

# **ICP Construction**

Version No: **6.7** Safety Data Sheet according to OSHA HazCom Standard (2012) requirements Issue Date: **10/04/2017** Print Date: **10/04/2017** S.GHS.USA.EN

## **SECTION 1 IDENTIFICATION**

#### **Product Identifier**

| Product name                  | Fiberlock Piranha 2 5720 |
|-------------------------------|--------------------------|
| Synonyms                      | Not Available            |
| Proper shipping name          | Dichloromethane          |
| Other means of identification | Not Available            |

#### Recommended use of the chemical and restrictions on use

| Balance in the state of the second | D. L. D.      |
|------------------------------------|---------------|
| Relevant identified uses           | Paint Remover |

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

| Registered company name | ICP Construction                        |
|-------------------------|---|
| Address                 | 150 Dascomb Road MA 01810 United States |
| Telephone               | 923-623-9980                            |
| Fax                     | Not Available                           |
| Website                 | https://www.icp-construction.com/       |
| Email                   | Not Available                           |

#### Emergency phone number

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

# SECTION 2 HAZARD(S) IDENTIFICATION

## Classification of the substance or mixture



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)

| Classification | Skin Corrosion/Irritation Category 2, Specific target organ toxicity - single exposure Category 2, Aspiration Hazard Category 1, Carcinogenicity Category 2, Eye Irritation Category 2A, Specific target organ toxicity - repeated exposure Category 1, Acute Toxicity (Oral) Category 2, Acute Toxicity (Dermal) Category 4 |
|----------------|--|
|----------------|--|

#### Label elements

| Hazard pictogram(s) |        |
|---------------------|--------|
| SIGNAL WORD         | DANGER |

#### Hazard statement(s)

| H315 | Causes skin irritation.                       |
|------|---|
| H371 | May cause damage to organs.                   |
| H304 | May be fatal if swallowed and enters airways. |

| H351 | Suspected of causing cancer.                                    |
|------|---|
| H319 | Causes serious eye irritation.                                  |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H300 | Fatal if swallowed.   |
| H312 | Harmful in contact with skin.                                   |

#### Hazard(s) not otherwise specified

Not Applicable

## Precautionary statement(s) Prevention

| P101 | If medical advice is needed, have product container or label at hand. |
|------|---|
| P102 | Keep out of reach of children.  |

#### Precautionary statement(s) Response

| P301+P310 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. |
|-----------|---|
| P308+P313 | IF exposed or concerned: Get medical advice/attention.              |

# Precautionary statement(s) Storage

P405 Store locked up.

# Precautionary statement(s) Disposal

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

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

#### Substances

See section below for composition of Mixtures

#### Mixtures

| CAS No    | %[weight] | Name                            |
|-----------|-----------|---------------------------------|
| 75-09-2   | 65-70     | methylene chloride              |
| 108-88-3  | 10-15     | toluene                         |
| 67-56-1   | 10-15     | methanol                        |
| 111-76-2  | 0-5       | ethylene glycol monobutyl ether |
| 8002-74-2 | 0-5       | paraffin wax                    |

#### SECTION 4 FIRST-AID MEASURES

| Description of first aid measures |  |  |
|-----------------------------------|--|--|
| Eye Contact                       | If this product comes in contact with the eyes:  Immediately hold eyelids apart and flush the eye continuously with running water.  Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.  Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.  Transport to hospital or doctor without delay.  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. Immediately remove all contaminate and hair with running water (and soap if available). Immediately remove all contaminate and hair with running water (and soap if available). Immediately remove all contaminate and provide antibiotics. It is the see of cold packs and topical antibiotics. It is consider the use of cold packs and topical antibiotics. It is consider the use of cold packs and topical antibiotics. It is the see of cold packs and topical antibiotics. It is conserved the skin under cool (not cold) running water or immerse in cool water until pain subsides. It is cover with sterile non-adhesive bandage or clean cloth. Is the cover with sterile non-adhesive bandage or clean cloth. Is to NOT apply butter or ointments; this may cause infection. Is over with sterile non-adhesive bandage or secure of skin) Is cool the burn by immerse in cold running water for 10-15 minutes. Is use compresses if running water is not available. Is to NOT apply butter or ointments; this may cause infection. Is only the cas this may lower body temperature and cause further damage. Is to NOT apply ice as this may lower body temperature and cause further damage. Is to NOT apply butter or ointments; this may cause infection. Is orver the person thas a head, neck, or leg injury, or it would cause discomfort): Is tay the person flat. Is the person flat. Is the vate the person with coat or blanket. Is cover the person with coat or blanket. Is develored the person with coat or blanket. Is develored to person with coat or blanket. Is develored assistance. Is develored assistan |  |

|            | <ul> <li>For third-degree burns</li> <li>Seek immediate medical or emergency assistance.</li> <li>In the mean time:</li> <li>Protect burn area cover loosely with sterile, nonstick bandage or, for large areas, a sheet or other material that will not leave lint in wound.</li> <li>Separate burned toes and fingers with dry, sterile dressings.</li> <li>Do not soak burn in water or apply ointments or butter; this may cause infection.</li> <li>To prevent shock see above.</li> <li>For an airway burn, do not place pillow under the person's head when the person is lying down. This can close the airway.</li> <li>Have a person with a facial burn sit up.</li> <li>Check pulse and breathing to monitor for shock until emergency help arrives.</li> </ul> |
|------------|--|
| Inhalation | <ul> <li>If fumes, aerosols or combustion products are inhaled remove from contaminated area.</li> <li>Other measures are usually unnecessary.</li> </ul>  |
| Ingestion  | <ul> <li>If swallowed do NOT induce vomiting.</li> <li>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> <li>Observe the patient carefully.</li> <li>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li> <li>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li> <li>Seek medical advice.</li> <li>Avoid giving milk or oils.</li> <li>Avoid giving alcohol.</li> <li>If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.</li> </ul>        |

#### 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.

#### Treat symptomatically.

for intoxication due to Freons/ Halons;

- A: Emergency and Supportive Measures
- Maintain an open airway and assist ventilation if necessary
- Treat coma and arrhythmias if they occur. Avoid (adrenaline) epinephrine or other sympathomimetic amines that may precipitate ventricular arrhythmias. Tachyarrhythmias caused by increased myocardial sensitisation may be treated with propranolol, 1-2 mg IV or esmolol 25-100 microgm/kg/min IV.
- Monitor the ECG for 4-6 hours
- B: Specific drugs and antidotes:

#### There is no specific antidote

C: Decontamination

- Inhalation; remove victim from exposure, and give supplemental oxygen if available.
- Ingestion; (a) Prehospital: Administer activated charcoal, if available. DO NOT induce vomiting because of rapid absorption and the risk of abrupt onset CNS depression. (b) Hospital: Administer activated charcoal, although the efficacy of charcoal is unknown. Perform gastric lavage only if the ingestion was very large and recent (less than 30 minutes)
- D: Enhanced elimination:
- There is no documented efficacy for diuresis, haemodialysis, haemoperfusion, or repeat-dose charcoal.
- POISONING and DRUG OVERDOSE, Californian Poison Control System Ed. Kent R Olson; 3rd Edition
- + Do not administer sympathomimetic drugs unless absolutely necessary as material may increase myocardial irritability.
- No specific antidote.
- Because rapid absorption may occur through lungs if aspirated and cause systematic effects, the decision of whether to induce vomiting or not should be made by an attending physician.
- ► If lavage is performed, suggest endotracheal and/or esophageal control.
- > Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach.
- Treatment based on judgment of the physician in response to reactions of the patient
- For acute or short term repeated exposures to ethylene glycol:
- Early treatment of ingestion is important. Ensure emesis is satisfactory.
- Test and correct for metabolic acidosis and hypocalcaemia.
- Apply sustained diuresis when possible with hypertonic mannitol.
- Evaluate renal status and begin haemodialysis if indicated. [I.L.O]
- ▶ Rapid absorption is an indication that emesis or lavage is effective only in the first few hours. Cathartics and charcoal are generally not effective.
- Correct acidosis, fluid/electrolyte balance and respiratory depression in the usual manner. Systemic acidosis (below 7.2) can be treated with intravenous sodium bicarbonate solution.
- + Ethanol therapy prolongs the half-life of ethylene glycol and reduces the formation of toxic metabolites
- Pyridoxine and thiamine are cofactors for ethylene glycol metabolism and should be given (50 to 100 mg respectively) intramuscularly, four times per day for 2 days.
- Magnesium is also a cofactor and should be replenished. The status of 4-methylpyrazole, in the treatment regime, is still uncertain. For clearance of the material and its metabolites,
- haemodialysis is much superior to peritoneal dialysis.

#### [Ellenhorn and Barceloux: Medical Toxicology]

It has been suggested that there is a need for establishing a new biological exposure limit before a workshift that is clearly below 100 mmol ethoxy-acetic acids per mole creatinine in morning urine of people occupationally exposed to ethylene glycol ethers. This arises from the finding that an increase in urinary stones may be associated with such exposures. Laitinen J., et al: Occupational & Environmental Medicine 1996; 53, 595-600

For acute and short term repeated exposures to methanol:

- Toxicity results from accumulation of formaldehyde/formic acid.
- Clinical signs are usually limited to CNS, eyes and GI tract Severe metabolic acidosis may produce dyspnea and profound systemic effects which may become intractable. All symptomatic patients should have arterial pH measured. Evaluate airway, breathing and circulation.
- Stabilise obtunded patients by giving naloxone, glucose and thiamine.
- Decontaminate with Ipecac or lavage for patients presenting 2 hours post-ingestion. Charcoal does not absorb well; the usefulness of cathartic is not established.
- + Forced diuresis is not effective; haemodialysis is recommended where peak methanol levels exceed 50 mg/dL (this correlates with serum bicarbonate levels below 18 meq/L).
- Ethanol, maintained at levels between 100 and 150 mg/dL, inhibits formation of toxic metabolites and may be indicated when peak methanol levels exceed 20 mg/dL. An intravenous solution of ethanol in D5W is optimal.
- Folate, as leucovorin, may increase the oxidative removal of formic acid. 4-methylpyrazole may be an effective adjunct in the treatment. 8.Phenytoin may be preferable to diazepam for controlling seizure.

[Ellenhorn Barceloux: Medical Toxicology]

BIOLOGICAL EXPOSURE INDEX - BEI

| 120 |  |
|-----|--|
|     |  |
|     |  |
|     |  |

Methanol in urine
 Formic acid in urine

15 mg/l 80 mg/gm creatinine End of shift Before the shift at end of workweek B, NS B, NS

B: Background levels occur in specimens collected from subjects NOT exposed.

NS: Non-specific determinant - observed following exposure to other materials.

## 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         | <ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear breathing apparatus plus protective gloves in the event of a fire.</li> </ul>  |
|-----------------------|---|
| Fire/Explosion Hazard | <ul> <li>WARNING: In use may form flammable/ explosive vapour-air mixtures.</li> <li>Combustion products include:</li> <li>carbon dioxide (CO2)</li> <li>formaldehyde</li> <li>hydrogen chloride</li> <li>phosgene</li> <li>other pyrolysis products typical of burning organic material.</li> <li>Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.</li> <li>May emit poisonous fumes.</li> <li>Non flammable liquid.</li> <li>However vapour will burn when in contact with high temperature flame.</li> </ul> |

# 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 | <ul> <li>Remove all ignition sources.</li> <li>Clean up all spills immediately.</li> </ul>  |
|--------------|---|
| Major Spills | <ul> <li>Clear area of personnel and move upwind.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> </ul> |

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

## SECTION 7 HANDLING AND STORAGE

#### Precautions for safe handling

| Safe handling     | <ul> <li>Contains low boiling substance:</li> <li>Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately.</li> <li>Check for bulging containers.</li> <li>DO NOT allow clothing wet with material to stay in contact with skin</li> </ul> |
|-------------------|--|
| Other information | <ul> <li>Store in original containers.</li> <li>Keep containers securely sealed.</li> </ul>  |

## Conditions for safe storage, including any incompatibilities

| Suitable container      | <ul> <li>DO NOT use aluminium or galvanised containers</li> <li>Lined metal can, lined metal pail/ can.</li> <li>Plastic pail.</li> <li>For low viscosity materials</li> <li>Drums and jerricans must be of the non-removable head type.</li> <li>Where a can is to be used as an inner package, the can must have a screwed enclosure.</li> </ul> All inner and sole packagings for substances that have been assigned to Packaging Groups I or II on the basis of inhalation toxicity criteria, must be hermetically sealed.  |
|-------------------------|---|
| Storage incompatibility | <ul> <li>Methylene chloride</li> <li>is a combustible liquid under certain circumstances even though there is no measurable flash point and it is difficult to ignite</li> <li>its is flammable in ambient air in the range 12-23%; increased oxygen content can greatly enhance fire and explosion potential</li> <li>contact with hot surfaces and elevated temperatures can form fumes of hydrogen chloride and phosgene</li> <li>reacts violently with active metals, aluminum, lithium, methanol, peroxydisulfuryl difluoride, potassium, potassium tert-butoxide, sodium</li> <li>forms explosive mixtures with nitric acid</li> <li>is incompatible with strong oxidisers, strong caustics, alkaline earths and alkali metals</li> <li>attacks some plastics, coatings and rubber</li> </ul> |

| may generate electrostatic charge due to low conductivity  |
|--|
| Methanol:  |
| <ul> <li>reacts violently with strong oxidisers, acetyl bromide, alkyl aluminium salts, beryllium dihydride, bromine, chromic acid, 1-chloro-3,3-difluoro-<br/>2-methoxycyclopropene, cyanuric chloride, diethylzinc, isophthaloyl chloride, nitric acid, perchloric acid, potassium-tert-butoxide, potassium sulfur<br/>diimide, Raney nickel catalysts, 2,4,6-trichlorotriazine, triethylaluminium, 1,3,3-trifluoro-2-methoxycyclopropene</li> </ul>   |
| <ul> <li>is incompatible with strong acids, strong caustics, alkaline earth and alkali metals, aliphatic amines, acetaldehyde, benzoyl peroxide, 1,3-bis(di-<br/>n-cyclopentadienyl iron)-2-propen-1-one, calcium carbide, chloroform, chromic anhydride, chromium trioxide, dialkylzinc, dichlorine oxide,<br/>dichloromethane, ethylene oxide, hypochlorous acid, isocyanates, isopropyl chlorocarbonate, lithium tetrahydroaluminate, magnesium, methyl azide,<br/>nitrogen dioxide, palladium, pentafluoroguanidine, perchloryl fluoride, phosphorus pentasulfide, phosphorus trioxide, potassium, tangerine oil,</li> </ul> |
| triisobutylaluminium   |
| mixtures with lead perchlorate, sodium hypochlorite are explosive  |
| may react with metallic aluminium at high temperatures   |
| ► slowly corrodes lead and aluminium   |
| may generate electrostatic charges, due to low conductivity, on flow or agitation  |
| attacks some plastics, rubber and coatings.  |
| Static induced flash fires have happened when filling plastic containers with methanol / water solutions with as low as 30% methanol content   |
| Toluene:   |
| reacts violently with strong oxidisers, bromine, bromine trifluoride, chlorine, hydrochloric acid/ sulfuric acid mixture, 1,3-dichloro-5,5-dimethyl-   |
| 2,4-imidazolidindione, dinitrogen tetraoxide, fluorine, concentrated nitric acid, nitrogen dioxide, silver chloride, sulfur dichloride, uranium fluoride, vinyl acetate  |
| ▶ forms explosive mixtures with strong acids, strong oxidisers, silver perchlorate, tetranitromethane  |
| ▶ is incompatible with bis-toluenediazo oxide  |
| ▶ attacks some plastics, rubber and coatings   |
| may generate electrostatic charges, due to low conductivity, on flow or agitation.   |
| 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.   |
| 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.  |
| Segregate from:  |
| ▶ powdered metals such as aluminium, zinc and  |
| ▶ alkali metals such as sodium, potassium and lithium.   |
| May attack, soften or dissolve rubber, many plastics, paints and coatings  |
| <ul> <li>Segregate from alcohol, water.</li> </ul>   |
|  |

# SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

## **Control parameters**

# OCCUPATIONAL EXPOSURE LIMITS (OEL)

## INGREDIENT DATA

| Source   | Ingredient                         | Material name  | TWA                    | STEL                   | Peak             | Notes  |
|--|------------------------------------|--|------------------------|------------------------|------------------|--|
| US NIOSH Recommended<br>Exposure Limits (RELs)           | methylene<br>chloride              | Dichloromethane, Methylene dichloride  | Not<br>Available       | Not<br>Available       | Not<br>Available | Ca See Appendix A  |
| US ACGIH Threshold Limit Values<br>(TLV)                 | methylene<br>chloride              | Dichloromethane  | 50 ppm                 | Not<br>Available       | Not<br>Available | TLV® Basis: COHb-emia;<br>CNS impair; BEI                          |
| US OSHA Permissible Exposure<br>Levels (PELs) - Table Z1 | methylene<br>chloride              | Methylene chloride   | Not<br>Available       | Not<br>Available       | Not<br>Available | 2 See Table Z-2.   |
| US OSHA Permissible Exposure<br>Levels (PELs) - Table Z2 | methylene<br>chloride              | Methylene Chloride   | Not<br>Available       | Not<br>Available       | Not<br>Available | See 1919.52.   |
| US NIOSH Recommended<br>Exposure Limits (RELs)           | toluene                            | Methyl benzene, Methyl benzol, Phenyl methane, Toluol  | 375 mg/m3 /<br>100 ppm | 560 mg/m3 /<br>150 ppm | Not<br>Available | Not Available  |
| US ACGIH Threshold Limit Values (TLV)                    | toluene                            | Toluene  | 20 ppm                 | Not<br>Available       | Not<br>Available | TLV® Basis: Visual impair;<br>female repro; pregnancy<br>loss; BEI |
| US OSHA Permissible Exposure<br>Levels (PELs) - Table Z1 | toluene                            | Toluene  | Not<br>Available       | Not<br>Available       | Not<br>Available | 2 See Table Z-2.   |
| US OSHA Permissible Exposure<br>Levels (PELs) - Table Z2 | toluene                            | Toluene  | 200 ppm                | Not<br>Available       | 300 ppm          | (Z37.12-1967)  |
| US NIOSH Recommended<br>Exposure Limits (RELs)           | methanol                           | Carbinol, Columbian spirits, Methanol,<br>Pyroligneous spirit, Wood alcohol, Wood<br>naphtha, Wood spirit              | 260 mg/m3 /<br>200 ppm | 325 mg/m3 /<br>250 ppm | Not<br>Available | [skin]   |
| US ACGIH Threshold Limit Values<br>(TLV)                 | methanol                           | Methanol   | 200 ppm                | 250 ppm                | Not<br>Available | TLV® Basis: Headache; eye dam; dizziness; nausea; BEI              |
| US OSHA Permissible Exposure<br>Levels (PELs) - Table Z1 | methanol                           | Methyl alcohol   | 260 mg/m3 /<br>200 ppm | Not<br>Available       | Not<br>Available | Not Available  |
| US NIOSH Recommended<br>Exposure Limits (RELs)           | ethylene glycol<br>monobutyl ether | Butyl Cellosolve®, Butyl oxitol, Dowanol® EB,<br>EGBE, Ektasolve EB®, Ethylene glycol<br>monobutyl ether, Jeffersol EB | 24 mg/m3 /<br>5 ppm    | Not<br>Available       | Not<br>Available | [skin]   |
| US ACGIH Threshold Limit Values<br>(TLV)                 | ethylene glycol<br>monobutyl ether | 2-Butoxyethanol  | 20 ppm                 | Not<br>Available       | Not<br>Available | TLV® Basis: Eye & URT irr;<br>BEI                                  |
| US OSHA Permissible Exposure<br>Levels (PELs) - Table Z1 | ethylene glycol<br>monobutyl ether | 2-Butoxyethanol  | 240 mg/m3 /<br>50 ppm  | Not<br>Available       | Not<br>Available | Not Available  |
| US NIOSH Recommended<br>Exposure Limits (RELs)           | paraffin wax                       | Paraffin fume, Paraffin scale fume   | 2 mg/m3                | Not<br>Available       | Not<br>Available | Not Available  |
| US ACGIH Threshold Limit Values<br>(TLV)                 | paraffin wax                       | Paraffin wax fume  | 2 mg/m3                | Not<br>Available       | Not<br>Available | TLV® Basis: URT irr;<br>nausea                                     |

#### EMERGENCY LIMITS

| Ingredient                      | Material name  |       | L-1           | TEEL-2        | TEEL-3        |  |
|---------------------------------|--|-------|---------------|---------------|---------------|--|
| methylene chloride              | Methylene chloride; (Dichloromethane)                  | Not A | Available     | Not Available | Not Available |  |
| toluene                         | Toluene  | Not A | Available     | Not Available | Not Available |  |
| methanol                        | Methyl alcohol; (Methanol)                             | Not A | Available     | Not Available | Not Available |  |
| ethylene glycol monobutyl ether | Ityl ether Butoxyethanol, 2-; (Glycol ether EB) 60 ppm |       | m             | 120 ppm       | 700 ppm       |  |
| paraffin wax                    | Paraffin, n- 6 r                                       |       | /m3           | 66 mg/m3      | 400 mg/m3     |  |
|                                 |  |       |               |               |               |  |
| Ingredient                      | Original IDLH  |       | Revised IDLH  |               |               |  |
| methylene chloride              | 2,000 ppm  |       | Not Available |               |               |  |
| toluene                         | 500 ppm  |       | Not Available |               |               |  |
| methanol                        | 6,000 ppm  |       | Not Available |               |               |  |
| ethylene glycol monobutyl ether | 700 ppm<br>Not Available                               |       | Not Available |               |               |  |
| paraffin wax                    |  |       | Not Available |               |               |  |

#### Exposure controls

| Appropriate engineering<br>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             | <ul> <li>Safety glasses with side shields.</li> <li>Chemical goggles.</li> </ul>  |
| Skin protection                     | See Hand protection below   |
| Hands/feet protection               | <ul> <li>Wear chemical protective gloves, e.g. PVC.</li> <li>Wear safety footwear or safety gumboots, e.g. Rubber</li> <li>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.</li> <li>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.</li> </ul> |
| Body protection                     | See Other protection below  |
| Other protection                    | <ul> <li>Overalls.</li> <li>Eyewash unit.</li> </ul>  |
| Thermal hazards                     | Not Available   |

#### **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 | Maximum gas/vapour concentration present in air p.p.m. (by volume) | Half-face Respirator | Full-Face Respirator |
|------------------------------------|--|----------------------|----------------------|
| up to 10                           | 1000   | A-AUS / Class 1      | -                    |
| up to 50                           | 1000   | -                    | A-AUS / Class 1      |
| up to 50                           | 5000   | Airline *            | -                    |
| up to 100                          | 5000   | -                    | A-2                  |
| up to 100                          | 10000  | -                    | A-3                  |
| 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                                      | Not Available |   |               |
|---|---------------|---|---------------|
|   |               |   |               |
| 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)                                | 8-10          | Decomposition temperature               | Not Available |
| Melting point / freezing point<br>(°C)          | Not Available | Viscosity (cSt)                         | Not Available |
| Initial boiling point and boiling<br>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                  | <ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> </ul> |
| Possibility of hazardous reactions  | See section 7  |
| Conditions to avoid                 | See section 7  |
| Incompatible materials              | See section 7  |
| Hazardous decomposition<br>products | See section 5  |

# SECTION 11 TOXICOLOGICAL INFORMATION

# Information on toxicological effects

| Inhaled                  | The material is not thought to produce either adverse health effects or irritation of the respiratory tract following inhalation (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 and that suitable control measures be used in an occupational setting. The acute toxicity of inhaled alkylbenzene is best described by central nervous system depression. These compounds may also act as general anaesthetics. Inhalation hazard is increased at higher temperatures. Minor but regular methanol exposures may effect the central nervous system, optic nerves and retinae. Symptoms may be delayed, with headache, fatigue, nausea, blurring of vision and double vision. Acute intoxication by halogenated aliphatic hydrocarbons appears to take place over two stages. Signs of a reversible narcosis are evident in the first stage and in the second stage signs of injury to organs may become evident, a single organ alone is (almost) never involved. Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. |   |  |
|--------------------------|--|---|--|
| Ingestion                | Severely toxic effects may result from the accidental ingestion of the materi<br>or may produce serious damage to the health of the individual.<br>Swallowing of the liquid may cause aspiration into the lungs with the risk of c   | ial; animal experiments indicate that ingestion of less than 5 gram may be fatal<br>hemical pneumonitis; serious consequences may result. (ICSC13733)                                 |  |
| Skin Contact             | Skin contact with the material may be harmful; systemic effects may result foll<br>The material may accentuate any pre-existing dermatitis condition<br>Open cuts, abraded or irritated skin should not be exposed to this material<br>Entry into the blood-stream, through, for example, cuts, abrasions or lesions,<br>use of the material and ensure that any external damage is suitably protected.<br>The material may cause severe inflammation of the skin either following direct<br>dermatitis which is characterised by redness, swelling and blistering.  | lowing absorption.<br>may produce systemic injury with harmful effects. Examine the skin prior to the<br>t contact or after a delay of some time. Repeated exposure can cause contact |  |
| 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). 510meth   |   |  |
| Chronic                  | There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment.<br>Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.<br>This material can cause serious damage if one is exposed to it for long periods. It can be assumed that it contains a substance which can produce severe<br>defects.<br>Intentional abuse (glue sniffing) or occupational exposure to toluene can result in chronic habituation. Chronic abuse has caused inco-ordination, tremors<br>of the extremeties (due to widespread cerebrum withering), headache, abnormal speech, temporary memory loss, convulsions, coma, drowsiness, reduced<br>colour perception, blindness, nystagmus (rapid, involuntary eye movements), hearing loss leading to deafness and mild dementia.<br>Long-term exposure to methanol vapour, at concentrations exceeding 3000 ppm, may produce cumulative effects characterised by gastrointestinal<br>disturbances (nausea, vomiting), headache, ringing in the ears, insomnia, trembling, unsteady gait, vertigo, conjunctivitis and clouded or double vision.<br>Liver and/or kidney injury may also result.  |   |  |
| Fiberlock Piranha 2 5720 | TOXICITY     IRRITATION       Not Available     Not Available  |   |  |
| methylene chloride       | TOXICITY           dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup> Inhalation (rat) LC50: 76 mg/l/4H <sup>[2]</sup> Oral (rat) LD50: 985 mg/kg <sup>[2]</sup>  | IRRITATION         Eye(rabbit): 162 mg - moderate         Eye(rabbit): 500 mg/24hr - mild         Skin (rabbit): 100mg/24hr-moderate         Skin (rabbit): 810 mg/24hr-SEVERE        |  |

Continued...

|                                 | Dermal (rabbit) LD50: 12124 mg/kg <sup>1-3</sup>         |   |  |
|---------------------------------|--|---|--|
| toluene                         | Inhalation (rat) LC50: 49 mg/l/4H <sup>L2</sup>          | Eye (rabbit):0.87 mg - mild   |  |
|                                 | Oral (rat) LD50: 636 mg/kg <sup>[2]</sup>                | Eye (rabbit):100 mg/30sec - mild  |  |
|                                 |  | Skin (rabbit):20 mg/24h-moderate  |  |
|                                 |  | Skin (rabbit):500 mg - moderate   |  |
|                                 |  |   |  |
|                                 | TOXICITY   | IRRITATION  |  |
| methanol                        | Dermal (rabbit) LD50: 15800 mg/kg <sup>[2]</sup>         | Eye (rabbit): 100 mg/24h-moderate   |  |
| methanor                        | Inhalation (rat) LC50: 63926.976 mg/l/4h <sup>[2]</sup>  | Eye (rabbit): 40 mg-moderate  |  |
|                                 | Oral (rat) LD50: 5600 mg/kg <sup>[2]</sup>               | Skin (rabbit): 20 mg/24 h-moderate  |  |
|                                 |  |   |  |
|                                 | TOXICITY   | IRRITATION  |  |
|                                 | dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup>            | Eye (rabbit): 100 mg SEVERE   |  |
| ethylene glycol monobutyl ether | Inhalation (rat) LC50: 449.48655 mg/l/4H <sup>[2]</sup>  | Eye (rabbit): 100 mg/24h-moderate   |  |
|                                 | Oral (rat) LD50: 250 mg/kg <sup>[2]</sup>                | Skin (rabbit): 500 mg, open; mild   |  |
|                                 |  |   |  |
|                                 | ΤΟΧΙΟΙΤΥ   | IRRITATION  |  |
|                                 | dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup>            | Eye (rabbit): 100 mg/24 hr-mild   |  |
| paraffin wax                    | dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup>            | Skin (rabbit): 500 mg/24 hr-mild  |  |
|                                 | Oral (rat) LD50: >5000 mg/kg <sup>[1]</sup>              |   |  |
|                                 | Oral (rat) LD50: >5000 mg/kg <sup>[1]</sup>              |   |  |
|                                 |  |   |  |
|                                 |  | An de deviets 0 * Velue ableire d'frame many facture de CDC. Unless otherwise and ified |  |
| Legend:                         | 1. Value obtained from Europe ECHA Registered Substances | Acute toxicity 2." Value obtained from manufacturer's SDS. Unless otherwise specified   |  |

| METHYLENE CHLORIDE                 | The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.<br>The material may cause severe skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Repeated exposures may produce severe ulceration.<br>WARNING: This substance has been classified by the IARC as Group 2A: Probably Carcinogenic to Humans.<br>Inhalation (human) TCLo: 500 ppm/ 1 y - I Eye(rabbit): 10 mg - mild   |
|------------------------------------|--|
| TOLUENE                            | For toluene:<br>Acute toxicity: Humans exposed to high levels of toluene for short periods of time experience adverse central nervous system effects ranging from<br>headaches to intoxication, convulsions, narcosis (sleepiness) and death. When inhaled or swallowed, toluene can cause severe central nervous system<br>depression, and in large doses has a narcotic effect.  |
| ETHYLENE GLYCOL<br>MONOBUTYL ETHER | The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.<br>For ethylene glycol monoalkyl ethers and their acetates (EGMAEs):<br>Typical members of this category are ethylene glycol propylene ether (EGPE), ethylene glycol butyl ether (EGBE) and ethylene glycol hexyl ether (EGHE) and their acetates.<br>EGMAEs are substrates for alcohol dehydrogenase isozyme ADH-3, which catalyzes the conversion of their terminal alcohols to aldehydes (which are transient metabolites).<br>Animal testing showed that exposure to ethylene glycol monobutyl ether resulted in toxicity to both the mother and the embryo. Reproductive effects were thought to be less than that of other monoalkyl ethers of ethylene glycol.<br>For ethylene glycol:<br>Ethylene glycol is quickly and extensively absorbed throughout the gastrointestinal tract. Limited information suggests that it is also absorbed through the airways; absorption through skin is apparently slow.<br>NOTE: Changes in kidney, liver, spleen and lungs are observed in animals exposed to high concentrations of this substance by all routes. ** ASCC (NZ) SDS   |
| PARAFFIN WAX                       | <ul> <li>"Hydrocarbon wax" describes a group of solid C20 to C36 paraffinic hydrocarbons which are not absorbed in the gastro-intestinal tract and in small quantity will pass through undigested.</li> <li>Refined waxes are used widely in cosmetic surgery over many years and this demonstrates their low toxicity; many guidelines exist for their safe use. However, occasionally there are reports of adverse effects with these products.</li> <li>Animal studies indicate that normal, branched and cyclic paraffins are absorbed from the 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 than iso- or cyclo-paraffins.</li> <li>The materials included in the Lubricating Base Oils category are related from both process and physical-chemical perspectives;</li> <li>The potential toxicity of a specific distillate base oil is inversely related to the severity or extent of processing the oil has undergone, since:</li> <li>The adverse effects of these materials are associated with undesirable components, and</li> <li>The levels of the undesirable components are inversely related to the degree of processing;</li> <li>Distillate base oils receiving the same degree or extent of processing will have similar toxicities;</li> <li>The potential toxicity of residual base oils is independent of the degree of processing the oil receives.</li> <li>The reproductive and developmental toxicity of the distillate base oils:</li> <li>The reproductive and evelopmental toxicity of the distillate base oils inversely related to the degree of processing.</li> <li>For highly and severely refined distillate base oils:</li> <li>In animal studies, the acute, oral, semilethal dose is &gt;5g/kg body weight and the semilethal dose by skin contact is &gt;2g/kg body weight. The semilethal concentration for inhalation is 2.18 to &gt;4 mg/L.</li> </ul> |

|  | Tumorigenic in rats   |                                     |  |
|--|---|-------------------------------------|--|
| TOLUENE & METHANOL &<br>ETHYLENE GLYCOL<br>MONOBUTYL ETHER | The material may cause skin irritation after prolonged or re<br>scaling and thickening of the skin. | epeated exposure and may produce on | contact skin redness, swelling, the production of vesicles,      |
| Acute Toxicity   | ¥   | Carcinogenicity                     | ¥  |
| Skin Irritation/Corrosion                                  | ✓   | Reproductivity                      | 0  |
| Serious Eye Damage/Irritation                              | ✓   | STOT - Single Exposure              | ✓  |
| Respiratory or Skin sensitisation                          | 0   | STOT - Repeated Exposure            | *  |
| Mutagenicity   | 0   | Aspiration Hazard                   | ✓  |
|  |   | Leaend: 🗙 – D                       | Data available but does not fill the criteria for classification |

Data available to make classification

S − Data Not Available to make classification

## SECTION 12 ECOLOGICAL INFORMATION

| Fiberlack Birerba 0 5700   | ENDPOINT      |     | TEST DURATION (HR) |           | SPECIES            |         | UE        | SOU        | RCE      |
|----------------------------|---------------|-----|--------------------|-----------|--------------------|---------|-----------|------------|----------|
| Fiberiock Piranna 2 5720   | Not Available |     | Not Available      |           | Not Available      | Not     | Available | Not A      | vailable |
|                            | ENDPOINT      | TES | ST DURATION (HR)   | SPECIE    | S                  |         | VALUE     |            | SOURCE   |
|                            | LC50          | 96  |                    | Fish      |                    | =13.1mg | /L        | 1          |          |
| methylene chloride         | EC50          | 48  |                    | Crustace  | Crustacea          |         | =108.5m   | =108.5mg/L |          |
|                            | EC50          | 72  |                    | Algae or  | other aquatic plan | its     | 242mg/L   |            | 4        |
|                            | NOEC          | 96  |                    | Algae or  | other aquatic plan | ts      | 56mg/L    |            | 4        |
|                            | ENDPOINT      | TES | ST DURATION (HR)   | SPECIE    | S                  |         | VALUE     |            | SOURCE   |
|                            | LC50          | 96  |                    | Fish      |                    |         | 0.0073m   | g/L        | 4        |
|                            | EC50          | 48  |                    | Crustace  | ea                 |         | 3.78mg/L  | -          | 5        |
| toluene                    | EC50          | 72  |                    | Algae or  | other aquatic plar | nts     | 12.5mg/L  | _          | 4        |
|                            | BCF           | 24  |                    | Algae or  | other aquatic plar | nts     | 10mg/L    |            | 4        |
|                            | NOEC          | 168 |                    | Crustace  | ea                 |         | 0.74mg/L  | -          | 5        |
|                            |               |     |                    |           |                    |         |           |            |          |
|                            | ENDPOINT      | TES | ST DURATION (HR)   | SPECIES   | S                  |         | VALUE     |            | SOURCE   |
|                            | LC50          | 96  |                    | Fish      | Fish               |         | >100mg/L  | >100mg/L   |          |
|                            | EC50          | 48  |                    | Crustacea |                    | >10000m | g/L       | 4          |          |
| methanol                   | EC50          | 96  |                    | Algae or  | other aquatic plan | ts      | <10000m   | g/L        | 4        |
|                            | BCF           | 24  |                    | Algae or  | other aquatic plan | ts      | 0.05mg/L  |            | 4        |
|                            | EC0           | 168 |                    | Algae or  | other aquatic plan | ts      | =530mg/L  | -          | 1        |
|                            | NOEC          | 72  |                    | Crustace  | a                  |         | 0.1mg/L   |            | 4        |
|                            | ENDPOINT      |     | TEST DURATION (HR) |           | SPECIES            | V       | ALUE      | S          | OURCE    |
|                            | LC50          |     | 96                 |           | Fish 1250          |         | 250mg/L   | mg/L 4     |          |
| ene giycol monobutyl ether | EC50          |     | 48                 |           | Crustacea          | >       | 1000mg/L  | 4          |          |
|                            | NOEC          |     | 96                 |           | Crustacea 1000     |         | 000mg/L   | 4          |          |
|                            | ENDPOINT      |     | TEST DURATION (HR) |           | SPECIES            | VAL     | UE        | SOU        | RCE      |
| paraffin wax               | Not Available |     | Not Available      |           | Not Available      | Not     | Available | Not A      | vailable |
|                            |               |     |                    |           |                    |         |           |            |          |

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. For Methylene Chloride: Log Kow: 1.25; Log Koc: 1.68; Log Kom: 1.44; Henry's atm m3 /mol: 2.68E-03; Henry I atmosphere and the Earth's surface in repeated, temperature-driven cycles of deposition and volatilization.

Atmospheric Fate: Methylene chloride is a volatile liquid that tends to evaporate to the atmosphere from water and soil.

For Methanol: Log Kow: -0.82 to -0.66; Koc: 1; Henry s Law Constant: 4.55x10-6 atm-cu m/mole; Vapor Pressure: 127 mm Hg; BCF: < 10.

Atmospheric Fate: Methanol is expected to exist solely as a vapor in the ambient atmosphere.

For Toluene: log Kow : 2.1-3; log Koc : 1.12-2.85; Koc : 37-260; log Kom : 1.39-2.89; Half-life (hr) air : 2.4-104; Half-life (hr) H2O grund : 168-2628; Half-life (hr) H2O grund : 168-2628; Half-life (hr) soil : <48-240; Henry's Pa m3 /mol : 518-694; Henry's Pa m3 /mol : 5.94; E-03BOD 5 0.86-2.12, 5% COD - 0.7-2.52,21-27%; ThOD - 3.13; BCF - 1.67-380; log BCF - 0.22-3.28. Atmospheric Fate: The majority of toluene evaporates to the atmosphere from the water and soil. **DO NOT** discharge into sewer or waterways.

## Persistence and degradability

| Ingredient                      | Persistence: Water/Soil   | Persistence: Air            |
|---------------------------------|---------------------------|-----------------------------|
| methylene chloride              | LOW (Half-life = 56 days) | HIGH (Half-life = 191 days) |
| toluene                         | LOW (Half-life = 28 days) | LOW (Half-life = 4.33 days) |
| methanol                        | LOW                       | LOW                         |
| ethylene glycol monobutyl ether | LOW (Half-life = 56 days) | LOW (Half-life = 1.37 days) |

#### **Bioaccumulative potential**

| Ingredient                      | Bioaccumulation  |
|---------------------------------|------------------|
| methylene chloride              | LOW (BCF = 40)   |
| toluene                         | LOW (BCF = 90)   |
| methanol                        | LOW (BCF = 10)   |
| ethylene glycol monobutyl ether | LOW (BCF = 2.51) |

#### Mobility in soil

| Ingredient                      | Mobility          |
|---------------------------------|-------------------|
| methylene chloride              | LOW (KOC = 23.74) |
| toluene                         | LOW (KOC = 268)   |
| methanol                        | HIGH (KOC = 1)    |
| ethylene glycol monobutyl ether | HIGH (KOC = 1)    |

# SECTION 13 DISPOSAL CONSIDERATIONS

#### Waste treatment methods

| Product / Packaging disposal | <ul> <li>Containers may still present a chemical hazard/ danger when empty.</li> <li>Return to supplier for reuse/ recycling if possible.</li> <li>Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area.</li> <li>DO NOT allow wash water from cleaning or process equipment to enter drains.</li> <li>It may be necessary to collect all wash water for treatment before disposal.</li> <li>Recycle wherever possible or consult manufacturer for recycling options.</li> <li>Consult State Land Waste Authority for disposal.</li> </ul> |
|------------------------------|---|
|------------------------------|---|

#### **SECTION 14 TRANSPORT INFORMATION**

#### Labels Required

|                  | 5000<br>6 |
|------------------|-----------|
| Marine Pollutant | NO        |
|                  |           |

# Land transport (DOT)

| UN number                  | 1593                          |
|----------------------------|-------------------------------|
| UN proper shipping name    | Dichloromethane               |
| Transport hazard class(es) | Class6.1SubriskNot Applicable |
| Packing group              |                               |
| Environmental hazard       | Not Applicable                |

| Special precautions for user | Hazard Label 6.1                          |  |
|------------------------------|---|--|
|                              | Special provisions IB3, IP8, N36, T7, TP2 |  |

| Air transport (ICAO-IATA / DGR | 2)  |  |  |  |
|--------------------------------|---|--|--|--|
| UN number                      | 1593  |  |  |  |
| UN proper shipping name        | Dichloromethane   |  |  |  |
| Transport hazard class(es)     | ICAO/IATA Class<br>ICAO / IATA Subrisk<br>ERG Code  | 6.1<br>Not Applicable<br>6L  |  |  |
| Packing group                  | III   |  |  |  |
| Environmental hazard           | Not Applicable  |  |  |  |
| Special precautions for user   | Special provisions<br>Cargo Only Packing I<br>Cargo Only Maximum<br>Passenger and Cargo<br>Passenger and Cargo<br>Passenger and Cargo | nstructions<br>Qty / Pack<br>D Packing Instructions<br>Maximum Qty / Pack<br>D Limited Quantity Packing Instructions<br>Limited Maximum Qty / Pack | Not Applicable<br>663<br>220 L<br>655<br>60 L<br>Y642<br>2 L |  |

## Sea transport (IMDG-Code / GGVSee)

| UN number                    | 1593  |  |  |
|------------------------------|---|--|--|
| UN proper shipping name      | DICHLOROMETHANE   |  |  |
| Transport hazard class(es)   | IMDG Class6.1IMDG SubriskNot Applicable                                 |  |  |
| Packing group                | II  |  |  |
| Environmental hazard         | Not Applicable  |  |  |
| Special precautions for user | EMS NumberF-A, S-ASpecial provisionsNot ApplicableLimited Quantities5 L |  |  |

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

METHYLENE CHLORIDE(75-09-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

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 - Acute Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs) US - California Permissible Exposure Limits for Chemical Contaminants US - California Proposition 65 - Carcinogens US - California Proposition 65 - No Significant Risk Levels (NSRLs) for Carcinogens US - Hawaii Air Contaminant Limits US - Idaho - Acceptable Maximum Peak Concentrations US - Idaho - Limits for Air Contaminants US - Massachusetts - Right To Know Listed Chemicals Rule 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 New Jersey Right to Know Special Health Hazard Substance List (SHHSL): Mutagens

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

- US Oregon Permissible Exposure Limits (Z-1)
- US Pennsylvania Hazardous Substance List
- US Rhode Island Hazardous Substance List
- US Tennessee Occupational Exposure Limits Limits For Air Contaminants
- US Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants
- US Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air
- Contaminants

#### TOLUENE(108-88-3) 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 Acute Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs)
- US California Permissible Exposure Limits for Chemical Contaminants
- US California Proposition 65 Maximum Allowable Dose Levels (MADLs) for Chemicals
- Causing Reproductive Toxicity
- US California Proposition 65 Reproductive Toxicity
- US Hawaii Air Contaminant Limits
- US Idaho Acceptable Maximum Peak Concentrations
- 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 Oregon Permissible Exposure Limits (Z-2)
- US Pennsylvania Hazardous Substance List
- US Rhode Island Hazardous Substance List
- US Tennessee Occupational Exposure Limits Limits For Air Contaminants
- US Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants
- US Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air
- Contaminants

US - Washington Permissible exposure limits of air contaminants

#### METHANOL(67-56-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

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 Acute Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs
- (CRELs)
- US California Permissible Exposure Limits for Chemical Contaminants
- US California Proposition 65 Reproductive Toxicity
- 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

- US Washington Permissible exposure limits of air contaminants US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants US - Wyoming Toxic and Hazardous Substances Table Z-2 Acceptable ceiling concentration, Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift 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) - Priority Pollutants US CWA (Clean Water Act) - Toxic Pollutants US EPA Carcinogens Listing US EPCRA Section 313 Chemical List US List of Active Substances Exempt from the TSCA Inventory Notifications (Active-Inactive) US National Toxicology Program (NTP) 14th Report Part B. Reasonably Anticipated to be a Human Carcinogen US NIOSH Recommended Exposure Limits (RELs) US OSHA Carcinogens Listing US OSHA Permissible Exposure Levels (PELs) - Table Z1 US OSHA Permissible Exposure Levels (PELs) - Table Z2
- US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants
- US Toxic Substances Control Act (TSCA) Chemical Substance Inventory
- US TSCA Chemical Substance Inventory Interim List of Active Substances
- US TSCA New Chemical Exposure Limits (NCEL)

| US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values   |
|--|
| US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants   |
| US - Wyoming Toxic and Hazardous Substances Table Z-2 Acceptable ceiling concentration,  |
| Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift   |
| 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 Drug Enforcement Administration (DEA) List I and II Regulated Chemicals   |
| US EPA Carcinogens Listing   |
| US EPCRA Section 313 Chemical List   |
| US List of Active Substances Exempt from the TSCA Inventory Notifications (Active-Inactive)  |
| Rule   |
| US NIOSH Recommended Exposure Limits (RELs)  |
| US Office of Environmental Health Hazard Assessment Proposition 65 No Significant Risk<br>Levels (NSRLs) for Carcinogens and Maximum Allowable Dose Levels (MADLs) for |
| Chemicals Causing Reproductive Toxicity  |
| US OSHA Permissible Exposure Levels (PELs) - Table Z1  |
| US OSHA Permissible Exposure Levels (PELs) - Table Z2  |
| US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants   |
| 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 Final Rule Limits for Air Contaminants US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants
- US Washington Permissible exposure limits of air contaminants
- US Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values
- US Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
- US ACGIH Threshold Limit Values (TLV)
- US Clean Air Act Hazardous Air Pollutants
- US EPCRA Section 313 Chemical List
- US List of Active Substances Exempt from the TSCA Inventory Notifications (Active-Inactive) Rule
- US NIOSH Recommended Exposure Limits (RELs)
- US 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 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 TSCA Chemical Substance Inventory Interim List of Active Substances

| International Agency for Research on Cancer (IARC) - Agents Classified by the IARC<br>Monographs | US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air<br>Contaminants |
|--|--|
| US - Alaska Limits for Air Contaminants  | US - Washington Permissible exposure limits of air contaminants                                  |
| US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs)             | US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values         |
| US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs                  | US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants                 |
| (CRELs)  | US ACGIH Threshold Limit Values (TLV)  |
| US - California Permissible Exposure Limits for Chemical Contaminants                            | US ACGIH Threshold Limit Values (TLV) - Carcinogens  |
| US - Hawaii Air Contaminant Limits   | US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)                                     |
| US - Idaho - Limits for Air Contaminants   | US Clean Air Act - Hazardous Air Pollutants  |
| US - Massachusetts - Right To Know Listed Chemicals  | US EPA Carcinogens Listing   |
| US - Michigan Exposure Limits for Air Contaminants   | US EPCRA Section 313 Chemical List   |
| US - Minnesota Permissible Exposure Limits (PELs)  | US List of Active Substances Exempt from the TSCA Inventory Notifications (Active-Inactive)      |
| US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL):                    | Rule   |
| Carcinogens  | 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 Toxic Substances Control Act (TSCA) - Chemical Substance Inventory                            |
| US - Rhode Island Hazardous Substance List   | US TSCA Chemical Substance Inventory - Interim List of Active Substances                         |
| US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants                        |  |
| US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants      |  |
| PARAFFIN WAX(8002-74-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS                               |  |
| US - Alaska Limits for Air Contaminants  | US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants                        |
| US - California Permissible Exposure Limits for Chemical Contaminants                            | US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants      |
| US - Hawaii Air Contaminant Limits   | US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air                 |
| US - Massachusetts - Right To Know Listed Chemicals  | Contaminants   |
| US - Michigan Exposure Limits for Air Contaminants   | US - Washington Permissible exposure limits of air contaminants                                  |
| US - Minnesota Permissible Exposure Limits (PELs)  | US ACGIH Threshold Limit Values (TLV)  |
| US - Oregon Permissible Exposure Limits (Z-1)  | US List of Active Substances Exempt from the TSCA Inventory Notifications (Active-Inactive)      |
| US - Pennsylvania - Hazardous Substance List   | Rule   |
| US - Rhode Island Hazardous Substance List   | US NIOSH Recommended Exposure Limits (RELs)  |
|  | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory                            |
|  | US TSCA Chemical Substance Inventory - Interim List of Active Substances                         |
|  |  |
| Federal Regulations  |  |
| Superfund Amendments and Reauthorization Act of 1986 (SARA)                                      |  |

# SECTION 311/312 HAZARD CATEGORIES

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

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

| Name             | Reportable Quantity in Pounds (lb) | Reportable Quantity in kg |
|------------------|------------------------------------|---------------------------|
| Dichloromethane  | 1000                               | 454                       |
| Benzene, methyl- | 1000                               | 454                       |
| Methanol         | 5000                               | 2270                      |

#### 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

#### Dichloromethane (Methylene chloride), Toluene, Methanol Listed

| National Inventory            | Status   |
|-------------------------------|--|
| Australia - AICS              | Y  |
| Canada - DSL                  | Y  |
| Canada - NDSL                 | N (toluene; methanol; methylene chloride; ethylene glycol monobutyl ether; paraffin wax)   |
| China - IECSC                 | Y  |
| Europe - EINEC / ELINCS / NLP | Y  |
| Japan - ENCS                  | Y  |
| Korea - KECI                  | Y  |
| New Zealand - NZIoC           | Y  |
| Philippines - PICCS           | Y  |
| USA - TSCA                    | Y  |
| Legend:                       | Y = All ingredients are on the inventory<br>N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets) |

# **SECTION 16 OTHER INFORMATION**

#### CONTACT POINT

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

#### Other information

#### Ingredients with multiple cas numbers

| Name         | CAS No   |
|--------------|--|
| paraffin wax | 8002-74-2, 12704-91-5, 105054-93-1, 105845-08-7, 115251-23-5, 115251-24-6, 12704-92-6, 12795-75-4, 160936-34-5, 37220-23-8, 37339-80-3, 39355-22-1, 39373-78-9, 51331-35-2, 54692-42-1, 57572-43-7, 57608-84-1, 58057-11-7, 64742-43-4, 64742-51-4, 68607-08-9, 68649-50-3, 70431-26-4, 72993-88-5, 72993-89-6, 72993-90-9, 8035-62-9, 8044-02-8, 8044-79-9, 9083-41-4, 92045-74-4 |

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chernwatch 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 Powered by AuthorITe, from Chemwatch.

