Category 1
<u>GHS label elements</u>	
Hazard pictograms	: 
Signal word	: Danger
Hazard statements	: Causes serious eye damage.
<u>Precautionary statements</u>	
Prevention	: Wear eye or face protection.
Response	: IF IN EYES: 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.
Storage	: Not applicable.
Disposal	: Not applicable.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Other means of identification : TRIISOPROPANOLAMINE 85% TIPA-85

Ingredient name	%	CAS number
1,1',1''-nitrilotripropan-2-ol	≥85	122-20-3
water	≤15	7732-18-5

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 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** : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.
- 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** : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of 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. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. 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. Chemical burns must be treated promptly by a 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 or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
 pain
 watering
 redness

Section 4. First aid measures

- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

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, alcohol-resistant foam or water spray (fog). Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides

- 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.

- 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.

- Remark** : Non-flammable.

- Remark (Explosibility)** : Non-explosive.

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. 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 specialized 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".

Section 6. Accidental release measures

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. 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. 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). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- 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 original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. 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. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
1,1',1''-nitritotripropan-2-ol	None.
water	None.

Biological exposure indices

No exposure indices known.

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Section 8. Exposure controls/personal protection

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

- 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. 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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
- 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. E.g. butyl rubber.
- 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** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
Recommended: Ensure an MSHA/NIOSH-approved respirator or equivalent is used.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

- Physical state** : Liquid. [Clear.]
- Color** : Colorless.
- Odor** : Slight.
- Odor threshold** : Not applicable.
- pH** : 5 to 7
- Melting point/freezing point** : 45°C [Active ingredient].
- Boiling point, initial boiling point, and boiling range** : 301°C (573.8°F) (101.3 kPa) [Active ingredient].
- Flash point** :

Ingredient name	Closed cup			Open cup		
	°C	°F	Method	°C	°F	Method
1,1',1"-nitritotripropan-2-ol	174	345.2				

Flammability : Non-flammable.

Section 9. Physical and chemical properties and safety characteristics

Lower and upper explosion limit/flammability limit : Not available.

Vapor pressure :

Ingredient name	Vapor Pressure at 20 °C			Vapor pressure at 50 °C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
1,1',1"-nitritotripropan-2-ol	0.000006	0.0000008				

Relative vapor density : Not available.

Relative density : 1.02

Solubility in water : 830g/L (20°C) [Active ingredient].

Partition coefficient: n-octanol/water : -0.015 (23°C) [Active ingredient].

Auto-ignition temperature :

Ingredient name	°C	°F	Method
1,1',1"-nitritotripropan-2-ol	285	545	EU A.16

Decomposition temperature : Not available.

Viscosity : Not available.

Explosive properties : Non-explosive.

Oxidizing properties : None.

Particle characteristics

Median particle size : Not applicable.

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. In contact with active metals (alkali metals, Na, Ca etc.) causes a reaction and release hydrogen.

Conditions to avoid : Keep away from heat, sparks and flame.

Incompatible materials : Reactive or incompatible with the following materials: alkalis, sodium, calcium, other active metal, halogens, metal oxide, non-metal oxide, acyl halide, metal phosphide.

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

Section 11. Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
1,1',1''-nitrilotripropan-2-ol	LC0 Inhalation Dusts and mists	Mouse - Male	1070 mg/m ³	3 hours
	LD50 Dermal	Rabbit - Female	>5000 mg/kg	-
	LD50 Oral	Rat - Male, Female	4000 mg/kg	-
	LD50 Oral	Rat - Male	6500 mg/kg	-
	LD50 Oral	Rat - Male	5994 mg/kg	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
1,1',1''-nitrilotripropan-2-ol	Eyes - Severe irritant	Rabbit	-	-	21 days
	Skin - Not irritant	Rabbit	-	4 hours	14 days

Conclusion/Summary

Skin : Based on available data, the classification criteria are not met.

Eyes : Causes serious eye damage.

Respiratory : Not available.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
1,1',1''-nitrilotripropan-2-ol	skin	Guinea pig	Not sensitizing
	skin	Human	Not sensitizing

Conclusion/Summary

Skin : Based on available data, the classification criteria are not met.

Respiratory : Not available.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
1,1',1''-nitrilotripropan-2-ol	OECD 471	Experiment: In vitro Subject: Bacteria Metabolic activation: with and without	Negative
	OECD 476	Experiment: In vitro Subject: Mammalian-Animal Metabolic activation: with and without	Negative
	OECD 473	Experiment: In vitro Subject: Mammalian-Animal Metabolic activation: with and without	Negative
	OECD 474	Experiment: In vivo Subject: Mammalian-Animal	Negative

Conclusion/Summary : Based on available data, the classification criteria are not met.

Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
1,1',1''-nitrilotripropan-2-ol	Negative - Oral -	Rat - Male	2%	104 weeks

Conclusion/Summary : Based on available data, the classification criteria are not met.

Reproductive toxicity

Section 11. Toxicological information

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure
1,1',1''-nitritoltripropan-2-ol	Negative	Negative	Negative	Rabbit - Female	Oral: 1000 mg/kg bw/day LOAEL	21 days
	Negative	Negative	Negative	Rabbit - Female	Oral: 180 mg/kg bw/day NOAEL Maternal toxicity	-
	Negative	Negative	Negative	Rabbit - Female	Oral: 1000 mg/kg bw/day NOEL Developmental effects	-
	Negative	Negative	Negative	Rat - Male	Oral: 1000 mg/kg bw/day NOAEL	38 days
	Negative	Negative	Negative	Rat - Male, Female	Oral: 609 to 700 mg/kg bw/day NOEL	-
	Negative	Negative	Negative	Rat	Oral: 400 mg/kg bw/day NOAEL Maternal toxicity	-
	Negative	Negative	Negative	Rat	Oral: 1000 mg/kg bw/day NOAEL Developmental effects	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
1,1',1''-nitritoltripropan-2-ol	Negative - Oral	Rat	1000 mg/kg bw/day NOAEL	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Section 11. Toxicological information

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
 pain
 watering
 redness
Inhalation : No specific data.
Skin contact : Adverse symptoms may include the following:
 pain or irritation
 redness
 blistering may occur
Ingestion : Adverse symptoms may include the following:
 stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
1,1',1''-nitritotripropan-2-ol	Sub-acute LOAEL Oral	Rat - Male, Female	300 mg/kg bw/ day	2 weeks
	Sub-acute NOAEL Dermal	Rat - Male, Female	≥3000 mg/kg bw/ day systemic toxicity	28 days
	Sub-acute NOAEL Dermal	Rat - Male, Female	300 mg/kg bw/ day Local effects	28 days
	Sub-chronic NOAEL Oral	Dog - Male	272 mg/kg bw/ day	104 days
	Sub-chronic NOAEL Oral	Dog - Female	288 mg/kg bw/ day	104 days
	Sub-acute NOAEL Oral	Rat - Male, Female	100 mg/kg bw/ day	2 weeks

Conclusion/Summary : Based on available data, the classification criteria are not met.
General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Reproductive toxicity : No known significant effects or critical hazards.

Section 11. Toxicological information

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
TIPA-85	4600	N/A	N/A	N/A	N/A
1,1',1''-nitritotripropan-2-ol	4000	N/A	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
1,1',1''-nitritotripropan-2-ol	EC20 >1995 mg/l Fresh water	Micro-organism	30 minutes Activated sludge
	Acute EC50 64.67 mg/l (biomass) Fresh water	Algae - <i>Desmodesmus subspicatus</i>	72 hours
	Acute EC50 710 mg/l (growth rate) Fresh water	Algae - <i>Desmodesmus subspicatus</i>	72 hours
	Acute EC50 >100 mg/l (growth rate) Fresh water	Algae - <i>Desmodesmus subspicatus</i>	72 hours
	Acute EC50 857 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute EC50 >500 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 >1000 mg/l Fresh water	Fish - <i>Cyprinus carpio</i>	96 hours
	Acute LC50 3158.48 mg/l Fresh water	Fish - <i>Leuciscus idus</i>	96 hours
	Chronic EC10 1.3 mg/l (biomass) Fresh water	Algae - <i>Desmodesmus subspicatus</i>	72 hours
	Chronic EC10 9.4 mg/l (growth rate) Fresh water	Algae - <i>Desmodesmus subspicatus</i>	72 hours
	Chronic EC10 19.47 mg/l (growth rate) Fresh water	Algae - <i>Desmodesmus subspicatus</i>	72 hours
	Chronic EC10 7.14 mg/l (biomass) Fresh water	Algae - <i>Desmodesmus subspicatus</i>	72 hours
	Chronic NOEC ≥10 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	21 days
	Chronic NOEC ≥10 mg/l Fresh water	Fish - <i>Danio rerio</i>	35 days

Conclusion/Summary : Based on available data, the classification criteria are not met.

Persistence and degradability

Section 12. Ecological information

Product/ingredient name	Test	Result	Dose	Inoculum
1,1',1''-nitritotripropan-2-ol	OECD 301A	18 % - Not readily - 28 days	-	Activated sludge
	OECD 302B	<10 % - Not readily - 28 days	-	Activated sludge
	OECD 302C	3.4 % - Not readily - 28 days	-	Activated sludge
	OECD 301F	0 % - Not readily - 28 days	-	Activated sludge

Conclusion/Summary : There are no data available on the mixture itself.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
1,1',1''-nitritotripropan-2-ol	Fresh water 14.3 days, 20°C (EPA 162-4) Fresh water >180 days, 20°C (EPA 162-3)	50%; <1 day(s)	Not readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
1,1',1''-nitritotripropan-2-ol	-0.015	<0.06	Low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : 1,1',1''-nitritotripropan-2-ol:
616 L/kg (25°C, pH 5)
548 L/kg (25°C, pH 7)
288 L/kg (25°C, pH 8)

Mobility : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-	-

Section 14. Transport information

Label						
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	Marine Pollutant: No	No.

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.

Transport in bulk according to IMO instruments : Not applicable.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : SERIOUS EYE DAMAGE - Category 1

Composition/information on ingredients

Name	%	Classification
1,1',1''-nitriлотripropan-2-ol	≥85	SERIOUS EYE DAMAGE - Category 1

State regulations

Massachusetts : The following components are listed: TRIISOPROPANOLAMINE

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : The following components are listed: 2-PROPANOL, 1,1',1''-NITRILOTRIS-

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Section 15. Regulatory information

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Japan	: Japan inventory (CSCL): All components are listed or exempted.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
United States	: All components are active or exempted.
Viet Nam	: All components are listed or exempted.

Section 16. Other information

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



Procedure used to derive the classification

Classification	Justification
SERIOUS EYE DAMAGE - Category 1	Calculation method

History

Date of printing	: 08/24/2023
Date of issue/Date of revision	: 08/24/2023
Date of previous issue	: No previous validation
Version	: 1

Key to abbreviations	: ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor DOT = Department of Transportation 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 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
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Section 16. Other information

SGG = Segregation Group
TDG = Transportation of Dangerous Goods
UN = United Nations

References : Not available.

▀ 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.