



Fast Dry Degreaser #780-5287

RS Components Pty Ltd

Chemwatch: 4876-08

Version No: 5.1.1.1

Safety Data Sheet according to WHS and ADG requirements

Chemwatch Hazard Alert Code: 3

Issue Date: 09/02/2017

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L.GHS.AUS.EN

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

Product Identifier

| | |
|-------------------------------|------------------------------|
| Product name | Fast Dry Degreaser #780-5287 |
| Synonyms | Not Available |
| Proper shipping name | AEROSOLS |
| Other means of identification | Not Available |

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

| | |
|--------------------------|---|
| Relevant identified uses | Application is by spray atomisation from a hand held aerosol pack Cleaners - Heavy duty. |
|--------------------------|---|

Details of the supplier of the safety data sheet

| | |
|-------------------------|-------------------------------------|
| Registered company name | RS Components Pty Ltd |
| Address | 25 Pavese Street NSW 2164 Australia |
| Telephone | 1300 656 636 |
| Fax | 1300 656 696 |
| Website | Not Available |
| Email | Not Available |

Emergency telephone number

| | |
|-----------------------------------|---------------|
| Association / Organisation | Not Available |
| Emergency telephone numbers | 1800 039 008 |
| Other emergency telephone numbers | 03 95733112 |

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 | 3 |
| Toxicity | 1 | 1 |
| Body Contact | 2 | 2 |
| Reactivity | 1 | 1 |
| Chronic | 0 | 0 |

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

| | |
|--------------------|---|
| Poisons Schedule | Not Applicable |
| Classification [1] | Aerosols Category 1, Gas under Pressure (Compressed gas), Skin Corrosion/Irritation Category 2 |
| Legend: | 1. Classified by Chemwatch; 2. Classification drawn from HSIS; 3. Classification drawn from EC Directive 1272/2008 - Annex VI |

Label elements

| | |
|--------------------|---|
| GHS label elements |    |
|--------------------|---|

Continued...

SIGNAL WORD **DANGER****Hazard statement(s)**

| | |
|---------------|---|
| H222 | Extremely flammable aerosol. |
| H280 | Contains gas under pressure; may explode if heated. |
| H315 | Causes skin irritation. |
| AUH044 | Risk of explosion if heated under confinement |

Precautionary statement(s) Prevention

| | |
|-------------|--|
| P210 | Keep away from heat/sparks/open flames/hot surfaces. - No smoking. |
| P211 | Do not spray on an open flame or other ignition source. |
| P251 | Pressurized container: Do not pierce or burn, even after use. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |

Precautionary statement(s) Response

| | |
|------------------|--|
| P362 | Take off contaminated clothing and wash before reuse. |
| P302+P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P332+P313 | If skin irritation occurs: Get medical advice/attention. |

Precautionary statement(s) Storage

| | |
|------------------|--|
| P410+P403 | Protect from sunlight. Store in a well-ventilated place. |
| P410+P412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. |

Precautionary statement(s) Disposal

Not Applicable

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**Substances**

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] | Name |
|---------------|-----------|--|
| Not Available | 30-60 | hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane |
| Not Available | 10-30 | hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics |
| Not Available | 10-30 | hydrocarbons, C7, n-alkanes, isoalkanes, cyclic |
| 67-63-0 | <10 | <u>isopropanol</u> |
| 67-64-1 | <10 | <u>acetone</u> |
| 124-38-9 | 5-10 | <u>carbon dioxide</u> |

SECTION 4 FIRST AID MEASURES**Description of first aid measures**

| | |
|---------------------|---|
| Eye Contact | <p>If aerosols come in contact with the eyes:</p> <ul style="list-style-type: none"> ▶ Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes with fresh running water. ▶ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. ▶ Transport to hospital or doctor without delay. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |
| Skin Contact | <p>If solids or aerosol mists are deposited upon the skin:</p> <ul style="list-style-type: none"> ▶ Flush skin and hair with running water (and soap if available). ▶ Remove any adhering solids with industrial skin cleansing cream. ▶ DO NOT use solvents. ▶ Seek medical attention in the event of irritation. |
| Inhalation | <p>If aerosols, fumes or combustion products are inhaled:</p> <ul style="list-style-type: none"> ▶ Remove to fresh air. ▶ Lay patient down. Keep warm and rested. ▶ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. ▶ If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. ▶ Transport to hospital, or doctor. |
| Ingestion | <ul style="list-style-type: none"> ▶ Not considered a normal route of entry. |

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media**SMALL FIRE:**

- ▶ Water spray, dry chemical or CO2

LARGE FIRE:

- ▶ Water spray or fog.

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 | <ul style="list-style-type: none"> ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ May be violently or explosively reactive. ▶ Wear breathing apparatus plus protective gloves. ▶ Prevent, by any means available, spillage from entering drains or water course. |
| Fire/Explosion Hazard | <ul style="list-style-type: none"> ▶ Liquid and vapour are highly flammable. ▶ Severe fire hazard when exposed to heat or flame. ▶ Vapour forms an explosive mixture with air. ▶ Severe explosion hazard, in the form of vapour, when exposed to flame or spark. Combustion products include: <ul style="list-style-type: none"> · carbon dioxide (CO2) · other pyrolysis products typical of burning organic material. Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions. |
| HAZCHEM | Not Applicable |

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 style="list-style-type: none"> ▶ Clean up all spills immediately. ▶ Avoid breathing vapours and contact with skin and eyes. ▶ Wear protective clothing, impervious gloves and safety glasses. ▶ Shut off all possible sources of ignition and increase ventilation. |
| Major Spills | <ul style="list-style-type: none"> ▶ Clear area of personnel and move upwind. ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ May be violently or explosively reactive. ▶ Wear breathing apparatus plus protective gloves. |

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

SECTION 7 HANDLING AND STORAGE**Precautions for safe handling**

| | |
|--------------------------|--|
| Safe handling | <ul style="list-style-type: none"> ▶ DO NOT allow clothing wet with material to stay in contact with skin ▶ Avoid all personal contact, including inhalation. ▶ Wear protective clothing when risk of exposure occurs. ▶ Use in a well-ventilated area. ▶ Prevent concentration in hollows and sumps. |
| Other information | <ul style="list-style-type: none"> ▶ Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of can ▶ Store in original containers in approved flammable liquid storage area. ▶ DO NOT store in pits, depressions, basements or areas where vapours may be trapped. ▶ No smoking, naked lights, heat or ignition sources. ▶ Keep containers securely sealed. |

Conditions for safe storage, including any incompatibilities

| | |
|--------------------------------|--|
| Suitable container | <ul style="list-style-type: none"> ▶ Aerosol dispenser. ▶ Check that containers are clearly labelled. |
| Storage incompatibility | <ul style="list-style-type: none"> ▶ Avoid reaction with oxidising agents ▶ Compressed gases may contain a large amount of kinetic energy over and above that potentially available from the energy of reaction produced by the gas in chemical reaction with other substances |

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**Control parameters****OCCUPATIONAL EXPOSURE LIMITS (OEL)****INGREDIENT DATA**

| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|--------|------------|---------------|-----|------|------|-------|
|--------|------------|---------------|-----|------|------|-------|

Continued...

| | | | | | | |
|------------------------------|----------------|---|---|-------------------------|---------------|---------------|
| Australia Exposure Standards | isopropanol | Isopropyl alcohol | 983 mg/m3 / 400 ppm | 1230 mg/m3 / 500 ppm | Not Available | Not Available |
| Australia Exposure Standards | acetone | Acetone | 1185 mg/m3 / 500 ppm | 2375 mg/m3 / 1000 ppm | Not Available | Not Available |
| Australia Exposure Standards | carbon dioxide | Carbon dioxide / Carbon dioxide in coal mines | 9000 mg/m3 / 22500 mg/m3 / 5000 ppm / 12500 ppm | 54000 mg/m3 / 30000 ppm | Not Available | Not Available |

EMERGENCY LIMITS

| Ingredient | Material name | TEEL-1 | TEEL-2 | TEEL-3 |
|----------------|-------------------|---------------|---------------|---------------|
| isopropanol | Isopropyl alcohol | 400 ppm | 2000 ppm | 12000 ppm |
| acetone | Acetone | Not Available | Not Available | Not Available |
| carbon dioxide | Carbon dioxide | 30,000 ppm | 40,000 ppm | 50,000 ppm |

| Ingredient | Original IDLH | Revised IDLH |
|--|---------------|-----------------|
| hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, | Not Available | Not Available |
| hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics | Not Available | Not Available |
| hydrocarbons, C7, n-alkanes, isoalkanes, cyclic | Not Available | Not Available |
| isopropanol | 12,000 ppm | 2,000 [LEL] ppm |
| acetone | 20,000 ppm | 2,500 [LEL] ppm |
| carbon dioxide | 50,000 ppm | 40,000 ppm |

MATERIAL DATA**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. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. |
| Personal protection |  |
| Eye and face protection | No special equipment for minor exposure i.e. when handling small quantities. OTHERWISE: For potentially moderate or heavy exposures: <ul style="list-style-type: none"> ▶ Safety glasses with side shields. ▶ NOTE: Contact lenses pose a special hazard; soft lenses may absorb irritants and ALL lenses concentrate them. |
| Skin protection | See Hand protection below |
| Hands/feet protection | <ul style="list-style-type: none"> ▶ No special equipment needed when handling small quantities. ▶ OTHERWISE: ▶ For potentially moderate exposures: ▶ Wear general protective gloves, eg. light weight rubber gloves. ▶ For potentially heavy exposures: ▶ Wear chemical protective gloves, eg. PVC. and safety footwear. |
| Body protection | See Other protection below |
| Other protection | No special equipment needed when handling small quantities. OTHERWISE: <ul style="list-style-type: none"> ▶ Overalls. ▶ Skin cleansing cream. ▶ Eyewash unit. ▶ The clothing worn by process operators insulated from earth may develop static charges far higher (up to 100 times) than the minimum ignition energies for various flammable gas-air mixtures. This holds true for a wide range of clothing materials including cotton. ▶ Avoid dangerous levels of charge by ensuring a low resistivity of the surface material worn outermost. BREThERICK: Handbook of Reactive Chemical Hazards. |
| 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:

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| Material | CPI |
|----------------|-----|
| BUTYL | C |
| BUTYL/NEOPRENE | C |
| CPE | C |

Respiratory protection

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

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 | AX-AUS / Class1 | - |

| | |
|-------------------|---|
| HYPALON | C |
| NAT+NEOPR+NITRILE | C |
| NATURAL RUBBER | C |
| NATURAL+NEOPRENE | C |
| NEOPRENE | C |
| NITRILE | C |
| NITRILE+PVC | C |
| PE/EVAL/PE | C |
| PVA | C |
| PVC | C |
| PVDC/PE/PVDC | C |
| SARANEX-23 | C |
| SARANEX-23 2-PLY | C |
| TEFLON | C |
| VITON/NEOPRENE | 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.

| | | | |
|-----------|-------|-----------|------------------|
| up to 50 | 1000 | - | AX-AUS / Class 1 |
| up to 50 | 5000 | Airline * | - |
| up to 100 | 5000 | - | AX-2 |
| up to 100 | 10000 | - | AX-3 |
| 100+ | | | Airline** |

* - Continuous Flow ** - Continuous-flow or positive pressure demand

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)

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.

Aerosols, in common with most vapours/ mists, should never be used in confined spaces without adequate ventilation. Aerosols, containing agents designed to enhance or mask smell, have triggered allergic reactions in predisposed individuals.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | | | |
|---|---|--|------------------|
| Appearance | Colourless highly flammable liquid aerosol with a solvent odour; does not mix with water. | | |
| Physical state | Liquid | Relative density (Water = 1) | 0.712 @ 20 deg.C |
| Odour | Not Available | Partition coefficient n-octanol / water | Not Available |
| Odour threshold | Not Available | Auto-ignition temperature (°C) | >200 |
| 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) | 55-120 | Molecular weight (g/mol) | Not Applicable |
| Flash point (°C) | <0 (CC) | Taste | Not Available |
| Evaporation rate | 2.8 Ether = 1 | 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 (%) | 0.9 | 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 | 685 |

SECTION 10 STABILITY AND REACTIVITY

| | |
|---|--|
| Reactivity | See section 7 |
| Chemical stability | <ul style="list-style-type: none"> ▶ Elevated temperatures. ▶ Presence of open flame. ▶ Product is considered stable. ▶ Hazardous polymerisation will not occur. |
| Possibility of hazardous reactions | See section 7 |
| Conditions to avoid | See section 7 |
| Incompatible materials | See section 7 |
| Hazardous decomposition products | See section 5 |

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

| | |
|--------------|--|
| Inhaled | <p>Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo.</p> <p>Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. Limited evidence or practical experience suggests that the material may produce irritation of the respiratory system, in a significant number of individuals, following inhalation. In contrast to most organs, the lung is able to respond to a chemical insult by first removing or neutralising the irritant and then repairing the damage. The repair process, which initially evolved to protect mammalian lungs from foreign matter and antigens, may however, produce further lung damage resulting in the impairment of gas exchange, the primary function of the lungs. Respiratory tract irritation often results in an inflammatory response involving the recruitment and activation of many cell types, mainly derived from the vascular system.</p> <p>Material is highly volatile and may quickly form a concentrated atmosphere in confined or unventilated areas. The vapour may displace and replace air in breathing zone, acting as a simple asphyxiant. This may happen with little warning of overexposure. WARNING: Intentional misuse by concentrating/inhaling contents may be lethal.</p> |
| Ingestion | <p>Accidental ingestion of the material may be damaging to the health of the individual.</p> <p>Not normally a hazard due to physical form of product.</p> <p>Considered an unlikely route of entry in commercial/industrial environments</p> |
| Skin Contact | <p>Evidence exists, or practical experience predicts, that the material either produces inflammation of the skin in a substantial number of individuals following direct contact, and/or produces significant inflammation when applied to the healthy intact skin of animals, for up to four hours, such inflammation being present twenty-four hours or more after the end of the exposure period. Skin irritation may also be present after prolonged or repeated exposure; this may result in a form of contact dermatitis (nonallergic). The dermatitis is often characterised by skin redness (erythema) and swelling (oedema) which may progress to blistering (vesiculation), scaling and thickening of the epidermis. At the microscopic level there may be intercellular oedema of the spongy layer of the skin (spongiosis) and intracellular oedema of the epidermis.</p> <p>The material may accentuate any pre-existing dermatitis condition</p> <p>Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.</p> <p>Spray mist may produce discomfort</p> <p>Open cuts, abraded or irritated skin should not be exposed to this material</p> <p>Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds 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.</p> |
| Eye | <p>Limited evidence exists, or practical experience suggests, that the material may cause eye irritation in a substantial number of individuals and/or is expected to produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. Repeated or prolonged eye contact may cause inflammation characterised by temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur.</p> <p>Direct contact with the eye may not cause irritation because of the extreme volatility of the gas; however concentrated atmospheres may produce irritation after brief exposures.</p> |
| Chronic | <p>Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems. Principal route of occupational exposure to the gas is by inhalation.</p> |

| | | |
|---------------------------------|--|------------------------------------|
| Fast Dry Degreaser #780-5287 | TOXICITY | IRRITATION |
| | Not Available | Not Available |
| isopropanol | TOXICITY | IRRITATION |
| | Dermal (rabbit) LD50: 12792 mg/kg ^[1] | Eye (rabbit): 10 mg - moderate |
| | Inhalation (rat) LC50: 72.6 mg/L/4hr ^[2] | Eye (rabbit): 100 mg - SEVERE |
| | Oral (rat) LD50: 5000 mg/kg ^[2] | Eye (rabbit): 100mg/24hr-moderate |
| | | Skin (rabbit): 500 mg - mild |
| acetone | TOXICITY | IRRITATION |
| | Dermal (rabbit) LD50: 20000 mg/kg ^[2] | Eye (human): 500 ppm - irritant |
| | Inhalation (rat) LC50: 50.1 mg/L/8 hr ^[2] | Eye (rabbit): 20mg/24hr -moderate |
| | Oral (rat) LD50: 5800 mg/kg ^[2] | Eye (rabbit): 3.95 mg - SEVERE |
| | | Skin (rabbit): 500 mg/24hr - mild |
| | | Skin (rabbit): 395mg (open) - mild |
| carbon dioxide | TOXICITY | IRRITATION |
| | Inhalation (mouse) LC50: 200000 ppm/2hr ^[2] | Not Available |
| | Inhalation (mouse) LC50: 361 mg/L/2hr ^[2] | |
| | Inhalation (rat) LC50: 470000 ppm/30M ^[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

| | |
|-------------|---|
| ISOPROPANOL | <p>For isopropanol (IPA):</p> <p>Acute toxicity: Isopropanol has a low order of acute toxicity. It is irritating to the eyes, but not to the skin. Very high vapor concentrations are irritating to the eyes, nose, and throat, and prolonged exposure may produce central nervous system depression and narcosis. Human volunteers reported that exposure to 400 ppm isopropanol vapors for 3 to 5 min.</p> <p>The substance is classified by IARC as Group 3:</p> <p>NOT classifiable as to its carcinogenicity to humans.</p> <p>Evidence of carcinogenicity may be inadequate or limited in animal testing.</p> |
|-------------|---|

| | | |
|--|--|---------------------------------|
| ACETONE | for acetone: The acute toxicity of acetone is low. Acetone is not a skin irritant or sensitiser but is a defatting agent to the skin. Acetone is an eye irritant. The subchronic toxicity of acetone has been examined in mice and rats that were administered acetone in the drinking water and again in rats treated by oral gavage. | |
| CARBON DIOXIDE | - pulmonary effects IDLH: 50,000 ppm | |
| ISOPROPANOL & ACETONE | The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis. | |
| 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

| Ingredient | Endpoint | Test Duration (hr) | Species | Value | Source |
|----------------|----------|--------------------|-------------------------------|-------------|--------|
| isopropanol | LC50 | 96 | Fish | 183.844mg/L | 3 |
| isopropanol | EC50 | 48 | Crustacea | 12500mg/L | 5 |
| isopropanol | EC50 | 96 | Algae or other aquatic plants | 993.232mg/L | 3 |
| isopropanol | EC50 | 384 | Crustacea | 42.389mg/L | 3 |
| isopropanol | NOEC | 5760 | Fish | 0.02mg/L | 4 |
| acetone | LC50 | 96 | Fish | >100mg/L | 4 |
| acetone | EC50 | 48 | Crustacea | >100mg/L | 4 |
| acetone | EC50 | 96 | Algae or other aquatic plants | 20.565mg/L | 4 |
| acetone | EC50 | 384 | Crustacea | 97.013mg/L | 3 |
| acetone | NOEC | 96 | Algae or other aquatic plants | 4.950mg/L | 4 |
| carbon dioxide | LC50 | 96 | Fish | 53.413mg/L | 3 |
| carbon dioxide | EC50 | 96 | Algae or other aquatic plants | 237.138mg/L | 3 |
| carbon dioxide | EC50 | 384 | Crustacea | 12.472mg/L | 3 |

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 - 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

DO NOT discharge into sewer or waterways.

for acetone:

log Kow: -0.24

Half-life (hr) air: 312-1896

Half-life (hr) H₂O surface water: 20

Henry's atm m³/mol: 3.67E-05

BOD 5: 0.31-1.76,46-55%

COD: 1.12-2.07

ThOD: 2.2

BCF: 0.69

Environmental fate:

Acetone preferentially locates in the air compartment when released to the environment. A substantial amount of acetone can also be found in water, which is consistent with the high water to air partition coefficient and its small, but detectable, presence in rain water, sea water, and lake water samples. Very little acetone is expected to reside in soil, biota, or suspended solids. This is entirely consistent with the physical and chemical properties of acetone and with measurements showing a low propensity for soil absorption and a high preference for moving through the soil and into the ground water

In air, acetone is lost by photolysis and reaction with photochemically produced hydroxyl radicals; the estimated half-life of these combined processes is about 22 days.

Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|----------------|---------------------------|----------------------------------|
| isopropanol | LOW (Half-life = 14 days) | LOW (Half-life = 3 days) |
| acetone | LOW (Half-life = 14 days) | MEDIUM (Half-life = 116.25 days) |
| carbon dioxide | LOW | LOW |

Bioaccumulative potential

| Ingredient | Bioaccumulation |
|----------------|---------------------|
| isopropanol | LOW (LogKOW = 0.05) |
| acetone | LOW (BCF = 0.69) |
| carbon dioxide | LOW (LogKOW = 0.83) |

Mobility in soil

| Ingredient | Mobility |
|----------------|--------------------|
| isopropanol | HIGH (KOC = 1.06) |
| acetone | HIGH (KOC = 1.981) |
| carbon dioxide | HIGH (KOC = 1.498) |

SECTION 13 DISPOSAL CONSIDERATIONS**Waste treatment methods**

| | |
|-------------------------------------|---|
| Product / Packaging disposal | <p>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.</p> <p>A Hierarchy of Controls seems to be common - the user should investigate:</p> <ul style="list-style-type: none"> ▶ Reduction ▶ Reuse ▶ Recycling ▶ Disposal (if all else fails) <p>This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.</p> <ul style="list-style-type: none"> ▶ DO NOT allow wash water from cleaning or process equipment to enter drains. ▶ It may be necessary to collect all wash water for treatment before disposal. ▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. ▶ Where in doubt contact the responsible authority. ▶ Consult State Land Waste Management Authority for disposal. ▶ Discharge contents of damaged aerosol cans at an approved site. ▶ Allow small quantities to evaporate. ▶ DO NOT incinerate or puncture aerosol cans. |
|-------------------------------------|---|

SECTION 14 TRANSPORT INFORMATION**Labels Required**

| | |
|---|----------------|
|  | |
| Marine Pollutant | NO |
| HAZCHEM | Not Applicable |

Land transport (ADG)

| | | | | | |
|-------------------------------------|---|--------------------|--------------------|------------------|----------------|
| UN number | 1950 | | | | |
| UN proper shipping name | AEROSOLS | | | | |
| Transport hazard class(es) | <table border="0"> <tr> <td>Class</td> <td>2.1</td> </tr> <tr> <td>Subrisk</td> <td>Not Applicable</td> </tr> </table> | Class | 2.1 | Subrisk | Not Applicable |
| Class | 2.1 | | | | |
| Subrisk | Not Applicable | | | | |
| Packing group | Not Applicable | | | | |
| Environmental hazard | Not Applicable | | | | |
| Special precautions for user | <table border="0"> <tr> <td>Special provisions</td> <td>63 190 277 327 344</td> </tr> <tr> <td>Limited quantity</td> <td>1000ml</td> </tr> </table> | Special provisions | 63 190 277 327 344 | Limited quantity | 1000ml |
| Special provisions | 63 190 277 327 344 | | | | |
| Limited quantity | 1000ml | | | | |

Air transport (ICAO-IATA / DGR)

| | | | | | | | | | | | | | | | |
|---|---|--------------------|------------------------------|---------------------------------|----------------|-------------------------------|--------|--|----------------|--|------------------|---|-----------------|--|--------------------|
| UN number | 1950 | | | | | | | | | | | | | | |
| UN proper shipping name | Aerosols, flammable; Aerosols, flammable (engine starting fluid) | | | | | | | | | | | | | | |
| Transport hazard class(es) | <table border="0"> <tr> <td>ICAO/IATA Class</td> <td>2.1</td> </tr> <tr> <td>ICAO / IATA Subrisk</td> <td>Not Applicable</td> </tr> <tr> <td>ERG Code</td> <td>10L</td> </tr> </table> | ICAO/IATA Class | 2.1 | ICAO / IATA Subrisk | Not Applicable | ERG Code | 10L | | | | | | | | |
| ICAO/IATA Class | 2.1 | | | | | | | | | | | | | | |
| ICAO / IATA Subrisk | Not Applicable | | | | | | | | | | | | | | |
| ERG Code | 10L | | | | | | | | | | | | | | |
| Packing group | Not Applicable | | | | | | | | | | | | | | |
| Environmental hazard | Not Applicable | | | | | | | | | | | | | | |
| Special precautions for user | <table border="0"> <tr> <td>Special provisions</td> <td>A145A167A802; A1A145A167A802</td> </tr> <tr> <td>Cargo Only Packing Instructions</td> <td>203</td> </tr> <tr> <td>Cargo Only Maximum Qty / Pack</td> <td>150 kg</td> </tr> <tr> <td>Passenger and Cargo Packing Instructions</td> <td>203; Forbidden</td> </tr> <tr> <td>Passenger and Cargo Maximum Qty / Pack</td> <td>75 kg; Forbidden</td> </tr> <tr> <td>Passenger and Cargo Limited Quantity Packing Instructions</td> <td>Y203; Forbidden</td> </tr> <tr> <td>Passenger and Cargo Limited Maximum Qty / Pack</td> <td>30 kg G; Forbidden</td> </tr> </table> | Special provisions | A145A167A802; A1A145A167A802 | Cargo Only Packing Instructions | 203 | Cargo Only Maximum Qty / Pack | 150 kg | Passenger and Cargo Packing Instructions | 203; Forbidden | Passenger and Cargo Maximum Qty / Pack | 75 kg; Forbidden | Passenger and Cargo Limited Quantity Packing Instructions | Y203; Forbidden | Passenger and Cargo Limited Maximum Qty / Pack | 30 kg G; Forbidden |
| Special provisions | A145A167A802; A1A145A167A802 | | | | | | | | | | | | | | |
| Cargo Only Packing Instructions | 203 | | | | | | | | | | | | | | |
| Cargo Only Maximum Qty / Pack | 150 kg | | | | | | | | | | | | | | |
| Passenger and Cargo Packing Instructions | 203; Forbidden | | | | | | | | | | | | | | |
| Passenger and Cargo Maximum Qty / Pack | 75 kg; Forbidden | | | | | | | | | | | | | | |
| Passenger and Cargo Limited Quantity Packing Instructions | Y203; Forbidden | | | | | | | | | | | | | | |
| Passenger and Cargo Limited Maximum Qty / Pack | 30 kg G; Forbidden | | | | | | | | | | | | | | |

Sea transport (IMDG-Code / GGVSee)

| | | |
|-------------------------------------|--------------------|------------------------|
| UN number | 1950 | |
| UN proper shipping name | AEROSOLS | |
| Transport hazard class(es) | IMDG Class | 2.1 |
| | IMDG Subrisk | Not Applicable |
| Packing group | Not Applicable | |
| Environmental hazard | Not Applicable | |
| Special precautions for user | EMS Number | F-D, S-U |
| | Special provisions | 63 190 277 327 344 959 |
| | Limited Quantities | 1000ml |

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

ACETONE(67-64-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

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

CARBON DIOXIDE(124-38-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS

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

| National Inventory | Status |
|-------------------------------|--|
| Australia - AICS | Y |
| Canada - DSL | Y |
| Canada - NDSL | N (acetone; carbon dioxide; isopropanol) |
| 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 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**

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC – TWA: Permissible Concentration-Time Weighted Average
 PC – STEL: Permissible Concentration-Short Term Exposure Limit
 IARC: International Agency for Research on Cancer
 ACGIH: American Conference of Governmental Industrial Hygienists
 STEL: Short Term Exposure Limit
 TEEL: Temporary Emergency Exposure Limit,
 IDLH: Immediately Dangerous to Life or Health Concentrations
 OSF: Odour Safety Factor
 NOAEL :No Observed Adverse Effect Level
 LOAEL: Lowest Observed Adverse Effect Level
 TLV: Threshold Limit Value
 LOD: Limit Of Detection
 OTV: Odour Threshold Value
 BCF: BioConcentration Factors

BEI: Biological Exposure Index

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TEL (+61 3) 9572 4700.