# Protection Brands CERFACE Ceramic Protection 50ml

Chemwatch Hazard Alert Code: **3**

**Protection Brands Pty Ltd**

Chemwatch: **5250-76**
Version No: **2.1.1.1**
Safety Data Sheet according to WHS and ADG requirements

Issue Date: **1/06/2022**
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S.GHS.AUS.EN

## SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

### Product Identifier

| | |
|---|---|
| **Product name** | Protection Brands CERFACE Ceramic Protection 50ml |
| **Synonyms** | Not Available |
| **Proper shipping name** | FLAMMABLE LIQUID, N.O.S. (contains ethylbenzene, xylene and isopropanol) |
| **Other means of identification** | Not Available |

### Relevant identified uses of the substance or mixture and uses advised against

| | |
|---|---|
| **Relevant identified uses** | Use according to manufacturer's directions. |

### Details of the supplier of the safety data sheet

| | |
|---|---|
| **Registered company name** | Protection Brands Pty Ltd |
| **Address** | Level 9, 3 Nexus Court, Mulgrave VIC 3170 |
| **Telephone** | +61 3 8809 2700 |
| **Fax** | |
| **Website** | https://www.protectionbrands.com.au/sds |
| **Email** | Not Available |

### Emergency telephone number

| | |
|---|---|
| **Association / Organisation** | Not Available |
| **Emergency telephone numbers** | 131 126 (Poisons Information Centre) |
| **Other emergency telephone numbers** | 0800 764 766 (New Zealand Poisons Information Centre) |

## SECTION 2 HAZARDS IDENTIFICATION

### Classification of the substance or mixture

**HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.**

**CHEMWATCH HAZARD RATINGS**

| | | Min | Max |
|---|---|---|---|
| Flammability | 3 | | |
| Toxicity | 1 | | |
| Body Contact | 2 | | |
| Reactivity | 1 | | |
| Chronic | 2 | | |

0 = Minimum
1 = Low
2 = Moderate
3 = High
4 = Extreme

| | |
|---|---|
| **Poisons Schedule** | Not Applicable |
| **Classification [1]** | Flammable Liquid Category 2, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Carcinogenicity Category 2, Specific target organ toxicity - single exposure Category 3 (respiratory tract irritation), Specific target organ toxicity - single exposure Category 3 (narcotic effects), Specific target organ toxicity - repeated exposure Category 2, Aspiration Hazard Category 1, Acute Aquatic Hazard Category 2, Chronic Aquatic Hazard Category 2 |
| ***Legend:*** | *1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI* |

### Label elements

**Hazard pictogram(s)**



| | |
|---|---|
| **SIGNAL WORD** | **DANGER** |

### Hazard statement(s)

| | |
|---|---|
| **H225** | Highly flammable liquid and vapour. |
| **H315** | Causes skin irritation. |

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| | |
|---|---|
| **H319** | Causes serious eye irritation. |
| **H351** | Suspected of causing cancer. |
| **H335** | May cause respiratory irritation. |
| **H336** | May cause drowsiness or dizziness. |
| **H373** | May cause damage to organs through prolonged or repeated exposure. |
| **H304** | May be fatal if swallowed and enters airways. |
| **H411** | Toxic to aquatic life with long lasting effects. |
| **AUH019** | May form explosive peroxides |

### Precautionary statement(s) Prevention

| | |
|---|---|
| **P201** | Obtain special instructions before use. |
| **P210** | Keep away from heat/sparks/open flames/hot surfaces. - No smoking. |
| **P260** | Do not breathe dust/fume/gas/mist/vapours/spray. |
| **P271** | Use only outdoors or in a well-ventilated area. |
| **P281** | Use personal protective equipment as required. |
| **P240** | Ground/bond container and receiving equipment. |
| **P241** | Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment. |

### 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. |
| **P331** | Do NOT induce vomiting. |
| **P362** | Take off contaminated clothing and wash before reuse. |
| **P370+P378** | In case of fire: Use alcohol resistant foam or normal protein foam for extinction. |
| **P305+P351+P338** | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| **P312** | Call a POISON CENTER or doctor/physician if you feel unwell. |

### Precautionary statement(s) Storage

| | |
|---|---|
| **P403+P235** | Store in a well-ventilated place. Keep cool. |
| **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 |
|---|---|---|
| 67-63-0 | <70 | isopropanol |
| 8052-41-3. | <10 | Stoddard Solvent |
| 111-84-2 | <5 | n-nonane |
| 1330-20-7 | <5 | xylene |
| 100-41-4 | <5 | ethylbenzene |
| Not Available | <10 | proprietary ingredients |

## SECTION 4 FIRST AID MEASURES

### Description of first aid measures

| | |
|---|---|
| **Eye Contact** | If this product comes in contact with the eyes:<br>▸ Wash out immediately with fresh running water.<br>▸ 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.<br>▸ Seek medical attention without delay; if pain persists or recurs seek medical attention.<br>▸ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |
| **Skin Contact** | If skin contact occurs:<br>▸ Immediately remove all contaminated clothing, including footwear.<br>▸ Flush skin and hair with running water (and soap if available).<br>▸ Seek medical attention in event of irritation. |
| **Inhalation** | ▸ If fumes or combustion products are inhaled remove from contaminated area.<br>▸ Lay patient down. Keep warm and rested.<br>▸ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.<br>▸ Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. |

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| | |
|---|---|
| | ▸ Transport to hospital, or doctor, without delay. |
| **Ingestion** | ▸ If swallowed do **NOT** induce vomiting.<br>▸ If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.<br>▸ Observe the patient carefully.<br>▸ Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.<br>▸ Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.<br>▸ Seek medical advice.<br>▸ Avoid giving milk or oils.<br>▸ Avoid giving alcohol.<br>▸ If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus. |

### 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 isopropanol:

- Rapid onset respiratory depression and hypotension indicates serious ingestions that require careful cardiac and respiratory monitoring together with immediate intravenous access.
- Rapid absorption precludes the usefulness of emesis or lavage 2 hours post-ingestion. Activated charcoal and cathartics are not clinically useful. Ipecac is most useful when given 30 mins. post-ingestion.
- There are no antidotes.
- Management is supportive. Treat hypotension with fluids followed by vasopressors.
- Watch closely, within the first few hours for respiratory depression; follow arterial blood gases and tidal volumes.
- Ice water lavage and serial haemoglobin levels are indicated for those patients with evidence of gastrointestinal bleeding.

For acute or short term repeated exposures to xylene:

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

## SECTION 5 FIREFIGHTING MEASURES

### Extinguishing media

- Alcohol stable 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 |

### Advice for firefighters

| | |
|---|---|
| **Fire Fighting** | ▸ Alert Fire Brigade and tell them location and nature of hazard.<br>▸ May be violently or explosively reactive.<br>▸ Wear breathing apparatus plus protective gloves in the event of a fire.<br>▸ Prevent, by any means available, spillage from entering drains or water course.<br>▸ Consider evacuation (or protect in place).<br>▸ Fight fire from a safe distance, with adequate cover.<br>▸ If safe, switch off electrical equipment until vapour fire hazard removed. |
| **Fire/Explosion Hazard** | ▸ Liquid and vapour are highly flammable.<br>▸ Severe fire hazard when exposed to heat, flame and/or oxidisers.<br>▸ Vapour may travel a considerable distance to source of ignition.<br>▸ Heating may cause expansion or decomposition leading to violent rupture of containers.<br>▸ On combustion, may emit toxic fumes of carbon monoxide (CO).<br>Combustion products include:<br>,<br>carbon dioxide ($CO_2$)<br>,<br>hydrogen chloride<br>,<br>phosgene<br>,<br>hydrogen fluoride<br>,<br>other pyrolysis products typical of burning organic material.<br>**WARNING**: Long standing in contact with air and light may result in the formation of potentially explosive peroxides. |
| **HAZCHEM** | •3YE |

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## 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** | ▸ Remove all ignition sources.<br>▸ Clean up all spills immediately.<br>▸ Avoid breathing vapours and contact with skin and eyes.<br>▸ Control personal contact with the substance, by using protective equipment.<br>▸ Contain and absorb small quantities with vermiculite or other absorbent material.<br>▸ Wipe up.<br>▸ Collect residues in a flammable waste container. |
| **Major Spills** | ▸ Clear area of personnel and move upwind.<br>▸ Alert Fire Brigade and tell them location and nature of hazard.<br>▸ May be violently or explosively reactive.<br>▸ Wear breathing apparatus plus protective gloves.<br>▸ Prevent, by any means available, spillage from entering drains or water course.<br>▸ Consider evacuation (or protect in place).<br>▸ No smoking, naked lights or ignition sources. |

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

## SECTION 7 HANDLING AND STORAGE

### Precautions for safe handling

| | |
|---|---|
| **Safe handling** | ▸ **DO NOT** allow clothing wet with material to stay in contact with skin<br>▸ Avoid all personal contact, including inhalation.<br>▸ Wear protective clothing when risk of exposure occurs.<br>▸ Use in a well-ventilated area.<br>▸ Prevent concentration in hollows and sumps.<br>▸ **DO NOT** enter confined spaces until atmosphere has been checked.<br>▸ Avoid smoking, naked lights, heat or ignition sources.<br>▸ When handling, **DO NOT** eat, drink or smoke. |
| **Other information** | ▸ Store in original containers in approved flame-proof area.<br>▸ No smoking, naked lights, heat or ignition sources.<br>▸ **DO NOT** store in pits, depressions, basements or areas where vapours may be trapped.<br>▸ Keep containers securely sealed.<br>▸ Store away from incompatible materials in a cool, dry well ventilated area.<br>▸ Protect containers against physical damage and check regularly for leaks.<br>▸ Observe manufacturer's storage and handling recommendations contained within this SDS. |

### Conditions for safe storage, including any incompatibilities

| | |
|---|---|
| **Suitable container** | ▸ **DO NOT** use aluminium or galvanised containers<br>▸ Packing as supplied by manufacturer.<br>▸ Plastic containers may only be used if approved for flammable liquid.<br>▸ Check that containers are clearly labelled and free from leaks.<br>▸ For low viscosity materials (i) : Drums and jerry cans must be of the non-removable head type. (ii) : Where a can is to be used as an inner package, the can must have a screwed enclosure.<br>▸ For materials with a viscosity of at least 2680 cSt. (23 deg. C)<br>▸ For manufactured product having a viscosity of at least 250 cSt. (23 deg. C)<br>▸ Manufactured product that requires stirring before use and having a viscosity of at least 20 cSt (25 deg. C): (i) Removable head packaging; (ii) Cans with friction closures and (iii) low pressure tubes and cartridges may be used.<br>▸ Where combination packages are used, and the inner packages are of glass, there must be sufficient inert cushioning material in contact with inner and outer packages<br>▸ In addition, where inner packagings are glass and contain liquids of packing group I there must be sufficient inert absorbent to absorb any spillage, unless the outer packaging is a close fitting moulded plastic box and the substances are not incompatible with the plastic. |
| **Storage incompatibility** | ▸ Avoid reaction with oxidising agents |

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control parameters

**OCCUPATIONAL EXPOSURE LIMITS (OEL)**

**INGREDIENT DATA**

| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|---|---|---|---|---|---|---|
| Australia Exposure Standards | isopropanol | Isopropyl alcohol | 983 mg/m3 / 400 ppm | 1230 mg/m3 / 500 ppm | Not Available | Not Available |
| Australia Exposure Standards | Stoddard Solvent | White spirits | 790 mg/m3 | Not Available | Not Available | Not Available |
| Australia Exposure Standards | n-nonane | Nonane | 1050 mg/m3 / 200 ppm | Not Available | Not Available | Not Available |
| Australia Exposure Standards | xylene | Xylene (o-, m-, p- isomers) | 350 mg/m3 / 80 ppm | 655 mg/m3 / 150 ppm | Not Available | Not Available |
| Australia Exposure Standards | ethylbenzene | Ethyl benzene | 434 mg/m3 / 100 ppm | 543 mg/m3 / 125 ppm | Not Available | Not Available |

**Continued...**

**EMERGENCY LIMITS**

| Ingredient | Material name | TEEL-1 | TEEL-2 | TEEL-3 |
|---|---|---|---|---|
| isopropanol | Isopropyl alcohol | 400 ppm | 2000 ppm | 12000 ppm |
| Stoddard Solvent | Stoddard solvent; (Mineral spirits, 85% nonane and 15% trimethyl benzene) | 300 mg/m3 | 1,800 mg/m3 | 29500 mg/m3 |
| n-nonane | Nonane; (Shellsol 140) | 600 ppm | 830 ppm | 5,000 ppm |
| xylene | Xylenes | Not Available | Not Available | Not Available |
| ethylbenzene | Ethyl benzene | Not Available | Not Available | Not Available |

| Ingredient | Original IDLH | Revised IDLH |
|---|---|---|
| isopropanol | 12,000 ppm | 2,000 [LEL] ppm |
| Stoddard Solvent | 29,500 mg/m3 | 20,000 mg/m3 |
| n-nonane | Not Available | Not Available |
| xylene | 1,000 ppm | 900 ppm |
| ethylbenzene | 2,000 ppm | 800 [LEL] ppm |
| proprietary ingredients | Not Available | Not Available |

## Exposure controls

| | |
|---|---|
| **Appropriate engineering controls** | Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.<br>The basic types of engineering controls are:<br>Process controls which involve changing the way a job activity or process is done to reduce the risk.<br>Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.<br>Employers may need to use multiple types of controls to prevent employee overexposure. |
| **Personal protection** |  |
| **Eye and face protection** | ▸ Safety glasses with side shields.<br>▸ Chemical goggles.<br>▸ 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. |
| **Skin protection** | See Hand protection below |
| **Hands/feet protection** | ▸ Wear chemical protective gloves, e.g. PVC.<br>▸ Wear safety footwear or safety gumboots, e.g. Rubber<br>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.<br>The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.<br>Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended. |
| **Body protection** | See Other protection below |
| **Other protection** | ▸ Overalls.<br>▸ PVC Apron.<br>▸ PVC protective suit may be required if exposure severe.<br>▸ Eyewash unit.<br>▸ Ensure there is ready access to a safety shower. |
| **Thermal hazards** | Not Available |

### Recommended material(s)

**GLOVE SELECTION INDEX**

Glove selection is based on a modified presentation of the:
***"Forsberg Clothing Performance Index".***
The effect(s) of the following substance(s) are taken into account in the ***computer-generated*** selection:
Protection Brands CERFACE Ceramic Protection 50ml

| Material | CPI |
|---|---|
| BUTYL | C |
| BUTYL/NEOPRENE | C |
| HYPALON | C |
| NAT+NEOPR+NITRILE | C |
| NATURAL RUBBER | C |
| NATURAL+NEOPRENE | C |
| NEOPRENE | C |

### Respiratory protection

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

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.
Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

| Required Minimum Protection Factor | Half-Face Respirator | Full-Face Respirator | Powered Air Respirator |
|---|---|---|---|
| up to 5 x ES | A-AUS / Class 1 | - | A-PAPR-AUS / Class 1 |
| up to 25 x ES | Air-line* | A-2 | A-PAPR-2 |
| up to 50 x ES | - | A-3 | - |
| 50+ x ES | - | Air-line** | - |

* - Continuous-flow; ** - Continuous-flow or positive pressure demand
^ - Full-face

**Continued...**

| | |
|---|---|
| NEOPRENE/NATURAL | C |
| NITRILE | C |
| NITRILE+PVC | C |
| PE/EVAL/PE | C |
| PVA | C |
| PVC | C |
| PVDC/PE/PVDC | C |
| TEFLON | C |
| VITON | C |

* CPI - Chemwatch Performance Index
A: Best Selection
B: Satisfactory; may degrade after 4 hours continuous immersion
C: Poor to Dangerous Choice for other than short term immersion
**NOTE**: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -
* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, 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 degC)

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

| | |
|---|---|
| **Appearance** | Clear highly flammable liquid with a solvent odour; does not mix with water. |

| | | | |
|---|---|---|---|
| **Physical state** | liquid | **Relative density (Water = 1)** | 0.75-0.90 |
| **Odour** | Not Available | **Partition coefficient n-octanol / water** | Not Available |
| **Odour threshold** | Not Available | **Auto-ignition temperature (°C)** | Not Available |
| **pH (as supplied)** | Not Applicable | **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 Applicable |
| **Flash point (°C)** | 11.7 (isopropanol) | **Taste** | Not Available |
| **Evaporation rate** | Not Available | **Explosive properties** | Not Available |
| **Flammability** | HIGHLY FLAMMABLE. | **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 Applicable |
| **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.<br>▸ Product is considered stable.<br>▸ 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 can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.<br>Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.<br>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.<br>Inhalation hazard is increased at higher temperatures.<br>Concentrated nonane vapours may cause irritation of the nose and throat, headache, drowsiness, dizziness, confusion, nausea, tremors, incoordination and difficulty in breathing. Very high concentrations may cause unconsciousness and death. The odour of nitrous oxides is not easily detected. |

**Continued...**

| | |
|---|---|
| | 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.<br>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.<br>The odour of isopropanol may give some warning of exposure, but odour fatigue may occur. Inhalation of isopropanol may produce irritation of the nose and throat with sneezing, sore throat and runny nose.<br>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)<br>Accidental ingestion of the material may be damaging to the health of the individual.<br>Ingestion may result in nausea, abdominal irritation, pain and vomiting |
| **Skin Contact** | The material may cause mild but significant inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.<br>Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.<br>Most liquid alcohols appear to act as primary skin irritants in humans. Significant percutaneous absorption occurs in rabbits but not apparently in man.<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, 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.<br>511ipa |
| **Eye** | This material can cause eye irritation and damage in some persons.<br>Isopropanol vapour may cause mild eye irritation at 400 parts per million. Splashes may cause severe eye irritation, possible burns to the cornea and eye damage. Eye contact may cause tearing and blurring of vision. |
| **Chronic** | There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment.<br>Substance accumulation, in the human body, is likely and may cause some concern following repeated or long-term occupational exposure.<br>Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems.<br>There is some evidence from animal testing that exposure to this material may result in toxic effects to the unborn baby.<br>Implantation studies in rats show that paraffin oils may cause tumours. As a general rule, the highly refined paraffins are believed to contain less suspect polyaromatic hydrocarbons than less refined grades or waxes derived from napthenic base-stocks.<br><br>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.<br>Long term or repeated ingestion exposure of isopropanol may produce incoordination, lethargy and reduced weight gain.<br><br>Repeated inhalation exposure to isopropanol may produce narcosis, incoordination and liver degeneration. Animal data show developmental effects only at exposure levels that produce toxic effects in the adult animals. Isopropanol does not cause genetic damage in bacterial or mammalian cell cultures or in animals.<br><br>There are inconclusive reports of human sensitisation from skin contact with isopropanol. Chronic alcoholics are more tolerant of systemic isopropanol than are persons who do not consume alcohol; alcoholics have survived as much as 500 ml. of 70% isopropanol.<br>Exposure to the material for prolonged periods may cause physical defects in the developing embryo (teratogenesis). |

| **Protection Brands CERFACE Ceramic Protection 50ml** | **TOXICITY** | **IRRITATION** |
|---|---|---|
| | Not Available | Not Available |

| **isopropanol** | **TOXICITY** | **IRRITATION** |
|---|---|---|
| | Dermal (rabbit) LD50: 12800 mg/kg[2] | Eye (rabbit): 10 mg - moderate |
| | Inhalation (rat) LC50: 32000 ppm/8hr[2] | Eye (rabbit): 100 mg - SEVERE |
| | Oral (rat) LD50: 5000 mg/kg[2] | Eye (rabbit): 100mg/24hr-moderate |
| | | Skin (rabbit): 500 mg - mild |

| **Stoddard Solvent** | **TOXICITY** | **IRRITATION** |
|---|---|---|
| | Dermal (rabbit) LD50: >2000 mg/kg[1] | Eye (hmn) 470 ppm/15m irrit. |
| | Inhalation (rat) LC50: >2800 ppm/8hr[2] | Eye (rabbit) 500 mg/24h moderate |
| | Oral (rat) LD50: >5000 mg/kg[1] | |

| **n-nonane** | **TOXICITY** | **IRRITATION** |
|---|---|---|
| | Inhalation (rat) LC50: 3200 ppm/4hr[2] | Not Available |

| **xylene** | **TOXICITY** | **IRRITATION** |
|---|---|---|
| | Dermal (rabbit) LD50: >1700 mg/kg[2] | Eye (human): 200 ppm irritant |
| | Inhalation (rat) LC50: 5000 ppm/4hr[2] | Eye (rabbit): 5 mg/24h SEVERE |
| | Oral (rat) LD50: 4300 mg/kgt[2] | Eye (rabbit): 87 mg mild |
| | | Skin (rabbit):500 mg/24h moderate |

| **ethylbenzene** | **TOXICITY** | **IRRITATION** |
|---|---|---|
| | Dermal (rabbit) LD50: >5000 mg/kg[2] | Eye (rabbit): 500 mg - SEVERE |
| | Inhalation (rabbit) LC50: 4000 ppm/4hr[2] | Skin (rabbit): 15 mg/24h mild |
| | Oral (rat) LD50: 3500 mg/kgd[2] | |

| | |
|---|---|
| ***Legend:*** | *1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances* |

**Continued...**

| | |
|---|---|
| **ISOPROPANOL** | Isopropanol is irritating to the eyes, nose and throat but generally not to the skin. Prolonged high dose exposure may also produce depression of the central nervous system and drowsiness. Few have reported skin irritation. It can be absorbed from the skin or when inhaled. Intentional swallowing is common particularly among alcoholics or suicide victims and also leads to fainting, breathing difficulty, nausea, vomiting and headache. In the absence of unconsciousness, recovery usually occurred. Repeated doses may damage the kidneys. |
| **STODDARD SOLVENT** | For petroleum: This product contains benzene, which can cause acute myeloid leukaemia, and n-hexane, which can be metabolized to compounds which are toxic to the nervous system. This product contains toluene, and animal studies suggest high concentrations of toluene lead to hearing loss. This product contains ethyl benzene and naphthalene, from which animal testing shows evidence of tumour formation.<br>Cancer-causing potential: Animal testing shows inhaling petroleum causes tumours of the liver and kidney; these are however not considered to be relevant in humans.<br>Mutation-causing potential: Most studies involving gasoline have returned negative results regarding the potential to cause mutations, including all recent studies in living human subjects (such as in petrol service station attendants).<br>Reproductive toxicity: Animal studies show that high concentrations of toluene (>0.1%) can cause developmental effects such as lower birth weight and developmental toxicity to the nervous system of the foetus. Other studies show no adverse effects on the foetus. |
| **N-NONANE** | Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. On the other hand, industrial bronchitis is a disorder that occurs as a result of exposure due to high concentrations of irritating substance (often particles) and is completely reversible after exposure ceases. The disorder is characterized by difficulty breathing, cough and mucus production.<br>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.<br>The major classes of hydrocarbons are well absorbed into the gastrointestinal tract in various species. In many cases, the hydrophobic hydrocarbons are ingested in association with fats in the diet. Some hydrocarbons may appear unchanged as in the lipoprotein particles in the gut lymph, but most hydrocarbons partly separate from fats and undergo metabolism in the gut cell. The gut cell may play a major role in determining the proportion of hydrocarbon that becomes available to be deposited unchanged in peripheral tissues such as in the body fat stores or the liver.<br>Animal testing showed exposure to high concentrations (over 3500 parts per million) of C9 to C13 alkanes in air caused inco-ordination, seizures and spasms. Cerebellar damage was found on autopsy in some animals. It appears that exposure may possibly damage the central nervous system. |
| **XYLENE** | Reproductive effector in rats |
| **ETHYLBENZENE** | 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. Long Term exposure may cause damage to the kidney, liver and lungs, including a tendency to cancer formation, according to animal testing. There is no research on its effect on sex organs and unborn babies.<br>**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.<br><br>**WARNING:** This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.<br>Liver changes, utheral tract, effects on fertility, foetotoxicity, specific developmental abnormalities (musculoskeletal system) recorded. |
| **ISOPROPANOL & XYLENE & ETHYLBENZENE** | 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. |
| **ISOPROPANOL & XYLENE** | The substance is classified by IARC as Group 3:<br>**NOT** classifiable as to its carcinogenicity to humans.<br>Evidence of carcinogenicity may be inadequate or limited in animal testing. |
| **XYLENE & ETHYLBENZENE** | The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. |

| | | | |
|---|---|---|---|
| **Acute Toxicity** | ⊘ | **Carcinogenicity** | ✔ |
| **Skin Irritation/Corrosion** | ✔ | **Reproductivity** | ⊘ |
| **Serious Eye Damage/Irritation** | ✔ | **STOT - Single Exposure** | ✔ |
| **Respiratory or Skin sensitisation** | ⊘ | **STOT - Repeated Exposure** | ✔ |
| **Mutagenicity** | ⊘ | **Aspiration Hazard** | ✔ |

*Legend:* ✘ *– Data available but does not fill the criteria for classification*
✔ *– Data available to make classification*
⊘ *– Data Not Available to make classification*

## SECTION 12 ECOLOGICAL INFORMATION

### Toxicity

**Protection Brands CERFACE Ceramic Protection 50ml**

| ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|---|---|---|---|---|
| Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

**isopropanol**

| ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|---|---|---|---|---|
| LC50 | 96 | Fish | 183.844mg/L | 3 |
| EC50 | 48 | Crustacea | 12500mg/L | 5 |
| EC50 | 96 | Algae or other aquatic plants | 993.232mg/L | 3 |
| EC50 | 384 | Crustacea | 42.389mg/L | 3 |
| NOEC | 5760 | Fish | 0.02mg/L | 4 |

**Stoddard Solvent**

| ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|---|---|---|---|---|
| LC50 | 96 | Fish | 2.2mg/L | 4 |

**Continued...**

| | | | | | |
|---|---|---|---|---|---|
| | NOEC | 3072 | Fish | =1mg/L | 1 |

**n-nonane**

| ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|---|---|---|---|---|
| LC50 | 96 | Fish | 0.211mg/L | 3 |
| EC50 | 48 | Crustacea | 0.2mg/L | 2 |
| EC50 | 96 | Algae or other aquatic plants | 0.230mg/L | 3 |
| EC50 | 384 | Crustacea | 0.054mg/L | 3 |
| NOEC | 504 | Crustacea | 0.17mg/L | 2 |

**xylene**

| ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|---|---|---|---|---|
| LC50 | 96 | Fish | 2.6mg/L | 2 |
| EC50 | 48 | Crustacea | >3.4mg/L | 2 |
| EC50 | 72 | Algae or other aquatic plants | 4.6mg/L | 2 |
| EC50 | 24 | Crustacea | 0.711mg/L | 4 |
| NOEC | 73 | Algae or other aquatic plants | 0.44mg/L | 2 |

**ethylbenzene**

| ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|---|---|---|---|---|
| LC50 | 96 | Fish | 0.0043mg/L | 4 |
| EC50 | 48 | Crustacea | 1.184mg/L | 4 |
| EC50 | 96 | Algae or other aquatic plants | 3.6mg/L | 2 |
| EC50 | 96 | Crustacea | =0.49mg/L | 1 |
| NOEC | 168 | Crustacea | 0.96mg/L | 5 |

***Legend:*** *Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data*

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.
Wastes resulting from use of the product must be disposed of on site or at approved waste sites.
**DO NOT** discharge into sewer or waterways.

### Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|---|---|---|
| isopropanol | LOW (Half-life = 14 days) | LOW (Half-life = 3 days) |
| n-nonane | LOW | LOW |
| xylene | HIGH (Half-life = 360 days) | LOW (Half-life = 1.83 days) |
| ethylbenzene | HIGH (Half-life = 228 days) | LOW (Half-life = 3.57 days) |

### Bioaccumulative potential

| Ingredient | Bioaccumulation |
|---|---|
| isopropanol | LOW (LogKOW = 0.05) |
| Stoddard Solvent | LOW (BCF = 159) |
| n-nonane | HIGH (LogKOW = 4.7613) |
| xylene | MEDIUM (BCF = 740) |
| ethylbenzene | LOW (BCF = 79.43) |

### Mobility in soil

| Ingredient | Mobility |
|---|---|
| isopropanol | HIGH (KOC = 1.06) |
| n-nonane | LOW (KOC = 934.6) |
| ethylbenzene | LOW (KOC = 517.8) |

## SECTION 13 DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Product / Packaging disposal**

- Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible.

Otherwise:

- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
- Where possible retain label warnings and SDS and observe all notices pertaining to the product.

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

**Continued...**

| | |
|---|---|
| | A Hierarchy of Controls seems to be common - the user should investigate:<br>▸ Reduction<br>▸ Reuse<br>▸ Recycling<br>▸ Disposal (if all else fails)<br>This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.<br>▸ **DO NOT** allow wash water from cleaning or process equipment to enter drains.<br>▸ It may be necessary to collect all wash water for treatment before disposal.<br>▸ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.<br>▸ Where in doubt contact the responsible authority.<br>▸ Recycle wherever possible.<br>▸ Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.<br>▸ Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or Incineration in a licensed apparatus (after admixture with suitable combustible material).<br>▸ Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed. |

## SECTION 14 TRANSPORT INFORMATION

### Labels Required

| | |
|---|---|
| |  |
| **Marine Pollutant** |  |
| **HAZCHEM** | •3YE |

### Land transport (ADG)

| | |
|---|---|
| **UN number** | 1993 |
| **UN proper shipping name** | FLAMMABLE LIQUID, N.O.S. (contains ethylbenzene, xylene and isopropanol) |
| **Transport hazard class(es)** | Class: 3<br>Subrisk: Not Applicable |
| **Packing group** | II |
| **Environmental hazard** | Not Applicable |
| **Special precautions for user** | Special provisions: 274<br>Limited quantity: 1 L |

### Air transport (ICAO-IATA / DGR)

| | |
|---|---|
| **UN number** | 1993 |
| **UN proper shipping name** | FLAMMABLE LIQUID, N.O.S. (contains ethylbenzene, xylene and isopropanol) |
| **Transport hazard class(es)** | ICAO/IATA Class: 3<br>ICAO / IATA Subrisk: Not Applicable<br>ERG Code: 3H |
| **Packing group** | II |
| **Environmental hazard** | Not Applicable |
| **Special precautions for user** | Special provisions: A3<br>Cargo Only Packing Instructions: 364<br>Cargo Only Maximum Qty / Pack: 60 L<br>Passenger and Cargo Packing Instructions: 353<br>Passenger and Cargo Maximum Qty / Pack: 5 L<br>Passenger and Cargo Limited Quantity Packing Instructions: Y341<br>Passenger and Cargo Limited Maximum Qty / Pack: 1 L |

### Sea transport (IMDG-Code / GGVSee)

| | |
|---|---|
| **UN number** | 1993 |
| **UN proper shipping name** | Flammable liquid, n.o.s. * (contains ethylbenzene, xylene and isopropanol) |
| **Transport hazard class(es)** | IMDG Class: 3<br>IMDG Subrisk: Not Applicable |

**Continued...**

| | |
|---|---|
| **Packing group** | II |
| **Environmental hazard** | Marine Pollutant |
| **Special precautions for user** | EMS Number: F-E, S-E<br>Special provisions: 274<br>Limited Quantities: 1 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

**ISOPROPANOL(67-63-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

**STODDARD SOLVENT(8052-41-3.) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

**N-NONANE(111-84-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)

**XYLENE(1330-20-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

**ETHYLBENZENE(100-41-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

| National Inventory | Status |
|---|---|
| Australia - AICS | Y |
| Canada - DSL | Y |
| Canada - NDSL | N (xylene; ethylbenzene; Stoddard Solvent; isopropanol; n-nonane) |
| China - IECSC | Y |
| Europe - EINEC / ELINCS / NLP | Y |
| Japan - ENCS | N (xylene; Stoddard Solvent; isopropanol; n-nonane) |
| 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

### Other information

### Ingredients with multiple cas numbers

| Name | CAS No |
|---|---|
| Stoddard Solvent | 8052-41-3., 64742-47-8 |

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.