

De-stain for Coomassie

sc-300416



The Power is Question

Material Safety Data Sheet

Hazard Alert Code Key: **EXTREME** **HIGH** **MODERATE** **LOW**

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

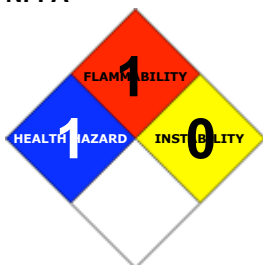
PRODUCT NAME

De-stain for Coomassie

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

laboratory, reagent

Section 2 - HAZARDS IDENTIFICATION

CHEMWATCH HAZARD RATINGS

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

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



CANADIAN WHMIS SYMBOLS



EMERGENCY OVERVIEW

RISK

In use, may form flammable/explosive vapour-air mixture.

Harmful in contact with skin.

Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

■ Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.

■ There is some evidence to suggest that this material can cause, if swallowed once, very serious, irreversible damage of organs.

EYE

■ Although the liquid is not thought to be an irritant, direct contact with the eye may produce transient discomfort characterized by tearing or conjunctival redness (as with windburn).

SKIN

■ Skin contact with the material may be harmful; systemic effects may result following absorption.

■ There is strong evidence to suggest that this material, on a single contact with skin, can cause serious, irreversible damage of organs.

■ The material is not thought to be a skin irritant (as classified using animal models). Temporary discomfort, however, may result from prolonged dermal exposures.

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■ 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 vapors or aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful.

■ 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.

■ There is strong evidence to suggest that this material, on a single contact with skin, can cause serious, irreversible damage of organs.

■ There is some evidence to suggest that this material can cause, if swallowed once, very serious, irreversible damage of organs.

■ There is some evidence to suggest that this material can cause, if inhaled once, serious, irreversible damage of organs.

CHRONIC HEALTH EFFECTS

■ Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.

Minor but regular methanol exposures may affect the central nervous system, optic nerves and retinae. Symptoms may be delayed, with headache, fatigue, nausea, blurring of vision and double vision. Continued or severe exposures may cause damage to optic nerves, which may become severe with permanent visual impairment even blindness resulting.

WARNING: Methanol is only slowly eliminated from the body and should be regarded as a cumulative poison which cannot be made non-harmful [CCINFO].

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.

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Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
methanol	67-56-1	10
acetic acid glacial	64-19-7	7.5

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: · Wash out immediately with fresh 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 or hair contact occurs: · Quickly but gently, wipe material off skin with a dry, clean cloth. · Immediately remove all contaminated clothing, including footwear.

INHALED

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

NOTES TO PHYSICIAN

- 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):	Not Available
Upper Explosive Limit (%):	Not Available
Specific Gravity (water=1):	Not Available
Lower Explosive Limit (%):	Not Available

EXTINGUISHING MEDIA

- Water spray or fog.
- Foam.

FIRE FIGHTING

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

GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

- WARNING: In use may form flammable/ explosive vapor-air mixtures.
- Combustible.

· Slight fire hazard when exposed to heat or flame.

Combustion products include: carbon dioxide (CO₂), formaldehyde, 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.

PERSONAL PROTECTION

Glasses:

Chemical goggles.

Gloves:

1.BUTYL 2.SARANEX-2 3.TEFLON

Respirator:

Type BAX Filter of sufficient capacity

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

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

MAJOR SPILLS

- Moderate hazard.
- 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

- 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.
- Metal can or drum
- Packing as recommended by manufacturer.

STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.
- No smoking, naked lights or ignition sources.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storing and handling recommendations.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

Source	Material	TWA ppm	TWA mg/m ³	STEL ppm	STEL mg/m ³	Peak ppm	Notes
Canada - British Columbia Occupational Exposure Limits	methanol (Methanol)	200		250			Skin
Canada - Ontario Occupational Exposure Limits	methanol (Methanol)	200	260	250	325		Skin
US - Minnesota Permissible Exposure Limits (PELs)	methanol (Methyl alcohol)	200	260	250	325		
US ACGIH Threshold Limit Values (TLV)	methanol (Methanol)	200		250			TLV Basis: headache; eye damage. BEI
US NIOSH Recommended Exposure Limits (RELs)	methanol (Methyl alcohol)	200	260	250	325		[skin]
Canada - Alberta Occupational Exposure Limits	methanol (Methanol (Methyl alcohol))	200	262	250	328		
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	methanol (Methyl alcohol)	200	260	250	325		
US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants	methanol (Methyl alcohol)	200	260				
US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants	methanol (Methyl alcohol)	200	260	250	310		
US - California Permissible Exposure Limits for Chemical Contaminants	methanol (Methyl alcohol; methanol)	200	260	250	325	1000	
US - Idaho - Limits for Air Contaminants	methanol (Methyl alcohol)	200	260				
US - Hawaii Air Contaminant Limits	methanol (Methyl alcohol (methanol))	200	260	250	325		
US - Alaska Limits for Air Contaminants	methanol (Methyl alcohol (Methanol))	200	260	250	310		
US - Michigan Exposure Limits for Air Contaminants	methanol (Methyl alcohol)	200	260	250	325		
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances	methanol (Methyl alcohol (methanol) - Skin)	200	260	250	310		
US - Washington Permissible exposure limits of air contaminants	methanol (Methanol (Methyl alcohol))	200		250			
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	methanol (Methyl alcohol (methanol))	200		250			Skin

US - Oregon Permissible Exposure Limits (Z-1)	methanol (Methyl alcohol (methanol))	200	260			
US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants	methanol (Methyl alcohol)	200	260			
Canada - Quebec Permissible Exposure Values for Airborne Contaminants (English)	methanol (Methyl alcohol)	200	262	250	328	
US OSHA Permissible Exposure Levels (PELs) - Table Z1	methanol (Methyl alcohol)	200	260			
Canada - Northwest Territories Occupational Exposure Limits (English)	methanol (Methyl alcohol (Methanol) - Skin)	200	262	250	328	
Canada - Nova Scotia Occupational Exposure Limits	methanol (Methanol)	200		250		TLV Basis: headache; eye damage. BEI
Canada - Prince Edward Island Occupational Exposure Limits	methanol (Methanol)	200		250		TLV Basis: headache; eye damage. BEI
Canada - Alberta Occupational Exposure Limits	acetic acid glacial (Acetic acid)	10	25	15	37	
Canada - British Columbia Occupational Exposure Limits	acetic acid glacial (Acetic acid)	10		15		
Canada - Ontario Occupational Exposure Limits	acetic acid glacial (Acetic acid)	10	25	15	37	
US OSHA Permissible Exposure Levels (PELs) - Table Z1	acetic acid glacial (Acetic acid)	10	25			
US ACGIH Threshold Limit Values (TLV)	acetic acid glacial (Acetic acid)	10		15		TLV Basis: Upper respiratory tract & eye Irritation ; pulmonary function
US NIOSH Recommended Exposure Limits (RELs)	acetic acid glacial (Acetic acid)	10	25	15	37	
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	acetic acid glacial (Acetic acid)	10	25			
US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants	acetic acid glacial (Acetic acid)	10	25			
US - Minnesota Permissible Exposure Limits (PELs)	acetic acid glacial (Acetic acid)	10	25			
US - California Permissible Exposure Limits for Chemical Contaminants	acetic acid glacial (Acetic acid)	10	25	15	37	40
US - Idaho - Limits for Air Contaminants	acetic acid glacial (Acetic acid)	10	25			

US - Hawaii Air Contaminant Limits	acetic acid glacial (Acetic acid)	10	25	15	37	
US - Alaska Limits for Air Contaminants	acetic acid glacial (Acetic acid)	10	25			
US - Michigan Exposure Limits for Air Contaminants	acetic acid glacial (Acetic acid)	10	25			
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances	acetic acid glacial (Acetic Acid)	10	25	25	43	
US - Washington Permissible exposure limits of air contaminants	acetic acid glacial (Acetic acid)	10		20		
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	acetic acid glacial (Acetic acid)	10		15		
Canada - Prince Edward Island Occupational Exposure Limits	acetic acid glacial (Acetic acid)	10		15		TLV Basis: Upper respiratory tract & eye Irritation ; pulmonary function
US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants	acetic acid glacial (Acetic acid)	10	25			
Canada - Quebec Permissible Exposure Values for Airborne Contaminants (English)	acetic acid glacial (Acetic acid)	10	25	15	37	
US - Oregon Permissible Exposure Limits (Z-1)	acetic acid glacial (Acetic Acid)	10	25			
Canada - Northwest Territories Occupational Exposure Limits (English)	acetic acid glacial (Acetic acid)	10	26	15	39	
Canada - Nova Scotia Occupational Exposure Limits	acetic acid glacial (Acetic acid)	10		15		TLV Basis: Upper respiratory tract & eye Irritation ; pulmonary function

ENDOELTABLE

PERSONAL PROTECTION



RESPIRATOR

Type BAX Filter of sufficient capacity
Consult your EHS staff for recommendations

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: such as:

- 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).

- 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) 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) 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.
- P.V.C. apron.
- Barrier cream.
- Skin cleansing cream.
- Eye wash unit.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required.

Use appropriate NIOSH-certified respirator based on informed professional judgement. In conditions where no reasonable estimate of exposure can be made, assume the exposure is in a concentration IDLH and use NIOSH-certified full face pressure demand SCBA with a minimum service life of 30 minutes, or a combination full facepiece pressure demand SAR with auxiliary self-contained air supply. Respirators provided only for escape from IDLH atmospheres shall be NIOSH-certified for escape from the atmosphere in which they will be used.

ENGINEERING CONTROLS

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

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Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL PROPERTIES

Liquid.

Mixes with water.

State	Liquid	Molecular Weight	Not Applicable
Melting Range (°F)	Not Available	Viscosity	Not Available
Boiling Range (°F)	Not Available	Solubility in water (g/L)	Miscible
Flash Point (°F)	Not Available	pH (1% solution)	Not Available
Decomposition Temp (°F)	Not Available	pH (as supplied)	Not Available
Autoignition Temp (°F)	Not Available	Vapour Pressure (mmHG)	Not Available
Upper Explosive Limit (%)	Not Available	Specific Gravity (water=1)	Not Available
Lower Explosive Limit (%)	Not Available	Relative Vapor Density (air=1)	Not Available
Volatile Component (%vol)	Not Available	Evaporation Rate	Not Available

APPEARANCE

Colourless liquid with vinegar odour; mixes with water.

Section 10 - CHEMICAL STABILITY

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.

STORAGE INCOMPATIBILITY

- Avoid reaction with oxidizing agents.

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

Section 11 - TOXICOLOGICAL INFORMATION

DE-STAIN SOLUTION

TOXICITY AND IRRITATION

■ unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

■ Not available. Refer to individual constituents.

METHANOL:

TOXICITY	IRRITATION
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/m ³	
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.

TOXICITY	IRRITATION
ACETIC ACID GLACIAL:	
Oral (human) TDLo: 1.47 mg/kg	Skin (human):50mg/24hr - Mild
Unreport (man) LDLo: 308 mg/kg	Skin (rabbit):525mg (open)-SEVERE
Oral (rat) LD50: 3310 mg/kg	Eye (rabbit): 0.05mg (open)-SEVERE
Inhalation (human) TCLo: 816 ppm/3 min	
Inhalation (rat) LCLo: 16000 ppm/4 hr	
Dermal (rabbit) LD50: 1060 mg/kg	

■ Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. Industrial bronchitis, on the other hand, is a disorder that occurs as result of exposure due to high concentrations of irritating substance (often particulate in nature) and is completely reversible after exposure ceases. The disorder is characterised by dyspnea, cough and mucus production.

The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

The material may cause severe 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. Repeated exposures may produce severe ulceration.

NOAELs following repeated exposure to acetic acid and its salts range from 210 mg/kg bw/day (2-4 month acetic acid drinking water study; systemic toxicity) to 3600 mg/kg bw/day (acetic acid, sodium salt, 4 week dietary study; no effects reported). Signs of irritation/corrosion at the site of contact as well as systemic toxicity have been reported. Prolonged inhalation exposure to acetic acid results in muscle imbalance, increase in blood cholinesterase activity, decreases in albumins and decreased growth at concentrations greater than 0.01 mg/m³/day.

Groups of 20 mice/sex were given 0.025% sodium acetate in drinking water (about 60 mg/kg bw/day) for 1 week before breeding, during a 9-day breeding period and (females only) throughout pregnancy, lactation and until the offspring were weaned at 3 weeks of age. No effects on fertility were observed. The male offspring were given the same solution until they were 5-7 weeks old and were then examined in a 24-hour activity test. Examination of the litters revealed no overt deformities and normal pup weights at day 1 and day 21. The activity of offspring of the treated group was lower than that of controls during the first 12 hours but was similar during the second 12 hours. It is unknown if the decreased activity observed in the sodium acetate treated group to was a result of exposure in utero and/or post-weaning, since the pups were exposed during both time periods.). Acetic acid had no effects on implantation or on maternal or fetal survival in rats, mice or rabbits dosed via gavage during gestation days 6-19 at doses up to 1600 mg/kg/day. The number of abnormalities seen in either soft or skeletal tissues of the test groups did not differ from the number occurring in the controls. Sodium acetate had no effect on pregnant mice or offspring when mice were administered 1000 mg/kg bw, by gavage on days 8-12 of gestation.

SKIN

methanol	US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants - Skin	Skin Designation	X
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 - 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	Canada - Alberta Occupational Exposure Limits - Skin	Substance Interaction	1

Section 12 - ECOLOGICAL INFORMATION

No data

Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
methanol	LOW		LOW	HIGH
acetic acid glacial	LOW		LOW	HIGH

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

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: DOT, IATA, IMDG

Section 15 - REGULATORY INFORMATION



REGULATIONS

ND

Ingredient CAS % de minimus concentration
methanol 67-56-1 1.0

ND

Ingredient CAS RQ
methanol 67-56-1 5000 lb (2270 kg)
acetic acid glacial 64-19-7 5000 lb (2270 kg)

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 - Ontario 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", "OECD Representative List of High Production Volume (HPV) Chemicals", "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 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 (AEGs) - 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) - Inventory"

acetic acid glacial (CAS: 64-19-7) 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 - Ontario 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 Toxicological Index Service - Workplace Hazardous Materials Information System - WHMIS (English)", "CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO IBC Code Chapter 17: Summary of minimum requirements", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "International Council of Chemical Associations (ICCA) - High Production Volume List", "International Fragrance Association (IFRA) Survey: Transparency List", "OECD Representative List of High Production Volume (HPV) Chemicals", "US - Alaska Limits for Air Contaminants", "US - California Occupational Safety and Health Regulations (CAL/OSHA) - Hazardous Substances List", "US - California Permissible Exposure Limits for Chemical Contaminants", "US - Hawaii Air Contaminant Limits", "US - Idaho - Limits for Air Contaminants", "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 - Pennsylvania - Hazardous Substance List", "US - Rhode Island Hazardous Substance List", "US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants", "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 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 CWA (Clean Water Act) - List of Hazardous Substances", "US CWA (Clean Water Act) - Reportable Quantities of Designated Hazardous Substances", "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 EPA High Production Volume Program Chemical List", "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 NIOSH Recommended Exposure Limits (RELs)", "US OSHA Permissible Exposure Levels (PELs) - Table Z1", "US Toxic Substances Control Act (TSCA) - Inventory"

No data for De-Stain Solution (CW: 4689-89)

Section 16 - OTHER INFORMATION

LIMITED EVIDENCE

- Cumulative effects may result following exposure*.
- Vapours potentially cause drowsiness and dizziness*.

* (limited evidence).

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■ 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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