

Not Available

Version No: 1.2 Safety Data Sheet according to OSHA HazCom Standard (2012) requirements Issue Date: 02/18/2017 Print Date: 02/18/2017 S.GHS.USA.EN

SECTION 1 IDENTIFICATION

Product Identifier

Product name	Vork Paint EXT AlkBarn Red F61379	
Synonyms	Not Available	
Other means of identification	Not Available	

Recommended use of the chemical and restrictions on use

Relevant identified uses	Exterior paint
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Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Registered company name	Not Available
Address	Not Available
Telephone	Not Available
Fax	Not Available
Website	Not Available
Email	Not Available

Emergency phone number

Association / Organisation	Not Available	
Emergency telephone numbers	Not Available	
Other emergency telephone numbers	Not Available	

SECTION 2 HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

Classification Aspiration Hazard Category 1, Skin Corrosion/Irritation Category 2	
Label elements	

GHS label elements	
SIGNAL WORD	DANGER

Hazard statement(s)

H304	May be fatal if swallowed and enters airways.	
H315	Causes skin irritation.	

Hazard(s) not otherwise specified

Not Applicable

Precautionary statement(s) Prevention

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.	
P331	Do NOT induce vomiting.	
P362	Take off contaminated clothing and wash before reuse.	
Precautionary statement(s) Storage		
Precautionary statement(s	Storage	

Precautionary statement(s) Disposal

Dispose of contents/container in accordance with local regulations. P501

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
64742-47-8	16.91	distillates, petroleum, light, hydrotreated
1330-20-7	0.32	xylene
100-41-4	0.07	ethylbenzene
not avail.	12.3	Non-hazardous ingredient
14808-60-7	0.06	silica crystalline - quartz
64742-88-7	0.1	solvent naphtha petroleum, medium aliphatic
1309-37-1	2.7	ferric oxide
471-34-1	0.19	calcium carbonate
64742-95-6.	15.7	aromatic 150
8052-41-3.	0.2	white spirit
681-84-5	0.2	methyl silicate

SECTION 4 FIRST-AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with eyes: Wash out immediately with water. If irritation continues, 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, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	 If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus. If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice. Avoid giving milk or oils. Avoid giving alcohol.

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours. For acute or short term repeated exposures to xvlene:

- Gastro-intestinal absorption is significant with ingestions. For ingestions exceeding 1-2 ml (xylene)/kg, intubation and lavage with cuffed endotracheal tube is recommended. The use of charcoal and cathartics is equivocal.
- Pulmonary absorption is rapid with about 60-65% retained at rest.
- Primary threat to life from ingestion and/or inhalation, is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO2 < 50 mm Hg or pCO2 > 50 mm Hg) should be intubated.
- + Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g.

• Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.

BIOLOGICAL EXPOSURE INDEX - BEI These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

Determinant Methylhippu-ric acids in urine Index 1.5 gm/gm creatinine 2 mg/min Sampling Time End of shift Last 4 hrs of shift Comments

SECTION 5 FIRE-FIGHTING MEASURES

Extinguishing media

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).Carbon dioxide.
- Water spray or fog Large fires only.

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. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. Avoid spraying water onto liquid pools. 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.
Fire/Explosion Hazard	 Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). May emit acrid smoke. Mists containing combustible materials may be explosive. Combustion products include: carbon dioxide (CO2) sulfur oxides (SOx) other pyrolysis products typical of burning organic material. 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. 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	 Environmental hazard - contain spillage. Moderate hazard. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. No smoking, naked lights or ignition sources. Increase ventilation. Stop leak if safe to do so. Collect recoverable product into labelled containers for recycling. Absorb remaining product with sand, earth or vermiculite. Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. If contamination of drains or waterways occurs, advise emergency services.

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

Precautions for safe handling

Safe handling	 Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<=1 m/sec until fill pipe submerged to twice its diameter, the <= 7 m/sec). Avoid splash filling. Do NOT use compressed air for filling discharging or handling operations. Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. Avoid smoking, naked lights or ignition sources. 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. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS.
	 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. DO NOT allow clothing wet with material to stay in contact with skin
Other information	 Store in original containers. Keep containers securely sealed. No smoking, naked lights or ignition sources. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

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	 Xylenes: may ignite or explode in contact with strong oxidisers, 1,3-dichloro-5,5-dimethylhydantoin, uranium fluoride attack some plastics, nubber and coatings may generate electrostatic charges on flow or agitation due to low conductivity. Vigorous reactions, sometimes amounting to explosions, can result from the contact between aromatic rings and strong oxidising agents. Aromatics can react exothermically with bases and with diazo compounds. For alkyl aromatics: The alkyl side chain of aromatic rings can undergo oxidation by several mechanisms. The most common and dominant one is the attack by oxidation at benzylic carbon as the intermediate formed is stabilised by resonance structure of the ring. Following reaction with oxygen and under the influence of sunlight, a hydroperoxide at the alpha-position to the aromatic ring, is the primary oxidation product formed (provided a hydrogen atom is initially available at this position) - this product is often short-lived but may be stable dependent on the nature of the aromatic substitution; a secondary C-H bond is more easily attacked than a primary C-H bond whilst a tertiary C-H bond is even more susceptible to attack by oxygen Monoalkylbenzenes may subsequently form monocarboxylic acids; alkyl naphthalenes mainly produce the corresponding naphthalene carboxylic acids. Oxidation in the presence of transition metal salts not only accelerates but also selectively decomposes the hydroperoxides. Hock-rearrangement by the influence of strong acids converts the hydroperoxides to hemiacetals. Peresters formed from the hydroperoxides undergo Criegee rearrangement easily. Alkali metals accelerate the oxidation while CO2 as co-oxidant enhances the selectivity. Microwave conditions give improved yields of the oxidation products. Photo-oxidation products may occur following reaction with hydroxyl radicals and NOx - these may be components of ph

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US OSHA Permissible Exposure Levels (PELs) - Table Z1	distillates, petroleum, light, hydrotreated	Oil mist, mineral	5 mg/m3	Not Available	Not Available	Not Available
US ACGIH Threshold Limit Values (TLV)	distillates, petroleum, light, hydrotreated	Mineral oil, excluding metal working fluids - Pure, highly and severely refined / Mineral oil, excluding metal working fluids - Poorly and mildly refined	5 mg/m3	Not Available	Not Available	TLV® Basis: URT irr
US NIOSH Recommended Exposure Limits (RELs)	distillates, petroleum, light, hydrotreated	Heavy mineral oil mist, Paraffin oil mist, White mineral oil mist	5 mg/m3	10 mg/m3	Not Available	Not Available

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Work Paint EXT Alk.-Barn Red F61379

US OSHA Permissible Exposure Levels (PELs) - Table Z1	xylene	Xylenes (o-, m-, p-isomers)	435 mg/m3 / 100 ppm	Not Available	Not Available	Not Available	
US ACGIH Threshold Limit Values (TLV)	xylene	Xylene (all isomers)	100 ppm	150 ppm	Not Available	TLV® Basis: URT & eye irr; CNS impair; BEI	
US OSHA Permissible Exposure Levels (PELs) - Table Z1	ethylbenzene	Ethyl benzene	435 mg/m3 / 100 ppm	Not Available	Not Available	Not Available	
US ACGIH Threshold Limit Values (TLV)	ethylbenzene	Ethyl benzene	20 ppm	Not Available	Not Available	TLV® Basis: URT irr; kidney dam (nephropathy); cochlear impair; BEI	
US NIOSH Recommended Exposure Limits (RELs)	ethylbenzene	Ethylbenzol, Phenylethane	435 mg/m3 / 100 ppm	545 mg/m3 / 125 ppm	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	solvent naphtha petroleum, medium aliphatic	Oil mist, mineral	5 mg/m3	Not Available	Not Available	Not Available	
US ACGIH Threshold Limit Values (TLV)	solvent naphtha petroleum, medium aliphatic	Mineral oil, excluding metal working fluids - Pure, highly and severely refined / Mineral oil, excluding metal working fluids - Poorly and mildly refined	5 mg/m3	Not Available	Not Available	TLV® Basis: URT irr	
US NIOSH Recommended Exposure Limits (RELs)	solvent naphtha petroleum, medium aliphatic	Heavy mineral oil mist, Paraffin oil mist, White mineral oil mist	5 mg/m3	10 mg/m3	Not Available	Not Available	
US OSHA Permissible Exposure Levels (PELs) - Table Z1	ferric oxide	Iron oxide fume	10 mg/m3	Not Available	Not Available	Not Available	
US ACGIH Threshold Limit Values (TLV)	ferric oxide	Iron oxide (Fe203)	5 mg/m3	Not Available	Not Available	TLV® Basis: Pneumoconiosis	
US NIOSH Recommended Exposure Limits (RELs)	ferric oxide	Iron(III)oxide, Iron oxide red, Red iron oxide, Red oxide / Ferric oxide, Iron(III) oxide	5 mg/m3	Not Available	Not Available	See Appendix D	
US OSHA Permissible Exposure Levels (PELs) - Table Z1	calcium carbonate	Calcium carbonate / Calcium carbonate - Respirable fraction	15 mg/m3 / 5 mg/m3	Not Available	Not Available	Total dust	
US NIOSH Recommended Exposure Limits (RELs)	calcium carbonate	Calcium carbonate, Natural calcium carbonate [Note: Calcite & aragonite are commercially important natural calcium carbonates.] / Calcium carbonate, Natural calcium carbonate [Note: Marble is a metamorphic form of calcium carbonate.]	10 (total), 5 (resp) mg/m3	Not Available	Not Available	Not Available	
US NIOSH Recommended Exposure Limits (RELs)	calcium carbonate	Calcium salt of carbonic acid [Note: Occurs in nature as as limestone, chalk, marble, dolomite, aragonite, calcite and oyster shells.]	10 (total), 5 (resp) mg/m3	Not Available	Not Available	Not Available	
US OSHA Permissible Exposure Levels (PELs) - Table Z1	white spirit	Stoddard solvent	2900 mg/m3 / 500 ppm	Not Available	Not Available	Not Available	
US ACGIH Threshold Limit Values (TLV)	white spirit	Stoddard solvent	100 ppm	Not Available	Not Available	TLV® Basis: Eye, skin, & kidney dam; nausea; CNS impair	
US NIOSH Recommended Exposure Limits (RELs)	white spirit	Dry cleaning safety solvent, Mineral spirits, Petroleum solvent, Spotting naphtha [Note: A refined petroleum solvent with a flash point of 102-110°F, boiling point of 309-336°F, and containing >65% C10 or higher	350 mg/m3	Not Available	1800 mg/m3	[15-minute]	

		hydrocarbons.]				
US OSHA Permissible Exposure Levels (PELs) - Table Z1	methyl silicate	Silicates - Mica / Silicates - Soapstone / Silicates- Soapstone / Silicates - Talc / Silicates - Tremolite, asbestiform	0.1 mg/m3	Not Available	Not Available	See Table Z-3;less than 1% crystalline silica(respirable dust) / See Table Z-3;less than 1% crystalline silica, total dust / See Table Z-3;less than 1% crystalline silica, respirable dust / less than 1% crystalline silica;see 29 CFR 1910.1001;See Table Z-3;(containing asbestos); use asbestos limit; (STEL (Excursion limit)(as averaged over a sampling period of 30 minutes)) / less than 1% crystalline silica;See Table Z-3, (containing no asbestos), respirable dust / (as quartz), respirable dust;ess than 1% crystalline silica;see 1910.1001;(STEL (Excursion limit)(as averaged over a sampling period of 30 minutes))
US OSHA Permissible Exposure Levels (PELs) - Table Z3	methyl silicate	Silicates: Mica / Silicates: Soapstone / Silicates: Talc / Silicates: Tremolite, asbestiforms	0.1 f/cc / 20 mppcf	Not Available	Not Available	(less than 1% crystalline silica) / (containing asbestos) Use asbestos limit;(less than 1% crystalline silica) / (see 29 CFR 1910.1001);(less than 1% crystalline silica)
US ACGIH Threshold Limit Values (TLV)	methyl silicate	Methyl silicate	1 ppm	Not Available	Not Available	TLV® Basis: URT irr; eye dam
US NIOSH Recommended Exposure Limits (RELs)	methyl silicate	Methyl orthosilicate, Tetramethoxysilane, Tetramethyl ester of silicic acid, Tetramethyl silicate	6 mg/m3 / 1 ppm	Not Available	Not Available	Not Available

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3	
xylene	Xylenes	Not Available	Not Available	Not Available	
ethylbenzene	Ethyl benzene	Not Available	Not Available	Not Available	
silica crystalline - quartz	Silica, crystalline-quartz; (Silicon dioxide)	0.075 mg/m3	33 mg/m3	200 mg/m3	
ferric oxide	Iron oxide; (Ferric oxide)	15 mg/m3	360 mg/m3	2,200 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	
white spirit	Stoddard solvent; (Mineral spirits, 85% nonane and 15% trimethyl benzene)	300 mg/m3	1,800 mg/m3	29500 mg/m3	
methyl silicate	Tetramethoxysilane; (Methyl silicate)	0.083 ppm	Not Available	Not Available	
Ingredient	Original IDLH	Revised IDLH			
distillates, petroleum, light, hydrotreated	Not Available	Not Available	Not Available		
xylene	1,000 ppm	900 ppm	900 ppm		
ethylbenzene	2,000 ppm	800 [LEL] ppm	800 [LEL] ppm		
Non-hazardous ingredient	Not Available	Not Available	Not Available		
silica crystalline - quartz	N.E. mg/m3 / N.E. ppm	50 mg/m3	50 mg/m3		
solvent naphtha petroleum, medium aliphatic	Not Available	Not Available	Not Available		
ferric oxide	N.E. mg/m3 / N.E. ppm	2,500 mg/m3	2,500 mg/m3		
calcium carbonate	Not Available	Not Available	Not Available		
aromatic 150	Not Available	Not Available	Not Available		
white spirit	29,500 mg/m3	20,000 mg/m3			
methyl silicate	Not Available	Not Available			

Exposure controls

aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation) f/min.)		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 stra "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure. General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved respirator. Correct adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace	tion system must match t fit is essential to obtain
	Appropriate engineering controls	"escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contamin Type of Contaminant: solvent, vapours, degreasing etc., evaporating from tank (in still air)	

	grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at air motion).	tt high initial velocity into zone of very high rapid 2.5-10 m/s (500-2000 f/min.)				
	Within each range the appropriate value depends on:					
	Lower end of the range	Upper end of the range				
	1: Room air currents minimal or favourable to capture	1: Disturbing room air currents				
	2: Contaminants of low toxicity or of nuisance value only	2: Contaminants of high toxicity				
	3: Intermittent, low production.	3: High production, heavy use				
	4: Large hood or large air mass in motion	4: Small hood - local control only				
	Simple theory shows that air velocity falls rapidly with distance away from the opening of distance from the extraction point (in simple cases). Therefore the air speed at the extractor from the contaminating source. The air velocity at the extraction fan, for exam solvents generated in a tank 2 meters distant from the extraction point. Other mechani apparatus, make it essential that theoretical air velocities are multiplied by factors of 10	extraction point should be adjusted, accordingly, after reference to pple, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of ical considerations, producing performance deficits within the extraction				
Personal protection						
Eye and face protection	 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] 					
Skin protection	See Hand protection below					
	 Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber The selection of suitable gloves does not only depend on the material, but also on furthe the chemical is a preparation of several substances, the resistance of the glove materia to the application. The exact break through time for substances has to be obtained from the manufacturer choice. Personal hygiene is a key element of effective hand care. Gloves must only be worn on thoroughly. Application of a non-perfumed moisturizer is recommended. Suitability and durability of glove type is dependent on usage. Important factors in the some frequency and duration of contact, chemical resistance of glove material, glove thickness and dexterity Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 21 When prolonged or frequently repeated contact may occur, a glove minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is 1 	al can not be calculated in advance and has therefore to be checked prior of the protective gloves and has to be observed when making a final o clean hands. After using gloves, hands should be washed and dried selection of gloves include: 161.1 or national equivalent).				
Hands/feet protection	EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended. Some glove polymer types are less affected by movement and this sh Contaminated gloves should be replaced. For general applications, gloves with a thickness typically greater than 0.35 mm, are re It should be emphasised that glove thickness is not necessarily a good predictor of glo glove will be dependent on the exact composition of the glove material. Therefore, glow requirements and knowledge of breakthrough times. Glove thickness may also vary depending on the glove manufacturer, the glove type and always be taken into account to ensure selection of the most appropriate glove for the ta Note: Depending on the activity being conducted, gloves of varying thickness may be re Thinner gloves (down to 0.1 mm or less) may be required where a hig likely to give short duration protection and would normally be just for single to Thicker gloves (up to 3 mm or more) may be required where there is puncture potential Gloves must only be wom on clean hands. After using gloves, hands should be washed	recommended. of 3 or higher (breakthrough time greater than 60 minutes according to hould be taken into account when considering gloves for long-term use. accommended. we resistance to a specific chemical, as the permeation efficiency of the ve selection should also be based on consideration of the task d the glove model. Therefore, the manufacturers' technical data should ask. required for specific tasks. For example: gh degree of manual dexterity is needed. However, these gloves are only use applications, then disposed of. s a mechanical (as well as a chemical) risk i.e. where there is abrasion or				
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Respiratory protection

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.

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Required minimum protection factor up to 10 up to 50 up to 50 up to 100 up to 100	Maximum gas/vapour concentration present in air p.p.m. (by volume) 1000 1000 5000 5000 10000	Half-face Respirator A-AUS / Class 1 - Airline * -	Full-Face Respirator - A-AUS / Class 1 - A-2 A-3 Aiding**
100+		-	Airline**

* - Continuous Flow

** - Continuous-flow or positive pressure demand.

A(All classes) = Organic vapours, B AUS or B1 = Acid gases, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 deg C)

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

Reactivity	See section 7
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	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. Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination. Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal. Headache, fatigue, tiredness, irritability and digestive disturbances (nausea, loss of appetite and bloating) are the most common symptoms of xylene overexposure. Injury to the heart, liver, kidneys and nervous system has also been noted amongst workers. Xylene is a central nervous system depressant
Ingestion	Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733) 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	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition

Work Paint EXT Alk.-Barn Red F61379

	The liquid may be miscible with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).
Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course. There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment. Women exposed to xylene in the first 3 months of pregnancy showed a slightly increased risk of miscarriage and birth defects. Evaluation of workers chronically exposed to xylene has demonstrated lack of genetic toxicity.

Work Paint EXT AlkBarn	ΤΟΧΙΟΙΤΥ	IF	RRITATION		
Red F61379	Not Available	N	lot Available		
	ΤΟΧΙΟΙΤΥ			IRRITATION	
distillates, petroleum, light, hydrotreated	Dermal (rabbit) LD50: >2000 mg/kg ^[1]			Not Available	
	Oral (rat) LD50: >5000 mg/kg ^[1]				
	ΤΟΧΙΟΙΤΥ		IRRITATION		
	Dermal (rabbit) LD50: >1700 mg/kg ^[2] Eye (human): 200 ppm		Eye (human): 200 ppm irrit	lant	
xylene	Inhalation (rat) LC50: 5000 ppm/4hr ^[2]		Eye (rabbit): 5 mg/24h SE	VERE	
	Oral (rat) LD50: 4300 mg/kg ^[2]		Eye (rabbit): 87 mg mild		
			Skin (rabbit):500 mg/24h n	noderate	
			IRRITATION		
	Dermal (rabbit) LD50: ca.15432.6 mg/kg ^[1]		Eye (rabbit): 500 m		
ethylbenzene	Inhalation (mouse) LC50: 35.5 mg/L/2hr ^[2]		Skin (rabbit): 15 mg	y24n mild	
	Oral (rat) LD50: 3500 mg/kg ^[2]				
	ΤΟΧΙΟΙΤΥ	10	RRITATION		
Non-hazardous ingredient	Not Available Not Available				
	ΤΟΧΙΟΙΤΥ	IF	RRITATION		
silica crystalline - quartz	Not Available	N	lot Available		
	ΤΟΧΙΟΙΤΥ			IRRITATION	
solvent naphtha petroleum, medium aliphatic	dermal (rat) LD50: 28000 mg/kg ^[2]		Not Available		
	Oral (rat) LD50: >19650 mg/kg ^[2]				
ferric oxide	ΤΟΧΙΟΙΤΥ			IRRITATION	
	Oral (rat) LD50: >5000 mg/kg ^[1]			Not Available	
	TOXICITY				
calcium carbonate	dermal (rat) LD50: >2000 mg/kg ^[1]				
	Oral (rat) LD50: >2000 mg/kg ^[1] Skin (rabbit): 500 mg/24h-moderate		ate		
	TOVIOTY			IDDITATION	
				IRRITATION Not Available	
	Dermal (rabbit) LD50: >1900 mg/kg ^[1] dermal (rat) LD50: >2000 mg/kg ^[1]				
aromatic 150					
	Inhalation (rat) LC50: >0.59 mg/L/4hr ⁽²⁾ Inhalation (rat) LC50: >3670 ppm/8 h * ^[2]	Inhalation (rat) LC50: >0.59 mg/L/4hr ^[2]			
	Oral (rat) LD50: >2000 mg/kg ^[1]				
	Urai (rat) LDOU: >2000 mg/kg ⁺ '				

	Oral (rat) LD50: >4500 mg/kg ^[1]			
	TOXICITY		TATION	
white spirit	Inhalation (rat) LC50: >1400 ppm/8hr ^[2]		human): 470 ppm/15m	
		Eye	(rabbit): 500 mg/24h mode	rate
	TOXICITY		IDDITATION	
methyl silicate	Dermal (rabbit) LD50: 17394.4 mg/kg ^[2]		Eye (rabbit); 0.25 mg (op	en) -
	Oral (mammal) LD50: 1000 mg/kg ^[2]			
Legend:	1. Value obtained from Europe ECHA Registered Substance extracted from RTECS - Register of Toxic Effect of chemica		ained from manufacturer's	SDS. Unless otherwise specified data
DISTILLATES, PETROLEUM, LIGHT, HYDROTREATED	Kerosene may produce varying ranges of skin irritation, and crusts and/or hair loss. It may worsen skin cancers. No significant acute toxicological data identified in literature		s are washed). Skin may l	be cracked or flaky and/or leathery, with
XYLENE	Reproductive effector in rats			
ETHYLBENZENE	irritate the skin, eyes and may cause hearing loss if exposed	Reproductive effector in rats Ethylbenzene is readily absorbed when inhaled, swallowed or in contact with the skin. It is distributed throughout the body, and passed out through urine. It may irritate the skin, eyes and may cause hearing loss if exposed to high doses. NOTE: Substance has been shown to be mutagenic in at least one assay, or belongs to a family of chemicals producing damage or change to cellular DNA.		
	WARNING: This substance has been classified by the IAF Liver changes, utheral tract, effects on fertility, foetotoxicity,			stem) recorded.
	WARNING: For inhalation exposure ONLY: This substance	e has been classified by the IAF	C as Group 1: CARCING	DGENIC 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.			
SOLVENT NAPHTHA PETROLEUM, MEDIUM ALIPHATIC	Studies indicate that normal, branched and cyclic paraffins are absorbed from the mammalian gastrointestinal tract and that the absorption of n-paraffins is inversely proportional to the carbon chain length, with little absorption above C30. With respect to the carbon chain lengths likely to be present in mineral oil, n-paraffins may be absorbed to a greater extent that iso- or cyclo-paraffins. The major classes of hydrocarbons have been shown to be well absorbed by the gastrointestinal tract in various species. for full range naphthas			
CALCIUM CARBONATE	No evidence of carcinogenic properties. No evidence of mu	Itagenic or teratogenic effects.		
WHITE SPIRIT	white spirit, as CAS RN 8052-41-3			
XYLENE & ETHYLBENZENE & CALCIUM CARBONATE & METHYL SILICATE	The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.			
XYLENE & ETHYLBENZENE & CALCIUM CARBONATE	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.			
XYLENE & SOLVENT NAPHTHA PETROLEUM, MEDIUM ALIPHATIC	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.			
SOLVENT NAPHTHA PETROLEUM, MEDIUM ALIPHATIC & AROMATIC	for petroleum: This product contains benzene which is known to cause acute myeloid leukaemia and n-hexane which has been shown to metabolize to compounds which are neuropathic.			
150 & WHITE SPIRIT FERRIC OXIDE & CALCIUM CARBONATE & AROMATIC 150 & METHYL SILICATE	This product contains toluene. There are indications from animal studies that prolonged exposure to high concentrations of toluene may lead to hearing loss. 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	0	Carcinogen	icity 🚫	
Skin Irritation/Corrosion	×	Reproduct	ivity 🚫	
Serious Eye Damage/Irritation	0	STOT - Single Expo	sure 🛇	
Respiratory or Skin sensitisation	\otimes	STOT - Repeated Expos	sure 🛇	
Mutagenicity	\odot	Aspiration Ha	zard 🗸	
	a	Legend:	🗙 – Data available k	out does not fill the criteria for classification

Data available to make classification

🚫 – Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Issue Date: 02/18/2017 Print Date: 02/18/2017

Work Paint EXT Alk.-Barn Red F61379

Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
distillates, petroleum, light, hydrotreated	LC50	96	Fish	2.2mg/L	4
distillates, petroleum, light, hydrotreated	NOEC	3072	Fish	=1mg/L	1
xylene	LC50	96	Fish	2.6mg/L	2
xylene	EC50	48	Crustacea	>3.4mg/L	2
xylene	EC50	72	Algae or other aquatic plants	4.6mg/L	2
xylene	EC50	24	Crustacea	0.711mg/L	4
kylene	NOEC	73	Algae or other aquatic plants	0.44mg/L	2
ethylbenzene	LC50	96	Fish	0.0043mg/L	4
ethylbenzene	EC50	48	Crustacea	1.184mg/L	4
ethylbenzene	EC50	96	Algae or other aquatic plants	3.6mg/L	2
ethylbenzene	EC50	96	Crustacea	=0.49mg/L	1
ethylbenzene	NOEC	168	Crustacea	0.96mg/L	5
solvent naphtha petroleum, medium aliphatic	EC50	48	Crustacea	>100mg/L	1
solvent naphtha petroleum, medium aliphatic	EC50	96	Algae or other aquatic plants	=450mg/L	1
ferric oxide	LC50	96	Fish	0.05mg/L	2
ferric oxide	EC50	72	Algae or other aquatic plants	18mg/L	2
ferric oxide	EC50	504	Crustacea	4.49mg/L	2
ferric oxide	NOEC	504	Fish	0.52mg/L	2
calcium carbonate	LC50	96	Fish	>56000mg/L	4
calcium carbonate	EC50	72	Algae or other aquatic plants	>14mg/L	2
calcium carbonate	NOEC	72	Algae or other aquatic plants	14mg/L	2
aromatic 150	LC50	96	Fish	0.58mg/L	2
aromatic 150	EC50	48	Crustacea	0.76mg/L	2
aromatic 150	EC50	72	Algae or other aquatic plants	<1mg/L	1
aromatic 150	EC50	48	Crustacea	=0.95mg/L	1
aromatic 150	NOEC	72	Algae or other aquatic plants	0.3mg/L	2
aromatic 150	EC50	48	Crustacea	=6.14mg/L	1
aromatic 150	EC50	72	Algae or other aquatic plants	3.29mg/L	1
aromatic 150	EC10	72	Algae or other aquatic plants	1.13mg/L	1
aromatic 150	NOEC	72	Algae or other aquatic plants	=1mg/L	1
methyl silicate	LC50	96	Fish	>245mg/L	2
methyl silicate	EC50	48	Crustacea	>75mg/L	2
methyl silicate	EC50	96	Algae or other aquatic plants	<1.000mg/L	3
methyl silicate	EC50	72	Algae or other aquatic plants	>22mg/L	2
methyl silicate	NOEC	72	Algae or other aquatic plants	>=22mg/L	2

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

When spilled this product may act as a typical oil, causing a film, sheen, emulsion or sludge at or beneath the surface of the body of water. The oil film on water surface may physically affect the aquatic organisms, due to the interruption of the

oxygen transfer between the air and the water

Oils of any kind can cause:

+ drowning of water-fowl due to lack of buoyancy, loss of insulating capacity of feathers, starvation and vulnerability to predators due to lack of mobility

lethal effects on fish by coating gill surfaces, preventing respiration

▶ asphyxiation of benthic life forms when floating masses become engaged with surface debris and settle on the bottom and

adverse aesthetic effects of fouled shoreline and beaches

In case of accidental releases on the soil, a fine film is formed on the soil, which prevents the plant respiration process and the soil particle saturation. It may cause deep water infestation. For Aromatic Substances Series:

Environmental Fate: Large, molecularly complex polycyclic aromatic hydrocarbons, or PAHs, are persistent in the environment longer than smaller PAHs.

Atmospheric Fate: PAHs are 'semi-volatile substances' which can move between the atmosphere and the Earth's surface in repeated, temperature-driven cycles of deposition and volatilization. Terrestrial Fate: BTEX compounds have the potential to move through soil and contaminate ground water, and their vapors are highly flammable and explosive.

Ecotoxicity - Within an aromatic series, acute toxicity increases with increasing alkyl substitution on the aromatic nucleus. The order of most toxic to least in a study using grass shrimp and brown shrimp was dimethylnaphthalenes > methylnaphthalenes > naphthalenes. Anthrcene is a phototoxic PAH. UV light greatly increases the toxicity of anthracene to bluegill sunfish. Biological resources in strong sunlight are at more risk than those that are not. PAHs in general are more frequently associated with chronic risks. For Xylenes:

log Koc : 2.05-3.08; Koc : 25.4-204; Half-life (hr) air : 0.24-42; Half-life (hr) H2O surface water : 24-672; Half-life (hr) H2O ground : 336-8640; Half-life (hr) soil : 52-672; Henry's Pa m3 /mol : 637-879; Henry's atm m3 /mol - 7.68E-03; BOD 5 if unstated - 1.4,1%; COD - 2.56,13% ThOD - 3.125 : BCF : 23; log BCF : 1.17-2.41.

Environmental Fate: Most xylenes released to the environment will occur in the atmosphere and volatilisation is the dominant environmental fate process. Soil - Xylenes are expected to have moderate mobility in soil evaporating rapidly from soil surfaces. The extent of the degradation is expected to depend on its concentration, residence time in the soil, the nature of the soil, and whether resident microbial populations have been acclimated. Xylene can remain below the soil surface for several days and may travel through the soil profile and enter groundwater. Soil and water microbes may travel through the soil profile and enter groundwater, but it may term only solve evens.

Atmospheric Fate: Xylene evaporates quickly into the air from surface soil and water and can remain in the air for several days until it is broken down by sunlight into other less harmful chemicals.

In the ambient atmosphere, xylenes are expected to exist solely in the vapour phase. Xylenes are degraded in the atmosphere with an estimated atmospheric lifetime of about 0.5 to 2 days. Xylene may contribute to photochemical smog formation. p-Xylene has a moderately high photochemical reactivity under smog conditions, higher than the other xylene isomers. The photooxidation of p-xylene results in the production of carbon monoxide, formaldehyde, glyoxal, methylglyoxal, 3-methylbenzylnitrate, m-tolualdehyde, 4-nitro-3-xylene, 5-nitro-3-xylene, 2,6-dimethyl-p-benzoquinone, 2,4-dimethylphenol, 6-nitro-2,4-dimethylphenol, 2,6-dimethylphenol, and 4-nitro-2,6-dimethylphenol.

Aquatic Fate: p-xylene may adsorb to suspended solids and sediment in water and is expected to volatilise from water surfaces. Estimated volatilisation half-lives for a model river and model lake are 3 hours and 4 days, respectively. Measurements taken from goldfish, eels and clams indicate that bioconcentration in aquatic organisms is low. Photo-oxidation in the presence of humic acids may play an important role in the abiotic degradation of p-xylene. p-Xylene is biodegradable and has been observed to degrade in pond water however; it is unclear if it degrades in surface waters. p-Xylene has been observed to degrade in anaerobic and aerobic groundwater; however, it is known to persist for many years in groundwater, at least at sites where the concentration might have been quite high. Ecotoxicity: Xylenes are slightly toxic to fathead minnow, rainbow trout and bluegill and not acutely toxic to water fleas. For Photobacterium phosphoreum EC50 (24 h): 0.0084 mg/L. and Gammarus lacustris LC50 (48 h): 0.6 mg/L.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
xylene	HIGH (Half-life = 360 days)	LOW (Half-life = 1.83 days)
ethylbenzene	HIGH (Half-life = 228 days)	LOW (Half-life = 3.57 days)
methyl silicate	HIGH	HIGH

Bioaccumulative potential

Ingredient	Bioaccumulation
distillates, petroleum, light, hydrotreated	LOW (BCF = 159)
xylene	MEDIUM (BCF = 740)
ethylbenzene	LOW (BCF = 79.43)
aromatic 150	LOW (BCF = 159)
methyl silicate	LOW (LogKOW = -1.9282)

Mobility in soil

Ingredient	Mobility
ethylbenzene	LOW (KOC = 517.8)
methyl silicate	LOW (KOC = 757.6)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

	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
Product / Packaging	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.
disposal	Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.
aiopecai	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 they be necessary to concer any hear mean mean mean necessary and regulations and these should be considered first.
	 Where in doubt contact the responsible authority.
	Recycle wherever possible or consult manufacturer for recycling options.
	Consult State Land Waste Authority for disposal.
	► Bury or incinerate residue at an approved site.
	 Recycle containers if possible, or dispose of in an authorised landfill.

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant NO

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

DISTILLATES, PETROLEUM, LIGHT, HYDROTREATED(64742-47-8) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency	of 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 California Proposition 65 Carcinogens
- US Hawaii Air Contaminant Limits
- US Idaho Limits for Air Contaminants
- 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 Tennessee Occupational Exposure Limits Limits For Air Contaminants

XYLENE(1330-20-7) 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 OEHHA/ARB Acute Reference Exposure Levels and Target Organs (RELs)
- US California OEHHA/ARB Chronic Reference Exposure Levels and Target Organs
- (CRELs)
- US California Permissible Exposure Limits for Chemical Contaminants
- US Hawaii Air Contaminant Limits
- US Idaho Limits for Air Contaminants
- 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

ETHYLBENZENE(100-41-4) 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 Proposition 65 Priority List for the Development of MADLs for Chemicals Causing Reproductive Toxicity
- US California OEHHA/ARB Chronic Reference Exposure Levels and Target Organs (CRELs)
- US California Permissible Exposure Limits for Chemical Contaminants
- US California Proposition 65 Carcinogens
- US California Proposition 65 No Significant Risk Levels (NSRLs) for Carcinogens
- US Hawaii Air Contaminant Limits
- US Idaho Limits for Air Contaminants
- US Massachusetts Right To Know Listed Chemicals
- US Michigan Exposure Limits for Air Contaminants
- US Minnesota Permissible Exposure Limits (PELs)
- US New Jersey Right to Know Special Health Hazard Substance List (SHHSL): Carcinogens
- 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
- 05 Tennessee Occupational Exposure Limits Limits For Air Contaminants
- US Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants

NON-HAZARDOUS INGREDIENT(NOT AVAIL.) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Not Applicable

SILICA CRYSTALLINE - QUARTZ(14808-60-7) 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 - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants US ACGIH Threshold Limit Values (TLV) US ACGIH Threshold Limit Values (TLV) - Carcinogens US National Toxicology Program (NTP) 14th Report Part A Known to be Human Carcinogens US NIOSH Recommended Exposure Limits (RELs) US OSHA Permissible Exposure Levels (PELs) - Table Z1 US Priority List for the Development of Proposition 65 Safe Harbor Levels - No Significant Risk Levels (NSRLs) for Carcinogens and Maximum Allowable Dose Levels (MADLs) for Chemicals Causing Reproductive Toxicity US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule 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 ACGIH Threshold Limit Values (TLV) US ACGIH Threshold Limit Values (TLV) - Carcinogens US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs) US Clean Air Act - Hazardous Air Pollutants
- US CWA (Clean Water Act) List of Hazardous Substances
- US EPA Carcinogens Listing

US EPCRA Section 313 Chemical List

- 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 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 ACGIH Threshold Limit Values (TLV)
- US ACGIH Threshold Limit Values (TLV) Carcinogens
- US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)
- US Clean Air Act Hazardous Air Pollutants
- US CWA (Clean Water Act) List of Hazardous Substances
- US CWA (Clean Water Act) Priority Pollutants
- US CWA (Clean Water Act) Toxic Pollutants
- US EPA Carcinogens Listing

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

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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	

SOLVENT NAPHTHA PETROLEUM, MEDIUM ALIPHATIC(64742-88-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC	US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants
Monographs	US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air
US - Alaska Limits for Air Contaminants	Contaminants
US - California Permissible Exposure Limits for Chemical Contaminants	US - Washington Permissible exposure limits of air contaminants
US - California Proposition 65 - Carcinogens	US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
US - Hawaii Air Contaminant Limits	US ACGIH Threshold Limit Values (TLV)
US - Idaho - Limits for Air Contaminants	US ACGIH Threshold Limit Values (TLV) - Carcinogens
US - Michigan Exposure Limits for Air Contaminants	US National Toxicology Program (NTP) 14th Report Part A Known to be Human Carcinogens
US - Minnesota Permissible Exposure Limits (PELs)	US NIOSH Recommended Exposure Limits (RELs)

- US Oregon Permissible Exposure Limits (Z-1)
- US Pennsylvania Hazardous Substance List
- US Tennessee Occupational Exposure Limits Limits For Air Contaminants

FERRIC OXIDE(1309-37-1) 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 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

CALCIUM CARBONATE(471-34-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

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 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

AROMATIC 150(64742-95-6.) IS FOUND ON THE FOLLOWING REGULATORY LISTS

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

WHITE SPIRIT(8052-41-3.) IS FOUND ON THE FOLLOWING REGULATORY LISTS

US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants

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

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 Priority List for the Development of Proposition 65 Safe Harbor Levels - No Significant Risk Levels (NSRLs) for Carcinogens and Maximum Allowable Dose Levels (MADLs) for

US - Washington Permissible exposure limits of air contaminants

US OSHA Permissible Exposure Levels (PELs) - Table Z1

- US Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants US ACGIH Threshold Limit Values (TLV)

Chemicals Causing Reproductive Toxicity

- US ACGIH Threshold Limit Values (TLV) Carcinogens US NIOSH Recommended Exposure Limits (RELs)
- US OSHA Permissible Exposure Levels (PELs) Table Z1
- 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 Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
- US NIOSH Recommended Exposure Limits (RELs) US OSHA Permissible Exposure Levels (PELs) - Table Z1
- US Toxic Substances Control Act (TSCA) Chemical Substance Inventory

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC	US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	
Monographs	US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants	
US - Alaska Limits for Air Contaminants	US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air	
US - California Permissible Exposure Limits for Chemical Contaminants	Contaminants	
US - California Proposition 65 - Carcinogens	US - Washington Permissible exposure limits of air contaminants	
US - Hawaii Air Contaminant Limits	US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants	
US - Idaho - Limits for Air Contaminants	US ACGIH Threshold Limit Values (TLV)	
US - Massachusetts - Right To Know Listed Chemicals	US ACGIH Threshold Limit Values (TLV) - Carcinogens	
US - Michigan Exposure Limits for Air Contaminants	US National Toxicology Program (NTP) 14th Report Part A Known to be Human Carcinogens	
US - Minnesota Permissible Exposure Limits (PELs)	US NIOSH Recommended Exposure Limits (RELs)	
US - Oregon Permissible Exposure Limits (Z-1)	US OSHA Permissible Exposure Levels (PELs) - Table Z1	
US - Pennsylvania - Hazardous Substance List	US Priority List for the Development of Proposition 65 Safe Harbor Levels - No Significant Risk Levels (NSRLs) for Carcinogens and Maximum Allowable Dose Levels (MADLs) for Chemicals Causing Reproductive Toxicity	
US - Rhode Island Hazardous Substance List		
	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory	
METHYL SILICATE(681-84-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS		
International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List	US - Rhode Island Hazardous Substance List	
Passenger and Cargo Aircraft	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 Permissible Exposure Limits for Chemical Contaminants	US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air	
US - Hawaii Air Contaminant Limits	Contaminants	
US - Idaho - Limits for Air Contaminants	US - Washington Permissible exposure limits of air contaminants	
US - Massachusetts - Right To Know Listed Chemicals	US ACGIH Threshold Limit Values (TLV)	
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 OSHA Permissible Exposure Levels (PELs) Table Z3
 - US Toxic Substances Control Act (TSCA) Chemical Substance Inventory

US - Oregon Permissible Exposure Limits (Z-1) US - Pennsylvania - Hazardous Substance List

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SECTION 311/312 HAZARD CATEGORIES

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

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

Name	Reportable Quantity in Pounds (Ib)	Reportable Quantity in kg
Xylene (mixed)	100	45.4
Ethylbenzene	1000	454

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

Soots, tars, and mineral oils (untreated and mildly treated oils and used engine oils), Ethylbenzene, Silica, crystalline (airborne particles of respirable size) Listed

National Inventory	Status
Australia - AICS	Y
Canada - DSL	Y
Canada - NDSL	N (white spirit; xylene; ethylbenzene; methyl silicate; silica crystalline - quartz; solvent naphtha petroleum, medium aliphatic; aromatic 150; distillates, petroleum, light, hydrotreated; ferric oxide)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	Υ
Japan - ENCS	N (solvent naphtha petroleum, medium aliphatic)
Korea - KECI	Y
New Zealand - NZIoC	Υ
Philippines - PICCS	Υ
USA - TSCA	Y
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

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

Other information

Ingredients with multiple cas numbers

Name	CAS No
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
calcium carbonate	471-34-1, 13397-26-7, 15634-14-7, 1317-65-3, 72608-12-9, 878759-26-3, 63660-97-9, 459411-10-0, 198352-33-9, 146358-95-4
aromatic 150	64742-95-6., 64742-94-5

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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