

# **CRC(NZ) Hot Black Aerosol**

**CRC Industries (CRC Industries New Zealand)** 

Chemwatch: **25-0435**Version No: **6.1.1.1** 

Safety Data Sheet according to HSNO Regulations

Chemwatch Hazard Alert Code: 4

Issue Date: **01/11/2019**Print Date: **03/04/2020**S.GHS.NZL.EN

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

| Product Identifier            |                           |
|-------------------------------|---------------------------|
| Product name                  | CRC(NZ) Hot Black Aerosol |
| 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

|                          | High temperature aerosol paint.                                   |
|--------------------------|---|
| Relevant identified uses | Application is by spray atomisation from a hand held aerosol pack |
|                          | Use according to manufacturer's directions.                       |

# Details of the supplier of the safety data sheet

| Registered company name | CRC Industries (CRC Industries New Zealand)         |  |
|-------------------------|---|--|
| Address                 | 10 Highbrook Drive East Tamaki Auckland New Zealand |  |
| Telephone               | +64 9 272 2700                                      |  |
| Fax                     | +64 9 274 9696                                      |  |
| Website                 | www.crc.co.nz                                       |  |
| Email                   | customerservices@crc.co.nz                          |  |

# **Emergency telephone number**

| Association / Organisation        | CRC Industries (CRC Industries New Zealand)  |  |
|-----------------------------------|--|--|
| Emergency telephone numbers       | NZ Poisons Centre 0800 POISON (0800 764 766) |  |
| Other emergency telephone numbers | 111 (NZ Emergency Services)                  |  |

# **SECTION 2 HAZARDS IDENTIFICATION**

## Classification of the substance or mixture

| Classification <sup>[1]</sup>                   | Flammable Liquid Category 1, Acute Toxicity (Oral) Category 4, Acute Toxicity (Dermal) Category 4, Acute Toxicity (Inhalation Category 4, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2, Reproductive Toxicity Category 2, Specific target organ toxicity - single exposure Category 2, Specific target organ toxicity - single exposure Category 3 (narcotic effects), Spetarget organ toxicity - repeated exposure Category 2, Acute Aquatic Hazard Category 3, Chronic Aquatic Hazard Category 4, Acute Vertebrate Hazard Category 3 |  |
|---|---|--|
| Legend:   | 1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI  |  |
| Determined by Chemwatch using GHS/HSNO criteria | 3 1A 6 1D (dermal) 6 1D (inhalation) 6 1D (oral) 6 3A 6 4A 6 8B 6 9B 9 1D 9 3C  |  |

# Label elements

Hazard pictogram(s)







SIGNAL WORD

DANGER

| H224 | Extremely flammable liquid and vapour.                             |
|------|--|
| H302 | Harmful if swallowed.  |
| H312 | Harmful in contact with skin.                                      |
| H332 | Harmful if inhaled.  |
| H315 | Causes skin irritation.  |
| H319 | Causes serious eye irritation.                                     |
| H361 | Suspected of damaging fertility or the unborn child.               |
| H371 | May cause damage to organs.  |
| H336 | May cause drowsiness or dizziness.                                 |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H402 | Harmful to aquatic life.   |
| H413 | May cause long lasting harmful effects to aquatic life.            |
| H433 | Harmful to terrestrial vertebrates.                                |

# Precautionary statement(s) Prevention

| P201 | Obtain special instructions before use.  |  |
|------|--|--|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |  |
| P260 | Do not breathe mist/vapours/spray.   |  |
| P271 | Use only outdoors or in a well-ventilated area.  |  |

# Precautionary statement(s) Response

| P321           | Specific treatment (see advice on this label).   |  |
|----------------|--|--|
| P370+P378      | In case of fire: Use alcohol resistant foam or normal protein foam to extinguish.  |  |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |  |
| P308+P311      | IF exposed or concerned: Call a POISON CENTER/doctor/physician/first aider.  |  |

# 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 to authorised hazardous or special waste collection point in accordance with any local regulation.

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

# Substances

See section below for composition of Mixtures

# Mixtures

| CAS No      | %[weight] | Name                   |
|-------------|-----------|------------------------|
| 1330-20-7   | 30-60     | xylene                 |
| 108-88-3    | 10-30     | toluene                |
| 67-64-1     | 10-30     | acetone                |
| 78-93-3     | 1-10      | methyl ethyl ketone    |
| 68476-85-7. | 25-35     | hydrocarbon propellant |

# **SECTION 4 FIRST AID MEASURES**

# **Description of first aid measures**

| Eye Contact  | <ul> <li>If aerosols come in contact with the eyes:</li> <li>Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes with fresh running water.</li> <li>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.</li> <li>Transport to hospital or doctor without delay.</li> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul> |
|--------------|---|
| Skin Contact | If solids or aerosol mists are deposited upon the skin:  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 | <ul> <li>If aerosols, fumes or combustion products are inhaled:</li> <li>Remove to fresh air.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>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.</li> <li>Transport to hospital, or doctor.</li> </ul> |
|------------|---|
| Ingestion  | <ul> <li>Avoid giving milk or oils.</li> <li>Avoid giving alcohol.</li> <li>Not considered a normal route of entry.</li> </ul>  |

#### Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

For acute or short term repeated exposures to acetone:

- Symptoms of acetone exposure approximate ethanol intoxication.
- About 20% is expired by the lungs and the rest is metabolised. Alveolar air half-life is about 4 hours following two hour inhalation at levels near the Exposure Standard; in overdose, saturable metabolism and limited clearance, prolong the elimination half-life to 25-30 hours.
- ▶ There are no known antidotes and treatment should involve the usual methods of decontamination followed by supportive care.

[Ellenhorn and Barceloux: Medical Toxicology]

Management:

Measurement of serum and urine acetone concentrations may be useful to monitor the severity of ingestion or inhalation.

Inhalation Management:

- Maintain a clear airway, give humidified oxygen and ventilate if necessary.
- If respiratory irritation occurs, assess respiratory function and, if necessary, perform chest X-rays to check for chemical pneumonitis.
- ▶ Consider the use of steroids to reduce the inflammatory response.
- ► Treat pulmonary oedema with PEEP or CPAP ventilation.

Dermal Management:

- Remove any remaining contaminated clothing, place in double sealed, clear bags, label and store in secure area away from patients and staff.
- Irrigate with copious amounts of water.
- ▶ An emollient may be required.

Eve Management:

- ▶ Irrigate thoroughly with running water or saline for 15 minutes.
- ▶ Stain with fluorescein and refer to an ophthalmologist if there is any uptake of the stain.

Oral Management:

- ► No GASTRIC LAVAGE OR EMETIC
- Encourage oral fluids.

Systemic Management:

- Monitor blood glucose and arterial pH.
- Ventilate if respiratory depression occurs.
- ▶ If patient unconscious, monitor renal function.
- Symptomatic and supportive care.

The Chemical Incident Management Handbook:

Guy's and St. Thomas' Hospital Trust, 2000

**BIOLOGICAL EXPOSURE INDEX** 

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

Determinant
Sampling Time
Index
Comments
Acetone in urine
End of shift
50 mg/L
NS

NS: Non-specific determinant; also observed after exposure to other material

Following acute or short term repeated exposures to toluene:

- Toluene is absorbed across the alveolar barrier, the blood/air mixture being 11.2/15.6 (at 37 degrees C.) The concentration of toluene, in expired breath, is of the order of 18 ppm following sustained exposure to 100 ppm. The tissue/blood proportion is 1/3 except in adipose where the proportion is 8/10.
- Metabolism by microsomal mono-oxygenation, results in the production of hippuric acid. This may be detected in the urine in amounts between 0.5 and 2.5 g/24 hr which represents, on average 0.8 gm/gm of creatinine. The biological half-life of hippuric acid is in the order of 1-2 hours.
- ▶ Primary threat to life from ingestion and/or inhalation is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (eg 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 damage 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 (adrenaline) 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.
- Lavage is indicated in patients who require decontamination; ensure use.

#### **BIOLOGICAL EXPOSURE INDEX - BEI**

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

DeterminantIndexSampling TimeCommentso-Cresol in urine0.5 mg/LEnd of shiftBHippuric acid in urine1.6 g/g creatinineEnd of shiftB, NS

Toluene in blood 0.05 mg/L Prior to last shift of workweek

NS: Non-specific determinant; also observed after exposure to other material

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**

SMALL FIRE:

▶ Water spray, dry chemical or CO2

LARGE FIRE:

Water spray or fog.

## Special hazards arising from the substrate or mixture

| Fire Incompatibility    | <ul> <li>Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may<br/>result</li> </ul> |
|-------------------------|--|
| Advice for firefighters |  |
|                         | <ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> </ul>  |
| Eiro Eighting           | ► May be violently or explosively reactive.  |
| Fire Fighting           | <ul> <li>Wear breathing apparatus plus protective gloves.</li> </ul>   |

• Prevent, by any means available, spillage from entering drains or water course.

► 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.

Fire/Explosion Hazard Combustion products include:

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.

## **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>Clean up all spills immediately.</li> <li>Avoid breathing vapours and contact with skin and eyes.</li> <li>Wear protective clothing, impervious gloves and safety glasses.</li> <li>Shut off all possible sources of ignition and increase ventilation.</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> <li>May be violently or explosively reactive.</li> <li>Wear breathing apparatus plus protective gloves.</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

- ► 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

- 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

- Aerosol dispenser.
- Check that containers are clearly labelled.

## 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  |
|---|------------------------|---------------------------------------|--------------------------|--------------------------|------------------|--|
| New Zealand Workplace<br>Exposure Standards (WES) | xylene                 | Dimethylbenzene                       | 50 ppm /<br>217 mg/m3    | Not Available            | Not<br>Available | Not Available  |
| New Zealand Workplace<br>Exposure Standards (WES) | toluene                | Toluene (Toluol)                      | 50 ppm /<br>188 mg/m3    | Not Available            | Not<br>Available | skin-Skin absorption   |
| New Zealand Workplace<br>Exposure Standards (WES) | acetone                | Acetone                               | 500 ppm /<br>1185 mg/m3  | 2375 mg/m3 /<br>1000 ppm | Not<br>Available | bio-Exposure can also be estimated by biological monitoring. |
| New Zealand Workplace<br>Exposure Standards (WES) | methyl ethyl<br>ketone | MEK (Methyl ethyl ketone, 2-Butanone) | 150 ppm /<br>445 mg/m3   | 890 mg/m3 /<br>300 ppm   | Not<br>Available | bio-Exposure can also be estimated by biological monitoring. |
| New Zealand Workplace<br>Exposure Standards (WES) | hydrocarbon propellant | LPG (Liquefied petroleum gas)         | 1000 ppm /<br>1800 mg/m3 | Not Available            | Not<br>Available | Not Available  |

#### **EMERGENCY LIMITS**

| Ingredient             | Material name                            | TEEL-1        | TEEL-2        | TEEL-3        |
|------------------------|--|---------------|---------------|---------------|
| xylene                 | Xylenes                                  | Not Available | Not Available | Not Available |
| toluene                | Toluene                                  | Not Available | Not Available | Not Available |
| acetone                | Acetone                                  | Not Available | Not Available | Not Available |
| methyl ethyl ketone    | Butanone, 2-; (Methyl ethyl ketone; MEK) | Not Available | Not Available | Not Available |
| hydrocarbon propellant | Liquified petroleum gas; (L.P.G.)        | 65,000 ppm    | 2.30E+05 ppm  | 4.00E+05 ppm  |

| Ingredient             | Original IDLH | Revised IDLH  |
|------------------------|---------------|---------------|
| xylene                 | 900 ppm       | Not Available |
| toluene                | 500 ppm       | Not Available |
| acetone                | 2,500 ppm     | Not Available |
| methyl ethyl ketone    | 3,000 ppm     | Not Available |
| hydrocarbon propellant | 2,000 ppm     | Not Available |

## **Exposure controls**

# Appropriate engineering controls

**CARE:** Use of a quantity of this material in confined space or poorly ventilated area, where rapid build up of concentrated atmosphere may occur, could require increased ventilation and/or protective gear

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 | <ul> <li>Safety glasses with side shields.</li> <li>Chemical goggles.</li> <li>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.</li> </ul>   |
|-------------------------|---|
| Skin protection         | See Hand protection below   |
| Hands/feet protection   | <ul> <li>No special equipment needed when handling small quantities.</li> <li>OTHERWISE:</li> <li>For potentially moderate exposures:</li> <li>Wear general protective gloves, eg. light weight rubber gloves.</li> <li>For potentially heavy exposures:</li> <li>Wear chemical protective gloves, eg. PVC. and safety footwear.</li> </ul>   |
| Body protection         | See Other protection below  |
| Other protection        | No special equipment needed when handling small quantities.  OTHERWISE:  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. |

#### 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:

CRC(NZ) Hot Black Aerosol

| Material          | СРІ |
|-------------------|-----|
| PE/EVAL/PE        | A   |
| TEFLON            | В   |
| BUTYL             | С   |
| BUTYL/NEOPRENE    | С   |
| CPE               | С   |
| HYPALON           | С   |
| NAT+NEOPR+NITRILE | С   |
| NATURAL RUBBER    | С   |
| NATURAL+NEOPRENE  | С   |
| NEOPRENE          | С   |
| NEOPRENE/NATURAL  | С   |
| NITRILE           | С   |
| NITRILE+PVC       | С   |
| PVA               | С   |
| PVC               | С   |
| PVDC/PE/PVDC      | С   |
| SARANEX-23        | С   |
| SARANEX-23 2-PLY  | С   |
| VITON             | С   |
| VITON/CHLOROBUTYL | С   |
| VITON/NEOPRENE    | С   |

#### \* 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.

## Respiratory protection

Type AX 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<br>Protection Factor | Half-Face<br>Respirator | Full-Face<br>Respirator | Powered Air<br>Respirator |
|---------------------------------------|-------------------------|-------------------------|---------------------------|
| up to 5 x ES                          | AX-AUS /<br>Class 1     | -                       | AX-PAPR-AUS /<br>Class 1  |
| up to 25 x ES                         | Air-line*               | AX-2                    | AX-PAPR-2                 |
| up to 50 x ES                         | -                       | AX-3                    | -                         |
| 50+ x ES                              | -                       | Air-line**              | -                         |

#### ^ - Full-face

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

- 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.
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

#### Information on basic physical and chemical properties

| _ |          |    |
|---|----------|----|
| Δ | ppearand | ٠. |
| _ | ppcarant | ,, |

Black flammable liquid with a strong solvent odour; not miscible with water.

Supplied as an aerosol pack. Contents under PRESSURE. Contains highly flammable hydrocarbon propellant.

| Physical state                               | Liquid            | Relative density (Water = 1)            | Not Available  |
|--|-------------------|---|----------------|
| Odour  | Not Available     | Partition coefficient n-octanol / water | Not Available  |
| Odour threshold                              | Not Available     | Auto-ignition temperature (°C)          | Not Available  |
| pH (as supplied)                             | Not 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)                             | -81 (propellant)  | 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                          | Immiscible        | pH as a solution (1%)                   | Not Applicable |
| Vapour density (Air = 1)                     | >1                | VOC g/L                                 | Not Available  |

#### **SECTION 10 STABILITY AND REACTIVITY**

| Reactivity                         | See section 7  |
|------------------------------------|--|
| Chemical stability                 | <ul> <li>Elevated temperatures.</li> <li>Presence of open flame.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul> |
| 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

Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful. 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.

There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.

The acute toxicity of inhaled alkylbenzene is best described by central nervous system depression. These compounds may also act as general anaesthetics. Whole body symptoms of poisoning include light-headedness, nervousness, apprehension, a feeling of well-being, confusion, dizziness, drowsiness, ringing in the ears, blurred or double vision, vomiting and sensations of heat, cold or numbness, twitching, tremors, convulsions, unconsciousness, depression of breathing, and arrest. Heart stoppage may result from cardiovascular collapse.

#### Inhaled

Inhalation of toxic gases may cause:

- ► Central Nervous System effects including depression, headache, confusion, dizziness, stupor, coma and seizures;
- respiratory: acute lung swellings, shortness of breath, wheezing, rapid breathing, other symptoms and respiratory arrest;
- heart: collapse, irregular heartbeats and cardiac arrest;
- gastrointestinal: irritation, ulcers, nausea and vomiting (may be bloody), and abdominal pain.

Inhalation hazard is increased at higher temperatures.

Inhaling high concentrations of mixed hydrocarbons can cause narcosis, with nausea, vomiting and lightheadedness. Low molecular weight (C2-C12) hydrocarbons can irritate mucous membranes and cause incoordination, giddiness, nausea, vertigo, confusion, headache, appetite loss, drowsiness, tremors and stupor.

Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal.

|              | 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.   |
|--------------|--|
|              | 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. Symptoms of asphyxia (suffocation) may include headache, dizziness, shortness of breath, muscular weakness, drowsiness and ringing in the ears. If the asphyxia is allowed to progress, there may be nausea and vomiting, further physical weakness and unconsciousness and, finally, convulsions, coma and death.  WARNING:Intentional misuse by concentrating/inhaling contents may be lethal.  |
| Ingestion    | Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.  Not normally a hazard due to physical form of product.  Considered an unlikely route of entry in commercial/industrial environments  Not a likely route of entry into the body in commercial or industrial environments. The liquid may produce considerable gastrointestinal discomfort and be harmful or toxic if swallowed.  |
| Skin Contact | Skin contact with the material may be harmful; systemic effects may result following absorption.  The material may cause moderate 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.  Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.  Spray mist may produce discomfort  Open cuts, abraded or irritated skin should not be exposed to this material  |
| Еуе          | There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain.  Not considered to be a risk because of the extreme volatility of the gas.   |
| Chronic      | Harmful: danger of serious damage to health by prolonged exposure through inhalation.  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 defects.  Based on experience with animal studies, exposure to the material may result in toxic effects to the development of the foetus, at levels which do not cause significant toxic effects to the mother.  Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following.  There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment.  Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.  Main route of exposure to the gas in the workplace is by inhalation.  Constant or exposure over long periods to mixed hydrocarbons may produce stupor with dizziness, weakness and visual disturbance, weight loss and anaemia, and reduced liver and kidney function. Skin exposure may result in drying and cracking and redness of the skin.  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.  Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS] |
|              |  |

| CRC(NZ) Hot Black | TOXICITY   | IRRITATION   |
|-------------------|--|--|
| Aerosol           | Not Available  | Not Available  |
|                   | TOXICITY   | IRRITATION   |
|                   | Dermal (rabbit) LD50: >1700 mg/kg <sup>[2]</sup>       | Eye (human): 200 ppm irritant                                    |
|                   | Inhalation (rat) LC50: 4994.295 mg/l/4h <sup>[2]</sup> | Eye (rabbit): 5 mg/24h SEVERE                                    |
| xylene            | Oral (rat) LD50: 3523-8700 mg/kg <sup>[2]</sup>        | Eye (rabbit): 87 mg mild   |
|                   |  | Eye: adverse effect observed (irritating) <sup>[1]</sup>         |
|                   |  | Skin (rabbit):500 mg/24h moderate                                |
|                   |  | Skin: adverse effect observed (irritating) <sup>[1]</sup>        |
|                   | TOXICITY   | IRRITATION   |
|                   | dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup>          | Eye (rabbit): 2mg/24h - SEVERE                                   |
|                   | Inhalation (rat) LC50: 49 mg/l/4H <sup>[2]</sup>       | Eye (rabbit):0.87 mg - mild                                      |
|                   | Oral (rat) LD50: 636 mg/kg <sup>[2]</sup>              | Eye (rabbit):100 mg/30sec - mild                                 |
| toluene           |  | Eye: adverse effect observed (irritating) <sup>[1]</sup>         |
|                   |  | Skin (rabbit):20 mg/24h-moderate                                 |
|                   |  | Skin (rabbit):500 mg - moderate                                  |
|                   |  | Skin: adverse effect observed (irritating) <sup>[1]</sup>        |
|                   |  | Skin: no adverse effect observed (not irritating) <sup>[1]</sup> |
| acetone           | TOXICITY   | IRRITATION   |
|                   | Dermal (rabbit) LD50: =20 mg/kg <sup>[2]</sup>         | Eye (human): 500 ppm - irritant                                  |
|                   | Inhalation (rat) LC50: 100.2 mg/l/8hr <sup>[2]</sup>   | Eye (rabbit): 20mg/24hr -moderate                                |

|                        | Oral (rat) LD50: 1800-7300 mg/kg <sup>[2]</sup>  | Eye (rabbit): 3.95 mg - SEVERE                                     |  |
|------------------------|--|--|--|
|                        |  | Eye: adverse effect observed (irritating) <sup>[1]</sup>           |  |
|                        |  | Skin (rabbit): 500 mg/24hr - mild                                  |  |
|                        |  | Skin (rabbit):395mg (open) - mild                                  |  |
|                        |  | Skin: no adverse effect observed (not irritating) <sup>[1]</sup>   |  |
|                        | TOXICITY   | IRRITATION   |  |
|                        | Dermal (rabbit) LD50: ~6400-8000 mg/kg <sup>[2]</sup>  | Eye (human): 350 ppm -irritant                                     |  |
| methyl ethyl ketone    | Inhalation (rat) LC50: 47 mg/l/8H <sup>[2]</sup> Eye (rabbit): 80 mg - irritant                        |  |  |
|                        | Oral (rat) LD50: 2054 mg/kg <sup>[1]</sup>   | Skin (rabbit): 402 mg/24 hr - mild                                 |  |
|                        |  | Skin (rabbit):13.78mg/24 hr open                                   |  |
| hydrocarbon propellant | TOXICITY   | IRRITATION   |  |
|                        | Not Available  | Not Available  |  |
| Legend:                | Value obtained from Europe ECHA Registered Subst   | ances - Acute toxicity 2.* Value obtained from manufacturer's SDS. |  |
|                        | Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances |  |  |

| XYLENE  | Reproductive effector in rats The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing.   |  |  |
|---|---|--|--|
| METHYL ETHYL KETONE   | 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.  Methyl ethyl ketone is considered to have a low order of toxicity; however, methyl ethyl ketone is often used in combination with other solvents and the mixture may have greater toxicity than either solvent alone. Combinations of n-hexane with methyl ethyl ketone, and also methyl n-butyl ketone with methyl ethyl ketone may result in an increased in peripheral neuropathy, a progressive disorder of the nerves of the extremities. Combinations with chloroform also show an increase in toxicity. |  |  |
| HYDROCARBON<br>PROPELLANT   | No significant acute toxicological data identified in literature search. inhalation of the gas  |  |  |
| CRC(NZ) Hot Black<br>Aerosol & XYLENE   | The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.  |  |  |
| CRC(NZ) Hot Black<br>Aerosol & XYLENE &<br>TOLUENE & ACETONE &<br>METHYL ETHYL KETONE | 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.   |  |  |
| CRC(NZ) Hot Black<br>Aerosol & TOLUENE  | For toluene: Acute toxicity: Humans exposed to high levels of toluene for short periods of time experience adverse central nervous system effects ranging from headaches to intoxication, convulsions, narcosis (sleepiness) and death. When inhaled or swallowed, toluene can cause severe central nervous system depression, and in large doses has a narcotic effect. 60mL has caused death. Death of heart muscle fibres, liver swelling, congestion and bleeding of the lungs and kidney injury were all found on autopsy. Exposure to inhalation at a concentration of 600 parts per million for 8 hours resulted in the same and more serious symptoms including euphoria (a feeling of well-being), dilated pupils, convulsions and nausea.   |  |  |
| CRC(NZ) Hot Black<br>Aerosol & ACETONE  | For acetone: The acute toxicity of acetone is low. Acetone is not a skin irritant or sensitizer, but it removes fat from the skin, and it also irritates the eye. Animal testing shows acetone may cause macrocytic anaemia. Studies in humans have shown that exposure to acetone at a level of 2375 mg/cubic metre has not caused neurobehavioural deficits.  |  |  |
| Acute Toxicity  | Carcinogenicity   |  |  |

| Acute Toxicity                    | ~        | Carcinogenicity          | ×        |
|-----------------------------------|----------|--------------------------|----------|
| Skin Irritation/Corrosion         | <b>✓</b> | Reproductivity           | ✓        |
| Serious Eye<br>Damage/Irritation  | <b>~</b> | STOT - Single Exposure   | <b>~</b> |
| Respiratory or Skin sensitisation | ×        | STOT - Repeated Exposure | <b>✓</b> |
| Mutagenicity                      | ×        | Aspiration Hazard        | ×        |

**Legend: X** − Data either not available or does not fill the criteria for classification

✓ – Data available to make classification

# **SECTION 12 ECOLOGICAL INFORMATION**

| CRC(NZ) Hot Black<br>Aerosol | ENDPOINT                    | TEST DURATION (HR)   | SPECIES  | VALUE  | SOURCE           |
|------------------------------|-----------------------------|--|--|--|------------------|
|                              | Not<br>Available            | Not Available  | Not Available  | Not<br>Available                                 | Not<br>Available |
|                              | ENDPOINT                    | TEST DURATION (HR)   | SPECIES  | VALUE  | SOURCE           |
|                              | LC50                        | 96   | Fish   | 2.6mg/L  | 2                |
| xylene                       | EC50                        | 48   | Crustacea  | 1.8mg/L  | 2                |
|                              | EC50                        | 72   | Algae or other aquatic plants  | 3.2mg/L  | 2                |
|                              | NOEC                        | 73   | Algae or other aquatic plants  | 0.44mg/L   | 2                |
|                              | ENDPOINT                    | TEST DURATION (HR)   | SPECIES  | VALUE  | SOURCE           |
|                              | LC50                        | 96   | Fish   | 0.0073mg/L                                       | 4                |
|                              | EC50                        | 48   | Crustacea  | 3.78mg/L   | 5                |
| toluene                      | EC50                        | 72   | Algae or other aquatic plants  | 12.5mg/L   | 4                |
|                              | BCF                         | 24   | Algae or other aquatic plants  | 10mg/L   | 4                |
|                              | NOEC                        | 168  | Crustacea  | 0.74mg/L   | 5                |
|                              | ENDPOINT                    | TEST DURATION (HR)   | SPECIES  | VALUE  | SOURCE           |
|                              | LC50                        | 96   | Fish   | 5-540mg/L  | 2                |
| acetone                      | EC50                        | 48   | Crustacea  | >100mg/L   | 4                |
|                              | EC50                        | 96   | Algae or other aquatic plants  | 20.565mg/L                                       | 4                |
|                              | NOEC                        | 240  | Crustacea  | 1-866mg/L  | 2                |
|                              | ENDPOINT                    | TEST DURATION (HR)   | SPECIES  | VALUE  | SOURCE           |
|                              | LC50                        | 96   | Fish   | 2-993mg/L  | 2                |
|                              | EC50                        | 48   | Crustacea  | 5-91mg/L   | 2                |
| methyl ethyl ketone          | EC50                        | 72   | Algae or other aquatic plants  | 1-972mg/L  | 2                |
|                              | EC0                         | 96   | Fish   | 1-848mg/L  | 2                |
|                              | NOEC                        | 96   | Fish   | 1-170mg/L  | 2                |
|                              | ENDPOINT                    | TEST DURATION (HR)   | SPECIES  | VALUE  | SOURCE           |
|                              | LC50                        | 96   | Fish   | 24.11mg/L  | 2                |
| hydrocarbon propellant       | EC50                        | 96   | Algae or other aquatic plants  | 7.71mg/L   | 2                |
|                              | LC50                        | 96   | Fish   | 24.11mg/L  | 2                |
|                              | EC50                        | 96   | Algae or other aquatic plants  | 7.71mg/L   | 2                |
| Legend:                      | Extracted from 3. EPIWIN Su | n 1. IUCLID Toxicity Data 2. Europe<br>ite V3.12 (QSAR) - Aquatic Toxicity | ECHA Registered Substances - Ecotoxicologi<br>Data (Estimated) 4. US EPA, Ecotox database<br>TE (Japan) - Bioconcentration Data 7. METI (J | ical Information - Aqu<br>e - Aquatic Toxicity D | atic Tox         |

Harmful to aquatic organisms.

For Aromatic Substances Series:

Environmental Fate: Large, molecularly complex polycyclic aromatic hydrocarbons, or PAHs, are persistent in the environment longer than smaller PAHs. Atmospheric Fate: PAHs are 'semi-volatile substances" which can move between the atmosphere and the Earth's surface in repeated, temperature-driven cycles of deposition and volatilization. Terrestrial Fate: BTEX compounds have the potential to move through soil and contaminate ground water, and their vapors are highly flammable and explosive.

Ecotoxicity - Within an aromatic series, acute toxicity increases with increasing alkyl substitution on the aromatic nucleus.

For Methyl Ethyl Ketone:

log Kow: 0.26-0.69;

log Koc: 0.69;

Koc: 34;

Half-life (hr) air: 2.3;

Half-life (hr) H2O surface water: 72-288;

Henry's atm m3 /mol: 1.05E-05;

BOD 5: 1.5-2.24, 46%; COD: 2.2-2.31, 100%;

ThOD: 2.44; BCF: 1.

Environmental Fate: Terrestrial Fate - Measured Koc values of 29 and 34 were obtained for methyl ethyl ketone in silt loams. Methyl ethyl ketone is expected to have very high mobility in soil. Volatilization of methyl ethyl ketone from moist and dry soil surfaces is expected.

For Xylenes:

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

Environmental Fate: Most xylenes released to the environment will occur in the atmosphere and volatilisation is the dominant environmental fate process. Soil - Xylenes are expected to have moderate mobility in soil evaporating rapidly from soil surfaces. The extent of the degradation is expected to depend on its

concentration, residence time in the soil, the nature of the soil, and whether resident microbial populations have been acclimated.

For Ketones: Ketones, unless they are alpha, beta--unsaturated ketones, can be considered as narcosis or baseline toxicity compounds.

Aquatic Fate: Hydrolysis of ketones in water is thermodynamically favourable only for low molecular weight ketones. Reactions with water are reversible with no permanent change in the structure of the ketone substrate. Ketones are stable to water under ambient environmental conditions.

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 surface water: 5.55-528; Half-life (hr) H2O ground: 168-2628;

Half-life (hr) soil : <48-240; Henry's Pa m3 /mol : 518-694; Henry's atm 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. The main degradation pathway for toluene in the atmosphere is reaction with photochemically produced hydroxyl radicals. The estimated atmospheric half life for toluene is about 13 hours.

#### 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: 2.2BCF: 0.69

Environmental Fate: The relatively long half-life allows acetone to be transported long distances from its emission source.

Atmospheric Fate: Acetone preferentially locates in the air compartment when released to the environment. 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                 |
|---------------------|-----------------------------|----------------------------------|
| xylene              | HIGH (Half-life = 360 days) | LOW (Half-life = 1.83 days)      |
| toluene             | LOW (Half-life = 28 days)   | LOW (Half-life = 4.33 days)      |
| acetone             | LOW (Half-life = 14 days)   | MEDIUM (Half-life = 116.25 days) |
| methyl ethyl ketone | LOW (Half-life = 14 days)   | LOW (Half-life = 26.75 days)     |

## **Bioaccumulative potential**

| Ingredient          | Bioaccumulation     |
|---------------------|---------------------|
| xylene              | MEDIUM (BCF = 740)  |
| toluene             | LOW (BCF = 90)      |
| acetone             | LOW (BCF = 0.69)    |
| methyl ethyl ketone | LOW (LogKOW = 0.29) |

# Mobility in soil

| Ingredient          | Mobility             |
|---------------------|----------------------|
| toluene             | LOW (KOC = 268)      |
| acetone             | HIGH (KOC = 1.981)   |
| methyl ethyl ketone | MEDIUM (KOC = 3.827) |

#### **SECTION 13 DISPOSAL CONSIDERATIONS**

disposal

#### Waste treatment methods

- ▶ 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.
- Product / Packaging 
   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.

#### **Disposal Requirements**

Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the package. The package must be disposed according to the manufacturer's directions taking into account the material it is made of. Packages which hazardous content have been appropriately treated and removed may be recycled.

The hazardous substance must only be disposed if it has been treated by a method that changed the characteristics or composition of the substance and it is no longer hazardous.

# **SECTION 14 TRANSPORT INFORMATION**

## **Labels Required**

|                  | 2              |
|------------------|----------------|
| Marine Pollutant | NO             |
| HAZCHEM          | Not Applicable |

# Land transport (UN)

| UN number                    | 1950   |  |  |
|------------------------------|--|--|--|
| UN proper shipping name      | EROSOLS  |  |  |
| Transport hazard class(es)   | Class 2.1 Subrisk Not Applicable   |  |  |
| Packing group                | Not Applicable   |  |  |
| Environmental hazard         | Not Applicable   |  |  |
| Special precautions for user | Special provisions         63; 190; 277; 327; 344; 381           Limited quantity         1000ml |  |  |

# Air transport (ICAO-IATA / DGR)

| UN number                    | 1950  |     |                |  |
|------------------------------|---|-----|----------------|--|
| UN proper shipping name      | Aerosols, flammable                                       |     |                |  |
|                              | ICAO/IATA Class 2.1                                       |     |                |  |
| Transport hazard class(es)   | ICAO / IATA Subrisk Not Applicable                        |     |                |  |
|                              | ERG Code  | 10L |                |  |
| Packing group                | Not Applicable  |     |                |  |
| Environmental hazard         | Not Applicable  |     |                |  |
|                              | Special provisions  |     | A145 A167 A802 |  |
|                              | Cargo Only Packing Instructions                           |     | 203            |  |
|                              | Cargo Only Maximum Qty / Pack                             |     | 150 kg         |  |
| Special precautions for user | Passenger and Cargo Packing Instructions                  |     | 203            |  |
|                              | Passenger and Cargo Maximum Qty / Pack                    |     | 75 kg          |  |
|                              | Passenger and Cargo Limited Quantity Packing Instructions |     | Y203           |  |
|                              | Passenger and Cargo Limited Maximum Qty / Pack            |     | 30 kg G        |  |

# 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         63 190 277 327 344 381 959           Limited Quantities         1000 ml |  |  |

#### **SECTION 15 REGULATORY INFORMATION**

#### Safety, health and environmental regulations / legislation specific for the substance or mixture

This substance is to be managed using the conditions specified in an applicable Group Standard

| HSR Number | Group Standard                           |  |
|------------|--|--|
| HSR002515  | Aerosols (Flammable) Group Standard 2017 |  |

#### XYLENE IS FOUND ON THE FOLLOWING REGULATORY LISTS

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

New Zealand Approved Hazardous Substances with controls

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals

New Zealand Hazardous Substances and New Organisms (HSNO) Act Classification of Chemicals - Classification Data
New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

#### **TOLUENE IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Chemical Footprint Project - Chemicals of High Concern List International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

New Zealand Approved Hazardous Substances with controls
New Zealand Hazardous Substances and New Organisms (HSNO) Act Classification of Chemicals

New Zealand Hazardous Substances and New Organisms (HSNO) Act Classification of Chemicals - Classification Data
New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

#### ACETONE IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Approved Hazardous Substances with controls

New Zealand Hazardous Substances and New Organisms (HSNO) Act Classification of Chemicals

New Zealand Hazardous Substances and New Organisms (HSNO) Act -

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data

New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

#### METHYL ETHYL KETONE IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Approved Hazardous Substances with controls

New Zealand Hazardous Substances and New Organisms (HSNO) Act Classification of Chemicals

New Zealand Hazardous Substances and New Organisms (HSNO) Act -

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data

New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

#### HYDROCARBON PROPELLANT IS FOUND ON THE FOLLOWING REGULATORY LISTS

Chemical Footprint Project - Chemicals of High Concern List

New Zealand Approved Hazardous Substances with controls

New Zealand Hazardous Substances and New Organisms (HSNO) Act 
Classification of Chemicals

New Zealand Hazardous Substances and New Organisms (HSNO) Act Classification of Chemicals - Classification Data
New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

#### **Hazardous Substance Location**

Subject to the Health and Safety at Work (Hazardous Substances) Regulations 2017.

| Hazard Class | Quantity beyond which controls apply for closed containers | Quantity beyond which controls apply when use occurring in open containers |  |
|--------------|--|--|--|
| 3.1A         | 20 L   | 20 L   |  |

# Certified Handler

Subject to Part 4 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

| Class of substance | Quantities |
|--------------------|------------|
| 3.1A               | Any amount |

Refer Group Standards for further information

## **Tracking Requirements**

Subject to tracking according to the Health and Safety at Work (Hazardous Substances) Regulations 2017

- Refer to the regulation for more information

#### **National Inventory Status**

| National Inventory | Status |
|--------------------|--------|
| Australia - AICS   | Yes    |
| Canada - DSL       | Yes    |

| Canada - NDSL                    | No (toluene; acetone; xylene; hydrocarbon propellant; methyl ethyl ketone)  |  |  |
|----------------------------------|---|--|--|
| China - IECSC                    | Yes   |  |  |
| Europe - EINEC / ELINCS /<br>NLP | Yes   |  |  |
| Japan - ENCS                     | Yes   |  |  |
| Korea - KECI                     | Yes   |  |  |
| New Zealand - NZIoC              | Yes   |  |  |
| Philippines - PICCS              | Yes   |  |  |
| USA - TSCA                       | Yes   |  |  |
| Taiwan - TCSI                    | Yes   |  |  |
| Mexico - INSQ                    | Yes   |  |  |
| Vietnam - NCI                    | Yes   |  |  |
| Russia - ARIPS                   | Yes   |  |  |
| Legend:                          | Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets) |  |  |

#### **SECTION 16 OTHER INFORMATION**

| Revision Date | 01/11/2019 |
|---------------|------------|
| Initial Date  | 13/10/2010 |

## **SDS Version Summary**

| Version | Issue Date | Sections Updated   |
|---------|------------|--|
| 4.1.1.1 | 05/10/2017 | Fire Fighter (fire/explosion hazard), Physical Properties, Spills (major)      |
| 6.1.1.1 | 01/11/2019 | One-off system update. NOTE: This may or may not change the GHS classification |

#### 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.