Tris[3-(trimethoxysilyl)propyl] isocyanurate

sc-253798

Material Safety Data Sheet

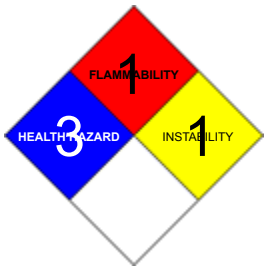
Hazard Alert Code Key:	EXTREME	HIGH	MODERATE	LOW

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME
Tris[3-(trimethoxysilyl)propyl] isocyanurate

STATEMENT OF HAZARDOUS NATURE
CONSIDERED A HAZARDOUS SUBSTANCE ACCORDING TO OSHA 29 CFR 1910.1200.

NFPA



SUPPLIER
Santa Cruz Biotechnology, Inc.
2145 Delaware Avenue
Santa Cruz, California 95060
800.457.3801 or 831.457.3800

EMERGENCY
ChemWatch
Within the US & Canada: 877-715-9305
Outside the US & Canada: +800 2436 2255
(1-800-CHEMCALL) or call +613 9573 3112

SYNONYMS
C21-H45-N3-O12-Si3, "1, 3, 5-tris[3-(3-trimethoxysilyl)propyl]-1, 3, 5-triazine-2, 4, 6(1H, 3H, ", 5H)-trione, "tris(trimethoxysilylpropyl)-s-triazine-2, 4, 6-trione"

Section 2 - HAZARDS IDENTIFICATION

CHEMWATCH HAZARD RATINGS

		Min	Max
Flammability	1		
Toxicity	3		
Body Contact	2		
Reactivity	1		
Chronic	2		

Min/Nil=0
Low=1
Moderate=2
High=3
Extreme=4

CANADIAN WHMIS SYMBOLS

EMERGENCY OVERVIEW

RISK

Toxic by inhalation and if swallowed.
Irritating to eyes and skin.
Harmful to aquatic organisms.

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

■ Toxic effects may result from the accidental ingestion of the material; animal experiments indicate that ingestion of less than 40 gram may be fatal or may produce serious damage to the health of the individual.
■ Triazine derivatives have been shown to cause structural damage to theliver in animal studies.

EYE

■ This material can cause eye irritation and damage in some persons.

SKIN

■ This material can cause inflammation of the skin oncontact in some persons.
■ The material may accentuate any pre-existing dermatitis condition.
■ Open cuts, abraded or irritated skin should not be exposed to this material.
■ Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.
Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

INHALED

■ Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may produce toxic effects; these may be fatal.
■ The material is not thought to produce respiratory irritation (as classified using animal models).
Nevertheless inhalation of vapors, fumes or aerosols, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress.
■ Inhalation of vapours may cause drowsiness and dizziness.
This may be accompanied by narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo.
■ Minor but regular methanol exposures may effect the central nervous system, optic nerves and retinae.
Symptoms may be delayed, with headache, fatigue, nausea, blurring of vision and double vision.

CHRONIC HEALTH EFFECTS

■ Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.
Long-term exposure to methanol vapor, at concentrations exceeding 3000 ppm, may produce cumulative effects characterized by gastrointestinal disturbances (nausea, vomiting), headache, ringing in the ears, insomnia, trembling, unsteady gait, vertigo, conjunctivitis and clouded or double vision. Liver and/or kidney injury may also result.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
tris(3-trimethoxysilylpropyl)isocyanurate	26115-70-8	>98
hydrolysis yields		
methanol	67-56-1	

Section 4 - FIRST AID MEASURES

SWALLOWED

- IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.
- Where Medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise

EYE

If this product comes in contact with the eyes

- Immediately hold eyelids apart and flush the eye continuously with running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

SKIN

If skin contact occurs

- Immediately remove all contaminated clothing, including footwear
- Flush skin and hair with running water (and soap if available).

INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.

NOTES TO PHYSICIAN

■ Treat symptomatically.

For acute and short term repeated exposures to methanol

- Toxicity results from accumulation of formaldehyde/formic acid.
- Clinical signs are usually limited to CNS, eyes and GI tract Severe metabolic acidosis may produce dyspnea and profound systemic effects which may become intractable. All symptomatic patients should have arterial pH measured. Evaluate airway, breathing and circulation.

Section 5 - FIRE FIGHTING MEASURES

Vapour Pressure (mmHG)	Negligible
Upper Explosive Limit (%)	Not available.
Specific Gravity (water=1)	1.17
Lower Explosive Limit (%)	Not available

EXTINGUISHING MEDIA

- Foam.
- Dry chemical powder.

FIRE FIGHTING

- Alert Emergency Responders and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.

When any large container (including road and rail tankers) is involved in a fire,
consider evacuation by 800 metres in all directions.

GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

- Combustible.
- Slight fire hazard when exposed to heat or flame.

Combustion products include carbon dioxide (CO_2), nitrogen oxides (NO_x), silicon dioxide (SiO_2), other pyrolysis products typical of burning organic material.

May emit poisonous fumes.

FIRE INCOMPATIBILITY

Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids,chlorine bleaches, pool chlorine etc. as ignition may result.

EXTINGUISHING MEDIA

- Foam.
- Dry chemical powder.

FIRE FIGHTING

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GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

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FIRE INCOMPATIBILITY

Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids,chlorine bleaches, pool chlorine etc. as ignition may result.

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

- Remove all ignition sources.
- Clean up all spills immediately.

MAJOR SPILLS

- Clear area of personnel and move upwind.
- Alert Emergency Responders and tell them location and nature of hazard.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- DO NOT allow clothing wet with material to stay in contact with skin
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.

RECOMMENDED STORAGE METHODS

- Lined metal can, Lined metal pail/drum
- Plastic pail

For low viscosity materials

- Drums and jerricans must be of the non-removable head type.
- Where a can is to be used as an inner package, the can must have a screwed enclosure.

All inner and sole packagings for substances that have been assigned to Packaging Groups I or II on the basis of inhalation toxicity criteria, must be hermetically sealed.

STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

Source	Material	TWA ppm	TWA mg/m³	STEL ppm	STEL mg/m³	Peak ppm	Peak mg/m³	TWA F/CC	Notes
Canada - Alberta Occupational Exposure Limits	tris(3-trimethoxysilylpropyl)isocyanurate (Methanol (Methyl alcohol))	200	262	250	328				

Canada - British Columbia Occupational Exposure Limits	tris(3-trimethoxysilylpropyl)isocyanurate (Methanol)	200		250			Skin
US - Minnesota Permissible Exposure Limits (PELs)	tris(3-trimethoxysilylpropyl)isocyanurate (Methyl alcohol)	200	260	250	325		
US ACGIH Threshold Limit Values (TLV)	tris(3-trimethoxysilylpropyl)isocyanurate (Methanol)	200		250			TLV Basis headache; eye damage. BEI
US NIOSH Recommended Exposure Limits (RELs)	tris(3-trimethoxysilylpropyl)isocyanurate (Methyl alcohol)	200	260	250	325		[skin]
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	tris(3-trimethoxysilylpropyl)isocyanurate (Methyl alcohol)	200	260	250	325		
US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants	tris(3-trimethoxysilylpropyl)isocyanurate (Methyl alcohol)	200	260				
US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants	tris(3-trimethoxysilylpropyl)isocyanurate (Methyl alcohol)	200	260	250	310		
US - California Permissible Exposure Limits for Chemical Contaminants	tris(3-trimethoxysilylpropyl)isocyanurate (Methyl alcohol; methanol)	200	260	250	325	1000	
US - Idaho - Limits for Air Contaminants	tris(3-trimethoxysilylpropyl)isocyanurate (Methyl alcohol)	200	260				
US - Hawaii Air Contaminant Limits	tris(3-trimethoxysilylpropyl)isocyanurate (Methyl alcohol (methanol))	200	260	250	325		
US - Alaska Limits for Air Contaminants	tris(3-trimethoxysilylpropyl)isocyanurate (Methyl alcohol (Methanol))	200	260	250	310		

US - Michigan Exposure Limits for Air Contaminants	tris(3-trimethoxysilylpropyl)isocyanurate (Methyl alcohol)	200	260	250	325		
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances	tris(3-trimethoxysilylpropyl)isocyanurate (Methyl alcohol (methanol) - Skin)	200	260	250	310		
US - Washington Permissible exposure limits of air contaminants	tris(3-trimethoxysilylpropyl)isocyanurate (Methanol (Methyl alcohol))	200		250			
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	tris(3-trimethoxysilylpropyl)isocyanurate (Methyl alcohol (methanol))	200		250			Skin
US - Oregon Permissible Exposure Limits (Z-1)	tris(3-trimethoxysilylpropyl)isocyanurate (Methyl alcohol (methanol))	200	260				
US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants	tris(3-trimethoxysilylpropyl)isocyanurate (Methyl alcohol)	200	260				
Canada - Quebec Permissible Exposure Values for Airborne Contaminants (English)	tris(3-trimethoxysilylpropyl)isocyanurate (Methyl alcohol)	200	262	250	328		
US OSHA Permissible Exposure Levels (PELs) - Table Z1	tris(3-trimethoxysilylpropyl)isocyanurate (Methyl alcohol)	200	260				
Canada - Northwest Territories Occupational Exposure Limits	tris(3-trimethoxysilylpropyl)isocyanurate (Methyl alcohol (Methanol) - Skin)	200	262	250	328		

(English)

Canada - Nova Scotia Occupational Exposure Limits	tris(3-trimethoxysilylpropyl)isocyanurate (Methanol)	200		250		TLV Basis headache; eye damage. BEI
Canada - Prince Edward Island Occupational Exposure Limits	tris(3-trimethoxysilylpropyl)isocyanurate (Methanol)	200		250		TLV Basis headache; eye damage. BEI
Canada - Ontario Occupational Exposure Limits	tris(3-trimethoxysilylpropyl)isocyanurate (Specified (PNOS) / Particules (insolubles ou peu solubles) non précisées par ailleurs)		3 (R)			
Canada - Ontario Occupational Exposure Limits	tris(3-trimethoxysilylpropyl)isocyanurate (Particles (Insoluble or Poorly Soluble) Not Otherwise)		10 (I)			

PERSONAL PROTECTION




RESPIRATOR

•Type AX-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 1432000 & 1492001, ANSI Z88 or national equivalent)

EYE

- Safety glasses with side shields.
- Chemical goggles.

HANDS/FEET

Wear chemical protective gloves, eg. PVC.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include

- frequency and duration of contact,
- chemical resistance of glove material,
- glove thickness and
- dexterity

Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).

- When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- Contaminated gloves should be replaced.

Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

OTHER

- Overalls.

- Eyewash unit.

ENGINEERING CONTROLS
Local exhaust ventilation usually required. If risk of overexposure exists, wear an approved respirator.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL PROPERTIES

Liquid.
Toxic or noxious vapours/gas.

State	Liquid	Molecular Weight	615.85
Melting Range (°F)	<32	Viscosity	350 cSt@40°C
Boiling Range (°F)	482	Solubility in water (g/L)	Reacts
Flash Point (°F)	216	pH (1% solution)	Not applicable
Decomposition Temp (°F)	Not available.	pH (as supplied)	Not applicable
Autoignition Temp (°F)	Not available	Vapour Pressure (mmHG)	Negligible
Upper Explosive Limit (%)	Not available.	Specific Gravity (water=1)	1.17
Lower Explosive Limit (%)	Not available	Relative Vapor Density (air=1)	>1
Volatile Component (%vol)	Negligible	Evaporation Rate	Not applicable

APPEARANCE
Liquid; does not mix well with water.

log Kow -0.82- -0.66

Material	Value

Section 10 - CHEMICAL STABILITY

CONDITIONS CONTRIBUTING TO INSTABILITY
- Presence of incompatible materials.
- Product is considered stable.

STORAGE INCOMPATIBILITY
¦ Segregate from alcohol, water.
Avoid reaction with oxidizing agents.
- NOTE May develop pressure in containers; open carefully. Vent periodically.

For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

tris(3-trimethoxysilylpropyl)isocyanurate

TOXICITY AND IRRITATION
unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.
TRIS(3-TRIMETHOXYSILYLPROPYL)ISOCYANURATE

TOXICITY	IRRITATION
Oral (Rat) LD50 1460 ul/kg	
Dermal (Rabbit) LD50 >16 ml/kg	

No significant acute toxicological data identified in literature search.
For alkoxysilanes
Low molecular weight alkoxysilanes (including alkyl orthosilicates) are a known concern for lung toxicity, due to inhalation of vapours or aerosols causing irreversible lung damage at low doses.
Alkoxysilane groups that rapidly hydrolyse when in contact with water, result in metabolites that may only cause

mild skin irritation. Although there appears to be signs of irritation under different test conditions, based on the available information, the alkoxysilanes cannot be readily classified as a skin irritant.
The trimethoxysilane group of chemicals have previously been associated with occupational eye irritation in exposed workers who experienced severe inflammation of the cornea . Based on the collective information, these substances are likely to be severe irritants to the eyes.
Methoxysilanes are generally reported to possess higher reactivity and toxicity compared to ethoxysilanes; some methoxysilanes appear to be carcinogenic .In the US, alkoxysilanes with alkoxy groups greater than C2 are classified as moderate concern.
Based on available information on methoxysilanes, the possibility that this family causes skin sensitisation cannot be ruled out. Amine-functional methoxysilanes have previously been implicated as a cause of occupational contact dermatitis, often as a result of repeated skin exposure with workers involved in the manufacture or use of the resins containing the chemical during fibreglass production.

TOXICITY	IRRITATION
METHANOL	
Oral (human) LDLo 143 mg/kg	Skin (rabbit) 20 mg/24 h-Moderate
Oral (man) LDLo 6422 mg/kg	Eye (rabbit) 40 mg-Moderate
Oral (man) TDLo 3429 mg/kg	Eye (rabbit) 100 mg/24h-Moderate
Oral (rat) LD50 5628 mg/kg	
Inhalation (human) TCLo 86000 mg/m³	
Inhalation (human) TCLo 300 ppm	
Inhalation (rat) LC50 64000 ppm/4h	
Dermal (rabbit) LD50 15800 mg/kg	

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

CARCINOGEN

methanol	US - Rhode Island Hazardous Substance List	IARC	
VPVB_(VERY~	US - Maine Chemicals of High Concern List	Carcinogen	
VPVB_(VERY~	US - Maine Chemicals of High Concern List	Carcinogen	CA Prop 65; IARC; NTP 11th ROC

SKIN

methanol	US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants - Skin	Skin Designation	X
methanol	US - Washington Permissible exposure limits of air contaminants - Skin	Skin	X
methanol	US ACGIH Threshold Limit Values (TLV) - Skin	Skin Designation	Yes
methanol	US AIHA Workplace Environmental Exposure Levels (WEELs) - Skin	Notes	TLV Basis headache; eye damage. BEI
methanol	US NIOSH Recommended Exposure Limits (RELs) - Skin	Skin	Yes
methanol	US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs) - Skin	Skin	X
methanol	US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs) - Skin	Skin	X
methanol	US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants - Skin	Skin Designation	X
methanol	Canada - British Columbia Occupational Exposure Limits - Skin	Notation	Skin

methanol	US - Minnesota Permissible Exposure Limits (PELs) - Skin	Skin Designation	X
methanol	US - Hawaii Air Contaminant Limits - Skin Designation	Skin Designation	X
methanol	US OSHA Permissible Exposure Levels (PELs) - Skin	Skin Designation	X
methanol	US - Oregon Permissible Exposure Limits (Z2) - Skin	Skin	X
methanol	US - California Permissible Exposure Limits for Chemical Contaminants - Skin	Skin	X
methanol	US - California Permissible Exposure Limits for Chemical Contaminants - Skin	Skin	S
methanol	Canada - Alberta Occupational Exposure Limits - Skin	Substance Interaction	1

Section 12 - ECOLOGICAL INFORMATION

Harmful to aquatic organisms.
This material and its container must be disposed of as hazardous waste.

Section 13 - DISPOSAL CONSIDERATIONS

US EPA Waste Number & Descriptions
B. Component Waste Numbers
When methanol is present as a solid waste as a discarded commercial chemical product, off-specification species, as a container residue, or a spill residue, use EPA waste number U154 (waste code I).
Disposal Instructions
All waste must be handled in accordance with local, state and federal regulations.
¦ Puncture containers to prevent re-use and bury at an authorized landfill.
Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.
A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction
- Reuse
- Recycling
- Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.
DO NOT allow wash water from cleaning equipment to enter drains. Collect all wash water for treatment before disposal.

- Recycle wherever possible or consult manufacturer for recycling options.
- Consult Waste Management Authority for disposal.

Section 14 - TRANSPORTATION INFORMATION

DOT:

Symbols:	None	Hazard class or Division:	6.1
Identification Numbers:	UN2810	PG:	II
Label Codes:	6.1	Special provisions:	IB2, T11, TP2, TP13, TP27
Packaging: Exceptions:	153	Packaging: Non-bulk:	202

Packaging: Exceptions:	153	Quantity limitations: Passenger aircraft/rail:	5 L
Quantity Limitations: Cargo aircraft only:	60 L	Vessel stowage: Location:	B
Vessel stowage: Other:	40		

Hazardous materials descriptions and proper shipping names:
Toxic, liquids, organic, n.o.s.

Air Transport IATA:

ICAO/IATA Class:	6.1	UN/ID Number:	2810
Packing Group:	II	Special provisions:	A3
		Cargo Only	
		Packing Instructions:	662
Maximum Qty/Pack:	60 L	Passenger and Cargo	
Passenger and Cargo		Packing Instructions:	Y641
Maximum Qty/Pack:	5 L	Passenger and Cargo Limited Quantity	
Passenger and Cargo Limited Quantity		Packing Instructions:	654
Maximum Qty/Pack:	1 L		

Shipping Name: TOXIC LIQUID, ORGANIC, N.O.S. *(CONTAINS TRIS(3-TRIMETHOXYSILYLPROPYL)ISOCYANURATE)

Maritime Transport IMDG:

IMDG Class:	6.1	IMDG Subrisk:	None
UN Number:	2810	Packing Group:	II
EMS Number:	F-A,S-A	Special provisions:	274
Limited Quantities:	100 ml		

Shipping Name: TOXIC LIQUID, ORGANIC, N.O.S.(contains tris(3-trimethoxysilylpropyl)isocyanurate)

Section 15 - REGULATORY INFORMATION

tris(3-trimethoxysilylpropyl)isocyanurate (CAS: 26115-70-8) is found on the following regulatory lists;
"Canada Domestic Substances List (DSL)","US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory"

Regulations for ingredients

methanol (CAS: 67-56-1) is found on the following regulatory lists;
"Canada - Alberta Ambient Air Quality Objectives","Canada - Alberta Occupational Exposure Limits","Canada - British Columbia Occupational Exposure Limits","Canada - Northwest Territories Occupational Exposure Limits (English)","Canada - Nova Scotia Occupational Exposure Limits","Canada - Prince Edward Island Occupational Exposure Limits","Canada - Quebec Permissible Exposure Values for Airborne Contaminants (English)","Canada - Saskatchewan Industrial Hazardous Substances","Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits","Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances","Canada Domestic Substances List (DSL)","Canada Ingredient Disclosure List (SOR/88-64)","Canada National Pollutant Release Inventory (NPRI)","Canada Toxicological Index Service - Workplace Hazardous Materials Information System - WHMIS (English)","GESAMP/EHS Composite List - GESAMP Hazard Profiles","IMO IBC Code Chapter 17: Summary of minimum requirements","IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances","International Council of Chemical Associations (ICCA) - High Production Volume List","US - Alaska Limits for Air Contaminants","US - California Air Toxics ""Hot Spots"" List (Assembly Bill 2588) Substances for which emissions must be quantified","US - California Occupational Safety and Health Regulations (CAL/OSHA) - Hazardous Substances List","US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs)","US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs)","US - California Permissible Exposure Limits for Chemical

Contaminants","US - California Toxic Air Contaminant List Category II","US - Connecticut - Regulations Concerning the Designation of Controlled Drugs - Volatile substances","US - Connecticut Hazardous Air Pollutants","US - Hawaii Air Contaminant Limits","US - Idaho - Limits for Air Contaminants","US - Maine Chemicals of High Concern List","US - Massachusetts Oil & Hazardous Material List","US - Michigan Exposure Limits for Air Contaminants","US - Minnesota Hazardous Substance List","US - Minnesota Permissible Exposure Limits (PELs)","US - New Jersey Right to Know Hazardous Substances","US - Oregon Permissible Exposure Limits (Z-1)","US - Rhode Island Hazardous Substance List","US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants","US - Vermont Hazardous wastes which are Discarded Commercial Chemical Products or Off-Specification Batches of Commercial Chemical Products or Spill Residues of Either","US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants","US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants","US - Washington Discarded Chemical Products List - ""U"" Chemical Products","US - Washington Permissible exposure limits of air contaminants","US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants","US ACGIH Threshold Limit Values (TLV)","US CAA (Clean Air Act) - HON Rule - Organic HAPs (Hazardous Air Pollutants)","US Clean Air Act - Hazardous Air Pollutants","US Cosmetic Ingredient Review (CIR) Cosmetic ingredients found safe, with qualifications","US Department of Transportation (DOT) List of Hazardous Substances and Reportable Quantities - Hazardous Substances Other Than Radionuclides","US DOE Temporary Emergency Exposure Limits (TEELs)","US DOT Coast Guard Bulk Hazardous Materials - List of Flammable and Combustible Bulk Liquid Cargoes","US EPA Acute Exposure Guideline Levels (AEGLs) - Interim","US EPA High Production Volume Program Chemical List","US EPCRA Section 313 Chemical List","US FDA Indirect Food Additives: Adhesives and Components of Coatings - Substances for Use Only as Components of Adhesives - Adhesives","US Food Additive Database","US List of Lists - Consolidated List of Chemicals Subject to EPCRA, CERCLA and Section 112(r) of the Clean Air Act","US NFPA 30A Typical Flammable and Combustible Liquids Found at Motor Fuel Dispensing Facilities","US NFPA 30B Manufacture and Storage of Aerosol Products - Chemical Heat of Combustion","US NIOSH Recommended Exposure Limits (RELs)","US OSHA Permissible Exposure Levels (PELs) - Table Z1","US Postal Service (USPS) Hazardous Materials Table: Postal Service Mailability Guide","US RCRA (Resource Conservation & Recovery Act) - List of Hazardous Wastes","US RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR Rule - Universal Treatment Standards","US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants","US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory"

Section 16 - OTHER INFORMATION

LIMITED EVIDENCE

■ Cumulative effects may result following exposure*.
■ Vapours potentially cause drowsiness and dizziness*.
* (limited evidence).

Denmark Advisory list for selfclassification of dangerous substances

Substance	CAS	Suggested codes
tris(3-trimethoxysilylpropyl)isocyanurate	26115- 70- 8	Xn; R22

Reasonable care has been taken in the preparation of this information, but the author makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The author makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. For additional technical information please call our toxicology department on +800 CHEMCALL.

■ Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.
A list of reference resources used to assist the committee may be found at:
www.chemwatch.net/references.

■ The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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