

ICP Building Solutions Group

Version No: 6.8

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

Issue Date: 02/03/2020 Print Date: 02/03/2020 S.GHS.USA.EN

SECTION 1 IDENTIFICATION

Product Identifier

Product name	Fiberlock IAQ 8500 Duct Sealer Black 8385
Synonyms	Not Available
Other means of identification	Not Available
Recommended use of the chemical and restrictions on use	
Relevant identified uses	Duct Sealant

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Registered company name	ICP Building Solutions Group
Address	150 Dascomb Road Andover MA United States
Telephone	1-978-623-9980
Fax	Not Available
Website	http://www.icpgroup.com
Email	Not Available

Emergency phone number

Association / Organisation	ChemTel
Emergency telephone numbers	800-255-3924
Other emergency telephone numbers	Not Available

SECTION 2 HAZARD(S) IDENTIFICATION

H373

H402

H332

Harmful to aquatic life.

Harmful if inhaled.

Classification of the substance or mixture

NFPA 704 diamond



Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

May cause damage to organs through prolonged or repeated exposure.

Classification	Eye Irritation Category 2A, Chronic Aquatic Hazard Category 2, Specific target organ toxicity - repeated exposure Category 2, Acute Aquatic Hazard Category 3, Acute Toxicity (Inhalation) Category 4, Carcinogenicity Category 1A, Skin Sensitizer Category 1	
Label elements		
Hazard pictogram(s)		
SIGNAL WORD	DANGER	
Hazard statement(s)		
H319	Causes serious eye irritation.	
H411	Toxic to aquatic life with long lasting effects.	

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H350	May cause cancer.	
H317	May cause an allergic skin reaction.	
Hazard(s) not otherwise classif	fied	
Not Applicable		
Precautionary statement(s) Ge	neral	
P101	If medical advice is needed, have product container or label at hand.	
P102	Keep out of reach of children.	
P201	Precautionary statement(s) Prevention P201 Obtain special instructions before use.	
P260	Do not breathe mist/vapours/spray.	
Precautionary statement(s) Res	sponse	
P308+P313	IF exposed or concerned: Get medical advice/attention.	
P321	Specific treatment (see advice on this label).	
Precautionary statement(s) Storage		
P405	Store locked up.	
Precautionary statement(s) Disposal		

P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
1314-13-2	2.08-5.08	zinc oxide
56709-13-8	0.2	azadioxabicyclooctane, isomer 1
7320-34-5	0.1	potassium pyrophosphate
124-68-5	>0.81	monoisobutanolamine
27646-80-6	<0.06	2-(methylamino)-2-methyl-1-propanol
471-34-1	9.31	calcium carbonate
14808-60-7	0.04	silica crystalline - quartz
1332-58-7	9.4	kaolin
57-55-6	1.14-1.2	propylene glycol
7631-86-9	not spec	silica amorphous
1897-45-6	0.48	chlorothalonil
Not Available	1.4	Non-hazardous ingredient
1333-86-4	2.5	carbon black

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.

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

- Foam.
- Dry chemical powder.

Special hazards arising from the substrate or mixture

Fire Incompatibility + Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Special protective equipment and precautions for fire-fighters

Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus.
Fire/Explosion Hazard	 Combustible. Slight fire hazard when exposed to heat or flame. Combustion products include: carbon dioxide (CO2) other pyrolysis products typical of burning organic material. May emit poisonous fumes. 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. Remove all ignition sources. Clean up all spills immediately.
Major Spills	Environmental hazard - contain spillage. Moderate hazard.

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling	
Safe handling	 Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. DO NOT allow clothing wet with material to stay in contact with skin
Other information	 Store in original containers. Keep containers securely sealed.

Conditions for safe storage, including any incompatibilities

Suitable container	 Metal can or drum Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	 Calcium carbonate: is incompatible with acids, ammonium salts, fluorine, germanium, lead diacetate, magnesium, mercurous chloride, silicon, silver nitrate, titanium. Contact with acid generates carbon dioxide gas, which may pressurise and then rupture closed containers Avoid reaction with oxidising agents

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

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Dis Notiones Landing March Discontes L	Source	Ingredient	Material name	TWA	STEL	Peak	Notes
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US NICSH Recommended Exposure Limits (RELs)Calcium cationnaleNatural calcium momon10 (trad) momonNet Mathe is a momonNet Mathe is a Mathe is a mathe is a mathe is a momon			carbonic acid [Note: Occurs in nature as as limestone, chalk, marble, dolomite, aragonite, calcite and	5 (resp)			Not Available
US NOSH Recommended Us NOSH Recommendedcalcium carbonate carbonate natural calcium carbonate10 (total) (total) (total) (total) (total) (total) (total) (total) 			Natural calcium carbonate [Note: Marble is a metamorphic form of	5 (resp)			Not Available
Levels (PELs) - Table 21carbonateTotal dust15 mg/m3AvailableNot availableNot Availab			Natural calcium carbonate [Note: Calcite & aragonite are commercially important natural calcium	5 (resp)			Not Available
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US OSHA Permissible Exposure Levels (PELs) - Table Z1 crystalline - quartz Silica, crystalline, respirable dust: Quartz Not Available Not Available Not Available Not Available Not Available For any operations or sectors where the exposure limit in § 1910.1053 is stayed or is otherwise not in effect. US NIOSH Recommended Exposure Limits (RFLs) Kaolin China clay, Clay, Hydrated aluminum eilipote Hydrite 10 (total), 5 (resp) Not Available Not Available Not Available Not Available		crystalline -	α-quartz and				TLV® Basis: Pulm fibrosis; lung cancer
US NIOSH Recommended kaolin Hydrated aluminum ciliado Hydrated hydrite by Stresp Available Available Available	•	crystalline -					for any operations or sectors where the exposure limit in
		kaolin	Hydrated aluminum	5 (resp)			Not Available

	0		I			
		Porcelain clay [Note: Main constituent of Kaolin is Kaolinite (Al2Si2O5(OH)4).]				
US ACGIH Threshold Limit Values (TLV)	kaolin	Kaolin	2 mg/m3	Not Available	Not Available	TLV® Basis: Pneumoconiosis
US OSHA Permissible Exposure Levels (PELs) - Table Z1	kaolin	Kaolin: Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Levels (PELs) - Table Z1	kaolin	Kaolin: Total dust	15 mg/m3	Not Available	Not Available	Not Available
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 Z3	silica amorphous	Amorphous	80 / (%SiO2) mg/m3 / 20 mppcf	Not Available	Not Available	(Name (including natural diatomaceous earth))
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, containing less than 1% crystalline silica	Not Available	Not Available	Not Available	See Table Z-3
US NIOSH Recommended Exposure Limits (RELs)	carbon black	Acetylene black, Channel black, Furnace black, Lamp black, Thermal black	3.5 mg/m3	Not Available	Not Available	Ca See Appendix A See Appendix C
US ACGIH Threshold Limit Values (TLV)	carbon black	Carbon black	3 mg/m3	Not Available	Not Available	TLV® Basis: Bronchitis
US OSHA Permissible Exposure Levels (PELs) - Table Z1	carbon black	Carbon black	3.5 mg/m3	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name		TEEL-1	TEEL-2	TEEL-3
zinc oxide	Zinc oxide		10 mg/m3	15 mg/m3	2,500 mg/m3
potassium pyrophosphate	Potassium pyrophosphate; (Tetrapotassium diphosphorate)		61 mg/m3	680 mg/m3	1,200 mg/m3
monoisobutanolamine	Isobutanol-2-amine		17 mg/m3	190 mg/m3	570 mg/m3
calcium carbonate	Limestone; (Calcium carbonate; Dolomite)		45 mg/m3	500 mg/m3	3,000 mg/m3
calcium carbonate	Carbonic acid, calcium salt		45 mg/m3	210 mg/m3	1,300 mg/m3
silica crystalline - quartz	Silica, crystalline-quartz; (Silicon dioxide)		0.075 mg/m3	33 mg/m3	200 mg/m3
propylene glycol	Polypropylene glycols		30 mg/m3	330 mg/m3	2,000 mg/m3
propylene glycol	Propylene glycol; (1,2-Propanediol)		30 mg/m3	1,300 mg/m3	7,900 mg/m3
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
chlorothalonil	Chlorothalonil; (Tetrachloroisophthalonitrile)		0.13 mg/m3	1.4 mg/m3	8.6 mg/m3
carbon black	Carbon black		9 mg/m3	99 mg/m3	590 mg/m3
Ingredient	Original IDLH	Revised	IDLH		
zinc oxide	500 mg/m3 Not Ava		able		
azadioxabicyclooctane, isomer 1	Not Available	Not Avail	Not Available		
potassium pyrophosphate	Not Available	Not Avail	able		
monoisobutanolamine	Not Available	Not Avail	Available		
	·	· · · · · · · · · · · · · · · · · · ·			

2-(methylamino)-2-methyl- 1-propanol	Not Available	Not Available
calcium carbonate	Not Available	Not Available
silica crystalline - quartz	25 mg/m3 / 50 mg/m3	Not Available
kaolin	Not Available	Not Available
propylene glycol	Not Available	Not Available
silica amorphous	3,000 mg/m3	Not Available
chlorothalonil	Not Available	Not Available
Non-hazardous ingredient	Not Available	Not Available
carbon black	1,750 mg/m3	Not Available

OCCUPATIONAL EXPOSURE BANDING

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
azadioxabicyclooctane, isomer 1	E	≤ 0.01 mg/m³
potassium pyrophosphate	E	≤ 0.01 mg/m³
monoisobutanolamine	E	≤ 0.01 mg/m³
2-(methylamino)-2-methyl- 1-propanol	E	≤ 0.01 mg/m³
propylene glycol	E	≤ 0.1 ppm
chlorothalonil	E	≤ 0.01 mg/m³
Notes:	Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a	

range of exposure concentrations that are expected to protect worker health.

osure controls	
Appropriate engineering 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.
Personal protection	
Eye and face protection	 Safety glasses with side shields. Chemical goggles.
Skin protection	See Hand protection below
Hands/feet protection	 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. 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.
Body protection	See Other protection below
Other protection	 ► Overalls. ► P.V.C.

Respiratory protection

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

- Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

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)	8.5	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	Immiscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable.
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

ormation on toxicological er			
Inhaled	Inhalation of vapours 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 by EC Directives using animal models). Nevertheless inhalation of vapours, fumes or aerosols, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress.		
Ingestion	The material is not thought to produce adverse health effects following ingestion (as classified by EC Directives using animal models). Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum. Ingestion of propylene glycol produced reversible central nervous system depression in humans following ingestion of 60 ml. Symptoms included increased heart-rate (tachycardia), excessive sweating (diaphoresis) and grand mal seizures in a 15 month child who ingested large doses (7.5 ml/day for 8 days) as an ingredient of vitamin preparation.		
Skin Contact	Open cuts, abraded or irritated skin should not be expose	brasions or lesions, may produce systemic injury with harmful effects. Examine the skir	
Eye	This material can cause eye irritation and damage in some persons.		
Chronic	Studies show that inhaling this substance for over a long period (e.g. in an occupational setting) may increase the risk of cancer. Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. Chronic dust inhalation of kaolin, can cause kaolinosis from kaolin deposition in the lungs causing distinct lung markings, abnormal inflation of air sacs, and chronic lung diseases (nodular pneumoconiosis).This condition is made worse by long duration of occupational exposure and pre-existing chest infection. Pre-employment screening is recommended. There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment. Propylene glycol is thought to be sensitizing following the regular use of topical creams by eczema patients. Testing in humans showed that 16% of exposed individuals, irritation occurred, with 12.5% showing toxic or allergic reactions.		
Fiberlock IAQ 8500 Duct	ΤΟΧΙΟΙΤΥ	IRRITATION	
Sealer Black 8385	Not Available	Not Available	
	ΤΟΧΙΟΙΤΥ	IRRITATION	
	dermal (rat) LD50: >2000 mg/kg ^[1]	Eye (rabbit) : 500 mg/24 h - mild	
zinc oxide	Inhalation (rat) LC50: >1.79 mg/l4 h ^[1]	Eye: no adverse effect observed (not irritating) ^[1]	
	Oral (rat) LD50: >5000 mg/kg ^[2]	Skin (rabbit) : 500 mg/24 h- mild	
		Skin: no adverse effect observed (not irritating) ^[1]	
azadioxabicyclooctane,	ΤΟΧΙΟΙΤΥ	IRRITATION	
isomer 1	Dermal (rabbit) LD50: >2000 mg/kg ^[2]	Not Available	

	TOXICITY	IRRITATION
potassium pyrophosphate	dermal (rat) LD50: >2000 mg/kg ^[1]	Eye: adverse effect observed (irritating) ^[1]
	Oral (rat) LD50: >300-2000 mg/kg ^[1]	Skin: no adverse effect observed (not irritating) ^[1]
	тохісіту	IRRITATION
monoisobutanolamine	Dermal (rabbit) LD50: >2000 mg/kg ^[2]	Not Available
	Oral (rat) LD50: 2900 mg/kg ^[2]	
2-(methylamino)-2-methyl-	TOXICITY	IRRITATION
1-propanol	Not Available	Not Available
	TOXICITY	IRRITATION
	dermal (rat) LD50: >2000 mg/kg ^[1]	Eye (rabbit): 0.75 mg/24h - SEVERE
calcium carbonate	Oral (rat) LD50: >2000 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1]
		Skin (rabbit): 500 mg/24h-moderate
		Skin: no adverse effect observed (not irritating) $\ensuremath{^{[1]}}$
	TOXICITY	IRRITATION
silica crystalline - quartz	Oral (rat) LD50: =500 mg/kg ^[2]	Not Available
	TOXICITY	IRRITATION
kaolin	Not Available	Not Available
	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 11890 mg/kg ^[2]	Eye (rabbit): 100 mg - mild
	Inhalation (rat) LC50: >44.9 mg/l/4H ^[2]	Eye (rabbit): 500 mg/24h - mild
propylene glycol	Oral (rat) LD50: 20000 mg/kg ^[2]	Eye: no adverse effect observed (not irritating) ^[1]
		Skin(human):104 mg/3d Intermit Mod
		Skin(human):500 mg/7days mild
		Skin: no adverse effect observed (not irritating) ^[1]
	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >5000 mg/kg ^[2]	Eye (rabbit): non-irritating *
silica amorphous	Inhalation (rat) LC50: >0.139 mg/l/14h**[Grace] ^[2]	Eye: no adverse effect observed (not irritating) ^[1]
	Oral (rat) LD50: 3160 mg/kg ^[2]	Skin (rabbit): non-irritating *
		Skin: no adverse effect observed (not irritating) ^[1]
	TOXICITY	IRRITATION
chlorothalonil	dermal (rat) LD50: >2500 mg/kg ^[2]	Not Available
chiorothaionn	Inhalation (rat) LC50: 0.0775 mg/l/1h ^[2]	
	Oral (rat) LD50: >5000 mg/kg ^[2]	
Non-hazardous ingredient	TOXICITY	IRRITATION
	Not Available	Not Available
carbon black	TOXICITY	IRRITATION
	dermal (rat) LD50: >2000 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1]
	Oral (rat) LD50: >15400 mg/kg ^[2]	Skin: no adverse effect observed (not irritating) ^[1]
Legend:	1. Value obtained from Europe ECHA Registered Substances - specified data extracted from RTECS - Register of Toxic Effect	Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwis of chemical Substances

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. * CCInfo
POTASSIUM PYROPHOSPHATE	No data available. Data for sodium analogue only. tetrasodium pyrophosphate
MONOISOBUTANOLAMINE	TRIS AMINO and its surrogate chemicals have very little, if any, toxicity. They are mildly irritating to eyes at moderate concentrations, and do not cause allergic skin reactions.

CALCIUM CARBONATE	No evidence of carcinogenic properties. No evidence of mutagenic or teratogenic effects. 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 subs	stance 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.			
KAOLIN	For bentonite clays: Bentonite (CAS No. 1302-78-9) consists of a group of clays formed by crystallization of vitreous volcanic ashes that were deposited in water. The expected acute oral toxicity of bentonite in humans is very low.			
SILICA AMORPHOUS	Reports indicate high/prolonged exposures to amorphous silicas induced lung fibrosis in experimental animals; in some experiments these effects were reversible. [PATTYS] 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. 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.			
CHLOROTHALONIL	Chlorothalonil has low toxicity, according to animal testing. It irritates the skin and eye. ADI: 0.01 mg/kg/day NOEL: 1.5 mg/kg/day			
CARBON BLACK	Inhalation (rat) TCLo: 50 mg/m3/6h/90D-I Nil reported			
Fiberlock IAQ 8500 Duct Sealer Black 8385 & 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.			
Fiberlock IAQ 8500 Duct Sealer Black 8385 & PROPYLENE GLYCOL	The acute oral toxicity of propylene glycol is very low; large amounts are needed to cause perceptible health damage in humans. Serious toxicity generally occurs only at blood concentrations over 1 g/L, which requires extremely high intake over a relatively short period of time; this is nearly impossible with consuming foods or supplements which contain 1g/kg of PG at most.			
ZINC OXIDE & CALCIUM CARBONATE & PROPYLENE GLYCOL	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.			
AZADIOXABICYCLOOCTANE, ISOMER 1 & POTASSIUM PYROPHOSPHATE & CALCIUM CARBONATE & CHLOROTHALONIL	Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound.			
2-(METHYLAMINO)- 2-METHYL-1-PROPANOL & KAOLIN & CARBON BLACK	No significant acute toxicological data identified in literature search.			
CHLOROTHALONIL & CARBON BLACK	WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.			
Acute Toxicity	✓	Carcinogenicity	✓	
Skin Irritation/Corrosion	×	Reproductivity	×	
Serious Eye Damage/Irritation	×	STOT - Single Exposure	×	
Respiratory or Skin sensitisation	*	STOT - Repeated Exposure	*	
3013113811011				

Data available to make classification

SECTION 12 ECOLOGICAL INFORMATION

	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
Fiberlock IAQ 8500 Duct Sealer Black 8385	Not Available	Not Available	Not Available	Not Available	Not Available
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCI
	LC50	96	Fish	0.001-0.58mg/L	2
zinc oxide	EC50	48	Crustacea	0.001-0.014mg/L	2
	EC50	72	Algae or other aquatic plants	0.037mg/L	2
	BCF	336	Fish	4376.673mg/L	4
	NOEC	72	Algae or other aquatic plants	0.00008138mg/L	2
azadioxabicyclooctane, isomer 1	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURC
	LC50	96	Fish	28073.682mg/L	3
	EC50	96	Algae or other aquatic plants	503.941mg/L	3
	LC50	96	Fish	7479.033mg/L	3
	EC50	96	Algae or other aquatic plants	193.440mg/L	3

	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOUR
	LC50	96	Fish	>100mg	
potassium pyrophosphate	EC50	48	Crustacea	>100mg	L 2
	EC50	72	Algae or other aquatic plants	>100mg	
	NOEC	72	Algae or other aquatic plants	>100mg	L 2
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOUF
	LC50	96	Fish	=100mg/L	1
monoisobutanolamine	EC50	48	Crustacea	=193mg/L	1
	EC50	96	Algae or other aquatic plants	52.872mg	L 3
	NOEC	48	Crustacea	100mg/L	2
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOUR
2-(methylamino)-2-methyl- 1-propanol	Not Available	Not Available	Not Available	Not Availab	Not e Availa
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOUF
	LC50	96	Fish	>56000mg	L 4
calcium carbonate	EC50	72	Algae or other aquatic plants	>14mg/L	2
	EC10	72	Algae or other aquatic plants	>14mg/L	2
	NOEC	72	Algae or other aquatic plants	14mg/L	2
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOUF
silica crystalline - quartz	Not Available	Not Available	Not Available	Not Availab	Not
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOUF
kaolin	Not Available	Not Available	Not Available	Not Availab	Not
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOUF
	LC50	96	Fish	>10-mg/L	2
propylene glycol	EC50	48	Crustacea	43-500mg	
F. 65 81	EC50	96	Algae or other aquatic plants	19-mg/L	2
	NOEC	168	Fish	11-530mg/	
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOUF
	LC50	96	Fish	1-289.09mg	
silica amorphous	EC50	48	Crustacea	ca.7600mg/l	
sinca amorphous	EC50	72	Algae or other aquatic plants	440mg/L	. ¦ 1
	NOEC	72	Crustacea	440mg/L 34.223mg/L	2
	ENDROUT		SDECIES	VALUE	SOUF
	ENDPOINT LC50	TEST DURATION (HR)	SPECIES	0.0076mg/L	4
		96	Fish Crustacea		1
chlorothalonil	EC50	48		0.0066475mg	
	EC50	72	Algae or other aquatic plants	0.0068mg/L	4
	BCF NOEC	240	Algae or other aquatic plants Crustacea	0.02mg/L 0.0003mg/L	4
		1	1	-	1
Non-hazardous ingredient	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOUR
Non-hazardous ingredient	Not Available	Not Available	Not Available	Not Availab	e Availa
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOUF
	LC50	96	Fish	>100mg	L 2
oorben bleek	EC50	48	Crustacea	>100mg	L 2
carbon black	EC50	72	Algae or other aquatic plants	>10-mg/	_ 2
	EC10	72	Algae or other aquatic plants	>10-mg/	2
	NOEC	96	Fish	>=1-mg/	2

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.

Bentonite and kaolin have low toxicity to aquatic species, a large number of which have been tested

Propylene glycol is known to exert high levels of biochemical oxygen demand (BOD) during degradation in surface waters. This process can adversely affect aquatic life by consuming oxygen needed by aquatic organisms for survival.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
azadioxabicyclooctane, isomer 1	HIGH	HIGH
monoisobutanolamine	LOW	LOW
propylene glycol	LOW	LOW
silica amorphous	LOW	LOW
chlorothalonil	HIGH	HIGH

Bioaccumulative potential

Ingredient	Bioaccumulation
zinc oxide	LOW (BCF = 217)
azadioxabicyclooctane, isomer 1	LOW (LogKOW = -1.5532)
monoisobutanolamine	LOW (BCF = 330)
propylene glycol	LOW (BCF = 1)
silica amorphous	LOW (LogKOW = 0.5294)
chlorothalonil	LOW (BCF = 125)

Mobility in soil

Ingredient	Mobility
azadioxabicyclooctane, isomer 1	LOW (KOC = 10)
monoisobutanolamine	MEDIUM (KOC = 2.196)
propylene glycol	HIGH (KOC = 1)
silica amorphous	LOW (KOC = 23.74)
chlorothalonil	LOW (KOC = 2392)

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. Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. 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. Recycle wherever possible or consult manufacturer for recycling options. Consult State Land Waste Authority for disposal.
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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

ZINC OXIDE IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Air Transport Association (IATA) Dangerous Goods Regulations US ACGIH Threshold Limit Values (TLV) International Maritime Dangerous Goods Requirements (IMDG Code) US AIHA Workplace Environmental Exposure Levels (WEELs) United Nations Recommendations on the Transport of Dangerous Goods Model US CWA (Clean Water Act) - Priority Pollutants Regulations US CWA (Clean Water Act) - Toxic Pollutants US - Alaska Limits for Air Contaminants US Department of Transportation (DOT), Hazardous Material Table US - California Permissible Exposure Limits for Chemical Contaminants US DOE Temporary Emergency Exposure Limits (TEELs) US - Hawaii Air Contaminant Limits US EPA Carcinogens Listing US - Idaho - Limits for Air Contaminants US EPCRA Section 313 Chemical List US - Idaho Toxic Air Pollutants Non- Carcinogenic Increments - Occupational Exposure US NIOSH Recommended Exposure Limits (RELs) Limits US NIOSH Recommended Exposure Limits (RELs) (Spanish) US - Michigan Exposure Limits for Air Contaminants US OSHA Permissible Exposure Levels (PELs) - Table Z1 US - Minnesota Permissible Exposure Limits (PELs) US OSHA Permissible Exposure Limits - Annotated Table Z-1 (Spanish) US - Oregon Permissible Exposure Limits (Z-1) US OSHA Permissible Exposure Limits - Annotated Table Z-3 (Spanish) US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants US Postal Service (USPS) Hazardous Materials Table: Postal Service Mailability Guide US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air US Postal Service (USPS) Numerical Listing of Proper Shipping Names by Contaminants Identification (ID) Number US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory Contaminants US TSCA Chemical Substance Inventory - Interim List of Active Substances 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 (Spanish)

AZADIOXABICYCLOOCTANE, ISOMER 1 IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Air Transport Association (IATA) Dangerous Goods Regulations International Maritime Dangerous Goods Requirements (IMDG Code)

United Nations Recommendations on the Transport of Dangerous Goods Model Regulations

US Department of Transportation (DOT). Hazardous Material Table

POTASSIUM PYROPHOSPHATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

GESAMP/EHS Composite List - GESAMP Hazard Profiles

International Air Transport Association (IATA) Dangerous Goods Regulations

- International Maritime Dangerous Goods Requirements (IMDG Code)
- United Nations Recommendations on the Transport of Dangerous Goods Model Regulations

US Department of Transportation (DOT), Hazardous Material Table

MONOISOBUTANOLAMINE IS FOUND ON THE FOLLOWING REGULATORY LISTS

GESAMP/EHS Composite List - GESAMP Hazard Profiles

IMO IBC Code Chapter 17: Summary of minimum requirements

IMO MARPOL (Annex II) - List of Noxious Liquid Substances Carried in Bulk

US Coast Guard, Department of Homeland Security Part 153: Ships Carrying Bulk Liquid, Liquefied gas or compressed gas hazardous materials. Table 1 to Part 153 --Summary of Minimum Requirements

2-(METHYLAMINO)-2-METHYL-1-PROPANOL IS FOUND ON THE FOLLOWING REGULATORY LISTS Not Applicable

CALCIUM CARBONATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

GESAMP/EHS Composite List - GESAMP Hazard Profiles

- IMO IBC Code Chapter 18: List of products to which the Code does not apply
- US Alaska Limits for Air Contaminants
- US Hawaii Air Contaminant Limits
- US Idaho Limits for Air Contaminants

US - Idaho Toxic Air Pollutants Non- Carcinogenic Increments - Occupational Exposure Limits

US - Michigan Exposure Limits for Air Contaminants

US - Minnesota Permissible Exposure Limits (PELs)

US - Oregon Permissible Exposure Limits (Z-1)

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 CRYSTALLINE - QUARTZ IS FOUND ON THE FOLLOWING REGULATORY LISTS

US Postal Service (USPS) Hazardous Materials Table: Postal Service Mailability Guide
US Postal Service (USPS) Numerical Listing of Proper Shipping Names by
Identification (ID) Number
US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US TSCA Chemical Substance Inventory - Interim List of Active Substances

US DOE Temporary Emergency Exposure Limits (TEELs) US Postal Service (USPS) Hazardous Materials Table: Postal Service Mailability Guide US Postal Service (USPS) Numerical Listing of Proper Shipping Names by Identification (ID) Number US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances

US DOE Temporary Emergency Exposure Limits (TEELs)

- US Toxic Substances Control Act (TSCA) Chemical Substance Inventory
- US TSCA Chemical Substance Inventory Interim List of Active Substances

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 (Spanish)
- US DOE Temporary Emergency Exposure Limits (TEELs)
- US NIOSH Recommended Exposure Limits (RELs)
- US NIOSH Recommended Exposure Limits (RELs) (Spanish)
- US OSHA Permissible Exposure Levels (PELs) Table Z1
- US OSHA Permissible Exposure Limits Annotated Table Z-1 (Spanish)
- US Toxic Substances Control Act (TSCA) Chemical Substance Inventory
- US TSCA Chemical Substance Inventory Interim List of Active Substances

Chemical Footprint Project - Chemicals of High Concern List

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

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1 : Carcinogenic to humans

- 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 Air Pollutants Non- Carcinogenic Increments - Occupational Exposure Limits

- US Idaho Toxic and Hazardous Substances Mineral Dust
- 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 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

KAOLIN IS FOUND ON THE FOLLOWING REGULATORY LISTS

Chemical Footprint Project - Chemicals of High Concern List

GESAMP/EHS Composite List - GESAMP Hazard Profiles

IMO IBC Code Chapter 18: List of products to which the Code does not apply

International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

- 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 Air Pollutants Non- Carcinogenic Increments - Occupational Exposure Limits

US - Minnesota Permissible Exposure Limits (PELs)

US - Oregon Permissible Exposure Limits (Z-1)

US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants

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

PROPYLENE GLYCOL IS FOUND ON THE FOLLOWING REGULATORY LISTS

GESAMP/EHS Composite List - GESAMP Hazard Profiles

- IMO IBC Code Chapter 17: Summary of minimum requirements
- IMO IBC Code Chapter 18: List of products to which the Code does not apply
- IMO MARPOL (Annex II) List of Noxious Liquid Substances Carried in Bulk
- IMO MARPOL 73/78 (Annex II) List of Other Liquid Substances

IMO Provisional Categorization of Liquid Substances - List 3: (Trade-named) mixtures containing at least 99% by weight of components already assessed by IMO, presenting safety hazards

US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)

SILICA AMORPHOUS IS FOUND ON THE FOLLOWING REGULATORY LISTS

GESAMP/EHS Composite List - GESAMP Hazard Profiles International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

- 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 Air Pollutants Non- Carcinogenic Increments - Occupational Exposure Limits

- US Idaho Toxic and Hazardous Substances Mineral Dust
- US Michigan Exposure Limits for Air Contaminants
- US Minnesota Permissible Exposure Limits (PELs)
- US Oregon Permissible Exposure Limits (Z-3)
- US Tennessee Occupational Exposure Limits Limits For Air Contaminants

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

CHLOROTHALONIL IS FOUND ON THE FOLLOWING REGULATORY LISTS

US - Washington Permissible exposure limits of air contaminants

- US Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
- US Wyoming Toxic and Hazardous Substances Table Z-3 Mineral Dusts
- US ACGIH Threshold Limit Values (Spanish)
- US ACGIH Threshold Limit Values (TLV)
- US AIHA Workplace Environmental Exposure Levels (WEELs)
- US DOE Temporary Emergency Exposure Limits (TEELs)

US National Toxicology Program (NTP) 14th Report Part A Known to be Human Carcinogens

- US NIOSH Recommended Exposure Limits (RELs)
- US NIOSH Recommended Exposure Limits (RELs) (Spanish)
- US OSHA Permissible Exposure Levels (PELs) Table Z1
- US OSHA Permissible Exposure Levels (PELs) Table Z3
- US OSHA Permissible Exposure Limits Annotated Table Z-1 (Spanish)
- US OSHA Permissible Exposure Limits Annotated Table Z-3 (Spanish)
- US Toxic Substances Control Act (TSCA) Chemical Substance Inventory
- US TSCA Chemical Substance Inventory Interim List of Active Substances

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 (Spanish)

- US ACGIH Threshold Limit Values (TLV)
- US AIHA Workplace Environmental Exposure Levels (WEELs)
- US NIOSH Recommended Exposure Limits (RELs)
- US NIOSH Recommended Exposure Limits (RELs) (Spanish)

US OSHA Permissible Exposure Levels (PELs) - Table Z1

- US OSHA Permissible Exposure Limits Annotated Table Z-1 (Spanish)
- US Toxic Substances Control Act (TSCA) Chemical Substance Inventory
- US TSCA Chemical Substance Inventory Interim List of Active Substances
- US DOE Temporary Emergency Exposure Limits (TEELs)

US DOT Coast Guard Bulk Hazardous Materials - List of Flammable and Combustible Bulk Liquid Cargoes

US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants

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

US Toxicology Excellence for Risk Assessment (TERA) Workplace Environmental Exposure Levels (WEEL)

US TSCA Chemical Substance Inventory - Interim List of Active Substances

- 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 Wyoming Toxic and Hazardous Substances Table Z-3 Mineral Dusts US ACGIH Threshold Limit Values (Spanish)

US OSHA Permissible Exposure Limits - Annotated Table Z-1 (Spanish)

US OSHA Permissible Exposure Limits - Annotated Table Z-3 (Spanish)

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

US TSCA Chemical Substance Inventory - Interim List of Active Substances

Continued...

US DOE Temporary Emergency Exposure Limits (TEELs)

US NIOSH Recommended Exposure Limits (RELs)

- US NIOSH Recommended Exposure Limits (RELs) (Spanish)
- US OSHA Permissible Exposure Levels (PELs) Table Z1
- US OSHA Permissible Exposure Levels (PELs) Table Z3

Chemical Footprint Project - Chemicals of High Concern List

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

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B : Possibly carcinogenic to humans

International Air Transport Association (IATA) Dangerous Goods Regulations

International Maritime Dangerous Goods Requirements (IMDG Code)

United Nations Recommendations on the Transport of Dangerous Goods Model Regulations

US - California Office of Environmental Health Hazard Assessment Proposition 65 No Significant Risk Levels (NSRLs) for Carcinogens and Maximum Allowable Dose Levels (MADLs) for Chemicals Causing Reproductive Toxicity

US - California Proposition 65 - Carcinogens

NON-HAZARDOUS INGREDIENT IS FOUND ON THE FOLLOWING REGULATORY LISTS Not Applicable

CARBON BLACK IS FOUND ON THE FOLLOWING REGULATORY LISTS

Chemical Footprint Project - Chemicals of High Concern List

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

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B : Possibly carcinogenic to humans

International WHO List of Proposed Occupational Exposure Limit (OEL) Values for

- Manufactured Nanomaterials (MNMS)
- US Alaska Limits for Air Contaminants
- US California Permissible Exposure Limits for Chemical Contaminants
- US California Proposition 65 Carcinogens
- US Hawaii Air Contaminant Limits
- US Idaho Limits for Air Contaminants

US - Idaho Toxic Air Pollutants Non- Carcinogenic Increments - Occupational Exposure Limits

US - Michigan Exposure Limits for Air Contaminants

US - Minnesota Permissible Exposure Limits (PELs)

US - Oregon Permissible Exposure Limits (Z-1)

US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SECTION 311/312 HAZARD CATEGORIES

US - California Proposition 65 - No Significant Risk Levels (NSRLs) for Carcinogens

- US Department of Transportation (DOT), Hazardous Material Table
- US DOE Temporary Emergency Exposure Limits (TEELs)
- US EPCRA Section 313 Chemical List

US List of Active Substances Exempt from the TSCA Inventory Notifications (Active Inactive) Rule

US Postal Service (USPS) Hazardous Materials Table: Postal Service Mailability Guide US Postal Service (USPS) Numerical Listing of Proper Shipping Names by Identification (ID) Number

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

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 (Spanish) US ACGIH Threshold Limit Values (TLV) US AIHA Workplace Environmental Exposure Levels (WEELs) US DOE Temporary Emergency Exposure Limits (TEELs) US NIOSH Recommended Exposure Limits (RELs) US NIOSH Recommended Exposure Limits (RELs) (Spanish) US OSHA Permissible Exposure Levels (PELs) - Table Z1

US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air

US OSHA Permissible Exposure Limits - Annotated Table Z-1 (Spanish)

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

US TSCA Chemical Substance Inventory - Interim List of Active Substances

Flammable (Gases, Aerosols, Liquids, or Solids)		
Gas under pressure	No	
Explosive	No	
Self-heating	No	
Pyrophoric (Liquid or Solid)	No	
Pyrophoric Gas	No	
Corrosive to metal	No	
Oxidizer (Liquid, Solid or Gas)	No	
Organic Peroxide	No	
Self-reactive	No	
In contact with water emits flammable gas	No	
Combustible Dust	No	
Carcinogenicity	Yes	
Acute toxicity (any route of exposure)	Yes	
Reproductive toxicity	No	
Skin Corrosion or Irritation	No	
Respiratory or Skin Sensitization	Yes	
Serious eye damage or eye irritation		
Specific target organ toxicity (single or repeated exposure)		
Aspiration Hazard		
Germ cell mutagenicity		
Simple Asphyxiant		
Hazards Not Otherwise Classified	No	

US. EPA CERCLA HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES (40 CFR 302.4) None Reported

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 PROPOSITION 65 - CARCINOGENS: LISTED SUBSTANCE

Chlorothalonil, Carbon black (airborne, unbound particles of respirable size) Listed

National Inventory Status

National Inventory	Status	
Australia - AICS	No (2-(methylamino)-2-methyl-1-propanol)	
Canada - DSL	No (2-(methylamino)-2-methyl-1-propanol)	
Canada - NDSL	No (chlorothalonil; monoisobutanolamine; kaolin; propylene glycol; silica crystalline - quartz; 2-(methylamino)-2-methyl-1-propanol; potassium pyrophosphate; carbon black; azadioxabicyclooctane, isomer 1)	
China - IECSC	Yes	
Europe - EINEC / ELINCS / NLP	No (2-(methylamino)-2-methyl-1-propanol)	
Japan - ENCS	No (kaolin; potassium pyrophosphate; azadioxabicyclooctane, isomer 1)	
Korea - KECI	No (2-(methylamino)-2-methyl-1-propanol)	
New Zealand - NZIoC	Yes	
Philippines - PICCS	Yes	
USA - TSCA	No (2-(methylamino)-2-methyl-1-propanol)	
Taiwan - TCSI	Yes	
Mexico - INSQ	No (2-(methylamino)-2-methyl-1-propanol; potassium pyrophosphate)	
Vietnam - NCI	Yes	
Russia - ARIPS	No (chlorothalonil; 2-(methylamino)-2-methyl-1-propanol)	
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)	

SECTION 16 OTHER INFORMATION

Revision Date	02/03/2020
Initial Date	05/02/2017

CONTACT POINT

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

SDS Version Summary

Version	Issue Date	Sections Updated
5.8.1.1.1	02/03/2020	Ingredients

Other information

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.

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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