

ICP Construction

Version No: 1.3

Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

Issue Date: 02/24/2017 Print Date: 02/24/2017 S.GHS.USA.EN

SECTION 1 IDENTIFICATION

Product Identifier

Product name	Stopz MR Waterproofer-White F58400
Synonyms	Not Available
Other means of identification	Not Available

Recommended use of the chemical and restrictions on use

Relevant identified uses	Mold Resistant Waterproofer
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Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Registered company name	ICP Construction
Address	150 Dascomb Road Massachusetts Andover United States
Telephone	978-623-9980
Fax	Not Available
Website	Not Available
Email	Not Available

Emergency phone number

Association / Organisation	Chemtel
Emergency telephone numbers	1-800-255-3924
Other emergency telephone numbers	1-813-248-0585

SECTION 2 HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

Classification	Eye Irritation Category 2B, Skin Sensitizer Category 1, Carcinogenicity Category 2, Acute Aquatic Hazard Category 2, Chronic Aquatic Hazard Category 2

Label elements



Hazard statement(s)

H320	Causes eye irritation.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H411	Toxic to aquatic life with long lasting effects.

Hazard(s) not otherwise specified

Not Applicable

Precautionary statement(s) Prevention

P201

P201 Obtain special instructions before use.

P280	Wear protective gloves/protective clothing/eye protection/face protection.	
P281	Use personal protective equipment as required.	
Precautionary statement(s)	Response	
P308+P313	IF exposed or concerned: Get medical advice/attention.	
P363	Wash contaminated clothing before reuse.	
P302+P352	IF ON SKIN: Wash with plenty of soap and water.	
Precautionary statement(s)	Storage	
P405	Store locked up.	
Precautionary statement(s)	Precautionary statement(s) Disposal	
P501	Dispose of contents/container in accordance with local regulations.	

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
12251-27-3		nepheline
107-21-1	0.9	ethylene glycol
7631-86-9	NotSpec.	silica amorphous
97-88-1	0.01	n-butyl methacrylate
56709-13-8	0.1	azadioxabicyclooctane, isomer 1
1897-45-6	0.48	chlorothalonil
9036-19-5	0.03	octylphenol, ethoxylated
14808-60-7	15	silica crystalline - quartz
not avail.	42.3	Non-hazardous ingredient
7664-41-7	0.19	ammonia anhydrous liquefied

SECTION 4 FIRST-AID MEASURES

Description of first aid measures

Eye Contact	 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. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	 If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor, without delay.
Ingestion	 Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIRE-FIGHTING MEASURES

Extinguishing media

- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

Special hazards arising from the substrate or mixture

Fire Incompatibility

Stopz MR Waterproofer-White F58400

Special protective equipment and precautions for fire-fighters

None known.

Fire Fighting	 When silica dust is dispersed in air, firefighters should wear inhalation protection as hazardous substances from the fire may be adsorbed on the silica particles. When heated to extreme temperatures, (>1700 deg.C) amorphous silica can fuse. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use fire fighting procedures suitable for surrounding area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use.
Fire/Explosion Hazard	 Non combustible. Not considered a significant fire risk, however containers may burn. silicon dioxide (SiO2) May emit corrosive fumes.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	 Environmental hazard - contain spillage. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal.
Major Spills	 Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by all means available, spillage from entering drains or water courses. Consider evacuation (or protect in place). No smoking, naked lights or ignition sources. Increase ventilation. Stop leak if safe to do so. Water spray or fog may be used to disperse / absorb vapour. Contain or absorb spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Collect recoverable product into labelled drums for disposal. Wash area and prevent runoff into drains. After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using. If contamination of drains or waterways occurs, advise emergency services.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling Other information	 Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with moisture. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Launder contaminated clothing before re-use. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained. DO NOT allow clothing wet with material to stay in contact with skin
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Conditions for safe storage, including any incompatibilities

Suitable container	 Polyethylene or polypropylene container. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
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 Silicas:

 react with hydrofluoric acid to produce silicon tetrafluoride gas
 react with xenon hexafluoride to produce explosive xenon trioxide
 react sexothermically with oxygen difluoride, and explosively with chlorine trifluoride (these halogenated materials are not commonplace industrial materials)
 and other fluorine-containing compounds
 may react with fluorine, chlorates
 are incompatible with strong oxidisers, manganese trioxide, chlorine trioxide, strong alkalis, metal oxides, concentrated orthophosphoric acid, vinyl acetate
 may react vigorously when heated with alkali carbonates.
 None known

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US ACGIH Threshold Limit Values (TLV)	ethylene glycol	‡ Ethylene glycol	Not Available	Not Available	100 mg/m3	TLV® Basis: URT & eye irr
US NIOSH Recommended Exposure Limits (RELs)	ethylene glycol	1,2-Dihydroxyethane; 1,2-Ethanediol; Glycol; Glycol alcohol; Monoethylene glycol	Not Available	Not Available	Not Available	See Appendix D
US OSHA Permissible Exposure Levels (PELs) - Table Z1	silica amorphous	Silica, amorphous, precipitated and gel	Not Available	Not Available	Not Available	See Table Z-3
US OSHA Permissible Exposure Levels (PELs) - Table Z1	silica amorphous	Silica, fused, respirable dust	Not Available	Not Available	Not Available	See Table Z-3
US OSHA Permissible Exposure Levels (PELs) - Table Z1	silica amorphous	Silica, amorphous, diatomaceous earth	Not Available	Not Available	Not Available	See Table Z-3;containing less than 1% crystalline silica
US OSHA Permissible Exposure Levels (PELs) - Table Z3	silica amorphous	Amorphous	80/(%SiO2) mg/m3 / 20 mppcf	Not Available	Not Available	including natural diatomaceous earth
US NIOSH Recommended Exposure Limits (RELs)	silica amorphous	Diatomaceous earth, Diatomaceous silica, Diatomite, Precipitated amorphous silica, Silica gel, Silicon dioxide (amorphous)	6 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Levels (PELs) - Table Z1	silica crystalline - quartz	Silica, crystalline quartz, respirable dust	Not Available	Not Available	Not Available	See Table Z-3
US OSHA Permissible Exposure Levels (PELs) - Table Z3	silica crystalline - quartz	Silica: Crystalline Quartz	10/(% SiO2+ 2) mg/m3 / 30/(% SiO2+ 2) mg/m3 / 250/(%SiO2+5) mppcf	Not Available	Not Available	(Respirable);(TWA mppcf (The percentage of crystalline silica in the formula is the amount determined from airborne samples, except in those instances in which other methods have been shown to be applicable)); (TWA mg/m3 (e)) / (Total Dust)
US NIOSH Recommended Exposure Limits (RELs)	silica crystalline - quartz	Cristobalite, Quartz, Tridymite, Tripoli	0.05 mg/m3	Not Available	Not Available	Ca See Appendix A
US OSHA Permissible Exposure Levels (PELs) - Table Z1	ammonia anhydrous liquefied	Ammonia	35 mg/m3 / 50 ppm	Not Available	Not Available	Not Available
US ACGIH Threshold Limit Values (TLV)	ammonia anhydrous liquefied	Ammonia	25 ppm	35 ppm	Not Available	TLV® Basis: Eye dam; URT irr
US NIOSH Recommended Exposure Limits (RELs)	ammonia anhydrous liquefied	Anhydrous ammonia, Aqua ammonia, Aqueous ammonia [Note: Often used in an aqueous solution.]	18 mg/m3 / 25 ppm	27 mg/m3 / 35 ppm	Not Available	Not Available

EMERGENCY LIMITS				
Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
ethylene glycol	Ethylene glycol	30 ppm	40 ppm	60 ppm
silica amorphous	Silica gel, amorphous synthetic	18 mg/m3	200 mg/m3	1,200 mg/m3
silica amorphous	Silica, amorphous fumed	18 mg/m3	100 mg/m3	630 mg/m3
silica amorphous	Siloxanes and silicones, dimethyl, reaction products with silica; (Hydrophobic silicon dioxide, amorphous)	120 mg/m3	1,300 mg/m3	7,900 mg/m3
silica amorphous	Silica, amorphous fume	45 mg/m3	500 mg/m3	3,000 mg/m3
silica amorphous	Silica amorphous hydrated	18 mg/m3	220 mg/m3	1,300 mg/m3
n-butyl methacrylate	Methyl butylacrylate, 2-; (Butyl methacrylate)	19 mg/m3	210 mg/m3	1,300 mg/m3
chlorothalonil	Chlorothalonil; (Tetrachloroisophthalonitrile)	0.13 mg/m3	1.4 mg/m3	8.6 mg/m3
octylphenol, ethoxylated	Polyoxyethylene monooctylphenyl ether	13 mg/m3	140 mg/m3	830 mg/m3
silica crystalline - quartz	Silica, crystalline-quartz; (Silicon dioxide)	0.075 mg/m3	33 mg/m3	200 mg/m3

ammonia anhydrous liquefied	Ammonia		Not Available	Not Available	Not Available
Ingredient	Original IDLH	Revised IDLH			
nepheline	Not Available	Not Available	e		
ethylene glycol	Not Available	Not Available	е		
silica amorphous	N.E. mg/m3 / N.E. ppm	3,000 mg/m3	3		
n-butyl methacrylate	Not Available	Not Available	e		
azadioxabicyclooctane, isomer 1	Not Available	Not Availabl	e		
chlorothalonil	Not Available	Not Available	e		
octylphenol, ethoxylated	Not Available	Not Available	e		
silica crystalline - quartz	N.E. mg/m3 / N.E. ppm	50 mg/m3			
Non-hazardous ingredient	Not Available	Not Available	e		
ammonia anhydrous liquefied	500 ppm	300 ppm			

Exposure controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed property. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employees exposed to confirmed human carcinogens should be authorized to do so by the employer, and work in a regulated area. • Work should be undertaken in an isolated system such as a "glove-box". Employees should wash their hands and arms upon completion of the assigned task and before engaging in other activities not associated with the isolated system. • Within regulated areas, the carcinogen should be stored in sealed containers, or enclosed in a closed system, including piping systems, with any sample ports or openings closed while the carcinogens are contained within. • Open-vessel systems are prohibited. • Each operation should be provided with continuous local exhaust ventilation so that air movement is always from ordinary work areas to the operation. • Exhaust air should not be discharged to regulated areas, non-regulated areas or the external environment unless decontaminated. Clean make-up air should be introduced in sufficient volume to maintain correct operation of the local exhaust system. • For maintenance and decontamination activities, authorized employees entering the area should be provided with and required to wear clean, impervious garments, including gloves, boost and continuous-ais supplied hood.
 Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]
See Hand protection below
 Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber NOTE: The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed. The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended. Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: frequency and duration of contact, deventive deventive 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 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national

	 Contaminated gloves should be replaced. For general applications, gloves with a thickness typically greater than 0.35 mm, are recommended. It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times. Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers' technical data should always be taken into account to ensure selection of the most appropriate glove for the task. Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example: Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of. Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential Gloves must only be wom on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.
Body protection	See Other protection below
Other protection	 Employees working with confirmed human carcinogens should be provided with, and be required to wear, clean, full body protective clothing (smocks, coveralls, or long-sleeved shirt and pants), shoe covers and gloves prior to entering the regulated area. [AS/NZS ISO 6529:2006 or national equivalent] Employees engaged in handling operations involving carcinogens should be provided with, and required to wear and use half-face filter-type respirators with filters for dusts, mists and fumes, or air purifying canisters or cartridges. A respirator affording higher levels of protection may be substituted. [AS/NZS 1715 or national equivalent] Emergency deluge showers and eyewash fountains, supplied with potable water, should be located near, within sight of, and on the same level with locations where direct exposure is likely. Prior to each exit from an area containing confirmed human carcinogens, employees should be required to remove and leave protective clothing and equipment at the point of exit and at the last exit of the day, to place used clothing and equipment in impervious containers at the point of exit for purposes of decontamination or disposal. The contents of such impervious containers must be identified with suitable labels. For maintenance and decontamination activities, authorized employees entering the area should be provided with and required to wear clean, impervious garments, including gloves, boots and continuous-air supplied hood. Prior to removing protective garments the employee should undergo decontamination and be required to shower upon removal of the garments and hood. Overalls. PrV.C. apron. Barrier cream. Skin cleansing cream. Eye wash unit.
Thermal hazards	Not Available

Respiratory protection

Type AX Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

If inhalation risk above the TLV exists, wear approved dust respirator.

Use respirators with protection factors appropriate for the exposure level.

- + Up to 5 X TLV, use valveless mask type; up to 10 X TLV, use 1/2 mask dust respirator
- + Up to 50 X TLV, use full face dust respirator or demand type C air supplied respirator
- + Up to 500 X TLV, use powered air-purifying dust respirator or a Type C pressure demand supplied-air respirator
- Over 500 X TLV wear full-face self-contained breathing apparatus with positive pressure mode or a combination respirator with a Type C positive pressure supplied-air full-face respirator and an auxiliary self-contained breathing apparatus operated in pressure demand or other positive pressure mode

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Text		
Physical state	Liquid	Relative density (Water = 1)	Not Available
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	There is strong evidence to suggest that this material can cause, if inhaled once, very serious, irreversible damage of organs. The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.
Ingestion	The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.
Skin Contact	Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions. There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons.
Eye	There is some evidence to suggest that this material can cause eye irritation and damage in some persons.
Chronic	Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. There is sufficient evidence to suggest that this material directly causes cancer in humans. Crystalline silicas activate the inflammatory response of white blood cells after they injure the lung epithelium. Chronic exposure to crystalline silicas reduces lung capacity and predisposes to chest infections.

Stopz MR	TOXICITY	IRRITATIO	N		
Waterproofer-White F58400	Not Available	Not Availab	le		
nepheline	TOXICITY	IRRITATIO	N		
nepnenne	Not Available	Not Available			
	TOXICITY	IRRITA	TION		
	Dermal (rabbit) LD50: 9530 mg/kg ^[2]	Eye (ra	bbit): 100 mg/1h - mild		
ethylene glycol	Inhalation (rat) LC50: 50.1 mg/L/8 hr ^[2]	Eye (ra	bbit): 12 mg/m3/3D		
	Oral (rat) LD50: 4700 mg/kg ^[2]	Eye (ra	bbit): 1440mg/6h-mode	erate	
			bbit): 500 mg/24h - mil		
		Skin (ra	abbit): 555 mg(open)-n	nild	
	TOXICITY	IRRITATION			
silica amorphous			Eye (rabbit): non-ir	-	
			Skin (rabbit): non-i	rritating *	
	Oral (rat) LD50: 3160 mg/kg ^[2]				
	ΤΟΧΙΟΙΤΥ	IRRITA	TION		
			abbit): 10000 mg/kg (op	pen)	
n-butyl methacrylate	Inhalation (rat) LC50: 4910 ppm/4hr ^[2]		,	,	
	Oral (rat) LD50: 16000 mg/kg ^[2]				
	ΤΟΧΙΟΙΤΥ			IRRITATION	
azadioxabicyclooctane, isomer 1	Dermal (rabbit) LD50: >2000 mg/kg ^[2]			Not Available	
Isomer i	Oral (rat) LD50: 2950 mg/kg ^[2]				
	TOXICITY			IRRITATION	
	dermal (rat) LD50: >2500 mg/kg ^[2]			Not Available	
chlorothalonil	Inhalation (rat) LC50: 0.1 mg/l/4h. ^[2]				

	Oral (rat) LD50: 10000 mg/kg ^[2]		
octylphenol, ethoxylated	TOXICITY Oral (rat) LD50: 4280 mg/kg ^[2]	IRRITATION Eye (rabbit): 1% SEVERE	
silica crystalline - quartz	TOXICITY Not Available	IRRITATION Not Available	
Non-hazardous ingredient	TOXICITY Not Available	IRRITATION Not Available	
ammonia anhydrous liquefied	TOXICITY dermal (rat) LD50: 4.84 mg/L ^[2] Inhalation (rat) LC50: 2000 ppm/4hr ^[2] Inhalation (rat) LC50: 9500 ppm/1hr ^[2] Oral (rat) LD50: 350 mg/kg ^[1]		IRRITATION Not Available
Legend:	 Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. 	* Value obtained from manufacture	er's SDS. Unless otherwise specified data

extracted from RTECS - Register of Toxic Effect of chemical Substances

NEPHELINE	No data available No data available
ETHYLENE GLYCOL	For ethylene glycol: Ethylene glycol is quickly and extensively absorbed through the gastrointestinal tract. Limited information suggests that it is also absorbed through the respiratory tract; dermal absorption is apparently slow. Following absorption, ethylene glycol is distributed throughout the body according to total body water. [Estimated Lethal Dose (human) 100 ml; RTECS quoted by Orica] Substance is reproductive effector in rats (birth defects). Mutagenic to rat cells.
SILICA AMORPHOUS	For silica amorphous: When experimental animals inhale synthetic amorphous silica (SAS) dust, it dissolves in the lung fluid and is rapidly eliminated. If swallowed, the vast majority of SAS is excreted in the faeces and there is little accumulation in the body. Following absorption across the gut, SAS is eliminated via urine without modification in animals and humans. The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing. Reports indicate high/prolonged exposures to amorphous silicas induced lung fibrosis in experimental animals; in some experiments these effects were reversible. [PATTYS]
N-BUTYL METHACRYLATE	Where no "official" classification for acrylates and methacrylates exists, there has been cautious attempts to create classifications in the absence of contrary evidence. For example Monalkyl or monoarylesters of acrylic acids should be classified as R36/37/38 and R51/53 Monoalkyl or monoaryl esters of methacrylic acid should be classified as R36/37/38 and R51/53 For isobutyl methacrylates (i-BMA) and n-butyl methacrylates (n-BMA): These have low levels of toxicity orally, through skin contact or by inhalation. They irritate the skin and eyes. They have not been shown to cause genetic damage or cancer, and there is little concern about them causing developmental toxicity. Based on the available oncogenicity data and without a better understanding of the carcinogenic mechanism the Health and Environmental Review Division (HERD), Office of Toxic Substances (OTS), of the US EPA previously concluded that all chemicals that contain the acrylate ro methacrylate moiety (CH2=CHCOO or CH2=C(CH3)COO) should be considered to be a carcinogenic hazard unless shown otherwise by adequate testing. This position has now been revised and acrylates and methacrylates are no longer <i>de facto</i> carcinogens.
AZADIOXABICYCLOOCTANE, ISOMER 1	For azadioxabicyclooctanes: The acute oral and dermal toxicities of azadioxabicyclooctane are low. The acute inhalation toxicity showed a median lethal dose range of between 0.441 mg/L and 0.819 mg/L in males, and between 0.819 mg/L and 1.397 mg/L in females, with epistaxis, labored breathing, rales, and rhinorrhoea in all dose groups. Corneal opacity was observed in the primary eye irritation study resulting . * CCInfo
CHLOROTHALONIL	Chlorothalonil has low toxicity, according to animal testing. It irritates the skin and eye. Animal testing suggests that at sufficient doses it can cause cancer of the kidney and forestomach. WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans. ADI: 0.01 mg/kg/day NOEL: 1.5 mg/kg/day
OCTYLPHENOL, ETHOXYLATED	Octoxynols: Octoxynols of various chain lengths as well as octoxynol salts and organic acids function in cosmetics either as surfactants-emulsifying agents, surfactants- cleansing agents, surfactant-solubilizing agents, or surfactants-hydrotropes in a wide variety of cosmetic products at concentrations ranging from 0.0008% to 25%, with most less than 5.0%. The octoxynols are chemically similar to nonoxynols. Long-chain nonoxynols (9 and above) were considered safe as used, whereas short-chain nonoxynols (8 and below) were considered safe as used in rinse-off products and safe at concentrations less than 5% in leave-on formulations. Human beings have regular contact with alcohol ethoxylates through a variety of industrial and consumer products such as soaps, detergents, and other cleaning products . Exposure to these chemicals can occur through ingestion, inhalation, or contact with the skin or eyes. Studies of acute toxicity show that volumes well above a reasonable intake level would have to occur to produce any toxic response. Both laboratory and animal testing has shown that there is no evidence for alcohol ethoxylates (AEs) causing genetic damage, mutations or cancer. No adverse reproductive or developmental effects were observed. Tri-ethylene glycol ethers undergo enzymatic oxidation to toxic alkoxy acids. They may irritate the skin and the eyes. At high oral doses, they may cause depressed reflexes, flaccid muscle tone, breathing difficulty and coma. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

	WARNING: For inhalation exposure ONLY: This substance has been classified by the IARC as Group 1: CARCINOGENIC TO HUMANS		
SILICA CRYSTALLINE - QUARTZ	The International Agency for Research on Cancer (IARC) has classified occupational exposures to respirable (<5 um) crystalline silica as being carcinogenic to humans . This classification is based on what IARC considered sufficient evidence from epidemiological studies of humans for the carcinogenicity of inhaled silica in the forms of quartz and cristobalite. Crystalline silica is also known to cause silicosis, a non-cancerous lung disease.		
AMMONIA ANHYDROUS LIQUEFIED	No significant acute toxicological data identified in literature search.	No significant acute toxicological data identified in literature search.	
N-BUTYL METHACRYLATE & AZADIOXABICYCLOOCTANE, ISOMER 1 & CHLOROTHALONIL	The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type.		
N-BUTYL METHACRYLATE & AZADIOXABICYCLOOCTANE, ISOMER 1 & CHLOROTHALONIL & AMMONIA ANHYDROUS LIQUEFIED	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.		
Acute Toxicity	S Carcinogenicity	✓	
Skin Irritation/Corrosion	S Reproductivity	0	
Serious Eye Damage/Irritation	✓ STOT - Single Exposure	0	
Respiratory or Skin sensitisation	✓ STOT - Repeated Exposure	0	
Mutagenicity	S Aspiration Hazard	0	
	Legend: 🗙	- Data available but does not fill the criteria for classification	

X − Data available but does not fill the criteria for classification
 ✓ − Data available to make classification

S – Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
ethylene glycol	LC50	96	Fish	2284.940mg/L	3
ethylene glycol	EC50	48	Crustacea	5046.29mg/L	5
ethylene glycol	EC50	96	Algae or other aquatic plants	6500-13000mg/L	1
ethylene glycol	EC50	Not Applicable	Crustacea	=10mg/L	1
ethylene glycol	NOEC	552	Crustacea	>=1000mg/L	2
silica amorphous	LC50	96	Fish	120.743mg/L	3
silica amorphous	EC50	48	Crustacea	ca.7600mg/L	1
silica amorphous	EC50	72	Algae or other aquatic plants	440mg/L	1
silica amorphous	EC50	384	Crustacea	28.000mg/L	3
silica amorphous	NOEC	72	Algae or other aquatic plants	60mg/L	1
n-butyl methacrylate	LC50	96	Fish	5.478mg/L	3
n-butyl methacrylate	EC50	48	Crustacea	32mg/L	1
n-butyl methacrylate	EC50	96	Algae or other aquatic plants	57mg/L	1
n-butyl methacrylate	EC50	504	Crustacea	6.59mg/L	2
n-butyl methacrylate	NOEC	336	Fish	0.78mg/L	2
azadioxabicyclooctane, isomer 1	LC50	96	Fish	28073.682mg/L	3
azadioxabicyclooctane, isomer 1	EC50	96	Algae or other aquatic plants	503.941mg/L	3
azadioxabicyclooctane, isomer 1	LC50	96	Fish	7479.033mg/L	3
azadioxabicyclooctane, isomer 1	EC50	96	Algae or other aquatic plants	193.440mg/L	3
chlorothalonil	LC50	96	Fish	0.0076mg/L	4
chlorothalonil	EC50	48	Crustacea	0.0066475mg/L	4
chlorothalonil	EC50	72	Algae or other aquatic plants	0.0068mg/L	4
chlorothalonil	BCF	336	Algae or other aquatic plants	0.02mg/L	4
chlorothalonil	EC10	48	Crustacea	0.00055839mg/L	4
chlorothalonil	NOEC	240	Crustacea	0.0003mg/L	4
octylphenol, ethoxylated	LC50	96	Fish	7.2mg/L	4
octylphenol, ethoxylated	EC50	96	Algae or other aquatic plants	0.21mg/L	4
octylphenol, ethoxylated	EC50	96	Algae or other aquatic plants	0.21mg/L	4

octylphenol, ethoxylated	NOEC	168	Fish	0.004mg/L	4
ammonia anhydrous liquefied	LC50	96	Fish	0.068mg/L	2
ammonia anhydrous liquefied	EC50	48	Crustacea	0.179mg/L	5
ammonia anhydrous liquefied	EC50	96	Algae or other aquatic plants	311.661mg/L	3
ammonia anhydrous liquefied	EC50	1440	Crustacea	0.016mg/L	5
ammonia anhydrous liquefied	NOEC	Not Applicable	Fish	0.0015mg/L	5
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data				

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
ethylene glycol	LOW (Half-life = 24 days)	LOW (Half-life = 3.46 days)
silica amorphous	LOW	LOW
n-butyl methacrylate	LOW	LOW
azadioxabicyclooctane, isomer 1	HIGH	HIGH
chlorothalonil	HIGH	HIGH
ammonia anhydrous liquefied	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
ethylene glycol	LOW (BCF = 200)
silica amorphous	LOW (LogKOW = 0.5294)
n-butyl methacrylate	LOW (BCF = 114)
azadioxabicyclooctane, isomer 1	LOW (LogKOW = -1.5532)
chlorothalonil	LOW (BCF = 125)
octylphenol, ethoxylated	LOW (BCF = 30)
ammonia anhydrous liquefied	LOW (LogKOW = 0.229)

Mobility in soil

Ingredient	Mobility
ethylene glycol	HIGH (KOC = 1)
silica amorphous	LOW (KOC = 23.74)
n-butyl methacrylate	LOW (KOC = 63.6)
azadioxabicyclooctane, isomer 1	LOW (KOC = 10)
chlorothalonil	LOW (KOC = 2392)
ammonia anhydrous liquefied	LOW (KOC = 14.3)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods	
Product / Packaging disposal	 Containers may still present a chemical hazard/ danger when empty. Return to supplier for reuse/ recycling if possible. Otherwise: If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. Where possible retain label warnings and SDS and observe all notices pertaining to the product. 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 or process equipment to enter drains.
▶ It may be necessary to collect all wash water for treatment before disposal.
▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
Where in doubt contact the responsible authority.
► Recycle wherever possible.
 Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
 Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or incineration in a licensed apparatus (after admixture with suitable combustible material).

• Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant



Land transport (DOT): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code Not Applicable

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

NEPHELINE(12251-27-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Not Applicable

ETHYLENE GLYCOL(107-21-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

US - Alaska Limits for Air Contaminants

- US California OEHHA/ARB Chronic Reference Exposure Levels and Target Organs (CRELs)
- US California Permissible Exposure Limits for Chemical Contaminants
- US California Proposition 65 Reproductive Toxicity
- US Hawaii Air Contaminant Limits
- US Massachusetts Right To Know Listed Chemicals
- US Michigan Exposure Limits for Air Contaminants
- US Minnesota Permissible Exposure Limits (PELs)
- 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

SILICA AMORPHOUS(7631-86-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

- US Alaska Limits for Air Contaminants
- US California Permissible Exposure Limits for Chemical Contaminants
- US Hawaii Air Contaminant Limits
- US Idaho Limits for Air Contaminants
- US Idaho Toxic and Hazardous Substances Mineral Dust
- US Massachusetts Right To Know Listed Chemicals
- US Michigan Exposure Limits for Air Contaminants
- US Minnesota Permissible Exposure Limits (PELs)
- US Oregon Permissible Exposure Limits (Z-1)
- US Oregon Permissible Exposure Limits (Z-3)
- US Pennsylvania Hazardous Substance List

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US - Massachusetts - Right To Know Listed Chemicals US - Pennsylvania - Hazardous Substance List

AZADIOXABICYCLOOCTANE, ISOMER 1(56709-13-8) IS FOUND ON THE FOLLOWING REGULATORY LISTS

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

CHLOROTHALONIL(1897-45-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS

N-BUTYL METHACRYLATE(97-88-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants

- US Washington Permissible exposure limits of air contaminants
- US Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values
- US ACGIH Threshold Limit Values (TLV) US ACGIH Threshold Limit Values (TLV) - Carcinogens
- US ACGIH Threshold Limit Values (TLV) Notice of Intended Changes
- US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)
- US Clean Air Act Hazardous Air Pollutants
- US EPCRA Section 313 Chemical List

US NIOSH Recommended Exposure Limits (RELs)

- US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants
- US Toxic Substances Control Act (TSCA) Chemical Substance Inventory
- 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 - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants US - Wyoming Toxic and Hazardous Substances Table Z-3 Mineral Dusts US NIOSH Recommended Exposure Limits (RELs) US OSHA Permissible Exposure Levels (PELs) - Table Z1
 - US OSHA Permissible Exposure Levels (PELs) Table Z3

 - US Toxic Substances Control Act (TSCA) Chemical Substance Inventory

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International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs	US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL): Carcinogens
US - California - Proposition 65 - Priority List for the Development of MADLs for Chemicals	US - Pennsylvania - Hazardous Substance List
Causing Reproductive Toxicity	US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values
US - California Proposition 65 - Carcinogens	US EPCRA Section 313 Chemical List
US - California Proposition 65 - No Significant Risk Levels (NSRLs) for Carcinogens US - Massachusetts - Right To Know Listed Chemicals	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
OCTYLPHENOL, ETHOXYLATED (9036-19-5) IS FOUND ON THE FOLLOWING REGULAT	ORYLISTS
US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
SILICA CRYSTALLINE - QUARTZ(14808-60-7) IS FOUND ON THE FOLLOWING REGULA	TORY LISTS
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC	US - Rhode Island Hazardous Substance List
Monographs	US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants
US - Alaska Limits for Air Contaminants	US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants
US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs)	US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants
US - California Permissible Exposure Limits for Chemical Contaminants	US - Washington Permissible exposure limits of air contaminants
US - California Proposition 65 - Carcinogens	US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values
US - Hawaii Air Contaminant Limits	US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
US - Idaho - Limits for Air Contaminants	US - Wyoming Toxic and Hazardous Substances Table Z-3 Mineral Dusts
US - Idaho - Toxic and Hazardous Substances - Mineral Dust	US ACGIH Threshold Limit Values (TLV) - Carcinogens
US - Massachusetts - Right To Know Listed Chemicals	US National Toxicology Program (NTP) 14th Report Part A Known to be Human Carcinogens
US - Michigan Exposure Limits for Air Contaminants	US NIOSH Recommended Exposure Limits (RELs)
US - Minnesota Permissible Exposure Limits (PELs)	US OSHA Permissible Exposure Levels (PELs) - Table Z1
US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL):	US OSHA Permissible Exposure Levels (PELs) - Table Z3
Carcinogens	US Priority List for the Development of Proposition 65 Safe Harbor Levels - No Significant Risk
US - Oregon Permissible Exposure Limits (Z-1)	Levels (NSRLs) for Carcinogens and Maximum Allowable Dose Levels (MADLs) for
US - Oregon Permissible Exposure Limits (Z-3)	Chemicals Causing Reproductive Toxicity
US - Pennsylvania - Hazardous Substance List	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
NON-HAZARDOUS INGREDIENT (NOT AVAIL.) IS FOUND ON THE FOLLOWING REGUL	ATORY LISTS
Not Applicable	
AMMONIA ANHYDROUS LIQUEFIED(7664-41-7) IS FOUND ON THE FOLLOWING REGU	LATORY LISTS
International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List	US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants
Passenger and Cargo Aircraft	US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air
US - Alaska Limits for Air Contaminants	Contaminants
US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs)	US - Washington Permissible exposure limits of air contaminants
US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs	US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values
(CRELs)	US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
US - California Permissible Exposure Limits for Chemical Contaminants	US ACGIH Threshold Limit Values (TLV)
US - Hawaii Air Contaminant Limits US - Idaho - Limits for Air Contaminants	US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)
	US UWA (Ulean Water Act) - List of Hazardous Substances

- US Massachusetts Right To Know Listed Chemicals
- US Michigan Exposure Limits for Air Contaminants
- US Minnesota Permissible Exposure Limits (PELs)
- 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

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SECTION 311/312 HAZARD CATEGORIES

Immediate (acute) health hazard	Yes
Delayed (chronic) health hazard	Yes
Fire hazard	No
Pressure hazard	No
Reactivity hazard	No

US EPCRA Section 313 Chemical List

US NIOSH Recommended Exposure Limits (RELs)

US OSHA Permissible Exposure Levels (PELs) - Table Z1

US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US SARA Section 302 Extremely Hazardous Substances

US. EPA CERCLA HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES (40 CFR 302.4)

Name	Reportable Quantity in Pounds (Ib)	Reportable Quantity in kg
Ethylene glycol	5000	2270
Ammonia	100	45.4

State Regulations

US. CALIFORNIA PROPOSITION 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm

US - CALIFORNIA PREPOSITION 65 - CARCINOGENS & REPRODUCTIVE TOXICITY (CRT): LISTED SUBSTANCE

Ethylene glycol (ingested), Chlorothalonil, Silica, crystalline (airborne particles of respirable size) Listed

National Inventory	Status
Australia - AICS	N (nepheline)
Canada - DSL	Υ
Canada - NDSL	N (chlorothalonii; nepheline; silica crystalline - quartz; n-butyl methacrylate; octylphenol, ethoxylated; ammonia anhydrous liquefied; ethylene glycol; azadioxabicyclooctane, isomer 1)
China - IECSC	Υ
Europe - EINEC / ELINCS / NLP	N (nepheline; octylphenol, ethoxylated)
Japan - ENCS	N (nepheline; octylphenol, ethoxylated; azadioxabicyclooctane, isomer 1)
Korea - KECI	Υ
New Zealand - NZIoC	Υ
Philippines - PICCS	Υ
USA - TSCA	N (nepheline)
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

CONTACT POINT

PLEASE NOTE THAT TITANIUM DIOXIDE IS NOT PRESENT IN CLEAR OR NEUTRAL BASES

Other information

Ingredients with multiple cas numbers

Name	CAS No
nepheline	12251-27-3, 37244-96-5
silica amorphous	7631-86-9, 112945-52-5, 67762-90-7, 68611-44-9, 68909-20-6, 112926-00-8, 61790-53-2, 60676-86-0, 91053-39-3, 69012-64-2, 844491-94-7
azadioxabicyclooctane, isomer 1	56709-13-8, 107497-96-1, 59720-42-2, 6542-37-6
silica crystalline - quartz	14808-60-7, 122304-48-7, 122304-49-8, 12425-26-2, 1317-79-9, 70594-95-5, 87347-84-0, 308075-07-2

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.

The 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.

Definitions and abbreviations

PC – TWA: Permissible Concentration-Time Weighted Average PC – STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit. IDLH: Immediately Dangerous to Life or Health Concentrations OSF: Odour Safety Factor NOAEL :No Observed Adverse Effect Level

LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value

LOD: Limit Of Detection

OTV: Odour Threshold Value

BCF: BioConcentration Factors BEI: Biological Exposure Index

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