

## Section 1 Identification of Chemical Product and Company

| Code  | Description         | Size   | Colour |
|-------|---------------------|--------|--------|
| 01305 | Soudal 2C Activator | 200 ml | n/a    |

|  |                 |   |
|--|-----------------|---|
| Recommended use:                                     | Adhesive        |   |
| HSNO Group Standard                                  | HSR002515       |   |
| UN number, shipping name and packaging group:        | Not applicable  |   |
| Supplier contact details:                            | Soudal Ltd      | Freephone: 0800 70 10 80  |
|  | 14 Avalon Drive | Phone: (07) 847 5540  |
|  | Nawton          |   |
|  | Hamilton 3200   | Email: <a href="mailto:info@soudal.co.nz">info@soudal.co.nz</a> |
|  | New Zealand     | Website: <a href="http://www.soudal.co.nz">www.soudal.co.nz</a> |
| <b>POISON CENTRE NUMBER: 0800 764 766 (24 hours)</b> |                 |   |

## Section 2 Hazards Identification

### Statement of Hazardous Nature

This product is classified as:

**HAZARDOUS SUBSTANCE** according to the criteria of HSNO.

**REGULATED** under NZS5433:2007 Transport of Dangerous Goods on Land

### Hazardous Substances and New Organisms (HSNO) classification:

| Classification                           |               | GHS Hazard statements  |
|--|---------------|--|
| <b>Flammable Aerosol Category 1</b>      | <b>2.1.2A</b> | H222 Extremely flammable aerosol                                       |
| <b>Skin Effects Category 2</b>           | <b>6.3A</b>   | H315 Causes skin irritation  |
| <b>Eye Effects Category 2</b>            | <b>6.4A</b>   | H319 Causes serious eye irritation                                     |
| <b>Reproductive Toxicity Category 2</b>  | <b>6.8B</b>   | H361 Suspected of damaging fertility or the unborn child               |
| <b>STOT – SE Category 2</b>              | <b>6.9B</b>   | H371 May cause damage to organs  |
| <b>STOT – RE Category 2</b>              | <b>6.9B</b>   | H373 May cause damage to organs through prolonged or repeated exposure |
| <b>STOT – SE NE Category 3</b>           | <b>6.9</b>    | H336 May cause drowsiness or dizziness                                 |
| <b>Chronic Aquatic Hazard Category 2</b> | <b>9.1B</b>   | H411 Toxic to aquatic life with long lasting effects                   |

HSNO Signal Word:

**DANGER**



### Precautionary Statements:

Read label before use.

Keep out of reach of children

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Do not spray on any open flame or other ignition source

Do not pierce or burn even after use

Use only outdoors or in a well-ventilated area

Do not breathe mists/ gas/ vapours/ sprays

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

Do not eat, drink or smoke when using this product

Avoid release to the environment

In case of Fire: Use water spray/ fog to extinguish

Store locked up

Protect from sunlight. Do not expose to temperatures exceeding 50°C

Store in a well-ventilated place. Keep container tightly closed

### Section 3. Composition/Information on Ingredients

| Ingredient              | CAS No.    | Individual HSNO classification   | Concentration (% by Wt.) |
|-------------------------|------------|--|--------------------------|
| Hexane                  | 110-54-3   | Flammable Liquid Category 2; Acute Oral Toxicity Category 5; Skin Effects Category 3; Eye Effects Category 2; STOT – SE Category 1; STOT – RE Category 1; Chronic Aquatic Hazard Category 2                            | > 25                     |
| Liquified Petroleum Gas | 68476-85-7 | Flammable Gas Category 1   | > 1                      |
| 1,3-butadiene           | 106-99-0   | Flammable Gas Category 1; Eye Effects Category 2; Mutagenicity Category 1; Carcinogenicity Category 1; Reproductive Toxicity Category 2; STOT – SE Category 1; STOT – RE Category 1; Chronic Aquatic Hazard Category 4 | < 0.1                    |
| Dimethyl-p-toluidine    | 99-97-8    | Acute Oral Toxicity Category 4; Acute Dermal Toxicity Category 5; Acute Inhalation Toxicity Category 4; Skin Effects Category 3; STOT – SE Category 2; STOT – RE Category 2; Chronic Aquatic Hazard Category 3         |                          |

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non-hazardous ingredients are also possible.

### Section 4 First Aid Measures

**NZ Poisons Centre 0800 POISON (0800 764 766) | NZ Emergency Services: 111**

#### Eye contact:

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:

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:

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:

Not considered a normal route of entry. If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus. Avoid giving milk or oils. Avoid giving alcohol.

#### General advice and advice for physicians:

Treat symptomatically

### Section 5 Fire-Fighting Measures

#### Extinguishing media:

Foam. Dry chemical powder. Carbon dioxide.

Water spray or fog - Large fires only.

**Special hazards due to combustion:**

Extremely flammable. Excessive pressures may develop in a aerosol exposed in a fire; this may result in explosion. 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. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition with violent container rupture. Aerosol cans may explode on exposure to naked flames. Rupturing containers may rocket and scatter burning materials. Hazards may not be restricted to pressure effects. May emit acrid, poisonous or corrosive fumes.

**Advice for fire-fighters:**

Alert Fire & Emergency New Zealand and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water courses. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use.

**Section 6 Accidental Release Measures**

**Minor Spills**

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. Wipe up. If safe, damaged cans should be placed in a container outdoors, away from all ignition sources, until pressure has dissipated. Undamaged cans should be gathered and stowed safely.

**Major Spills**

Clear area of all unprotected personnel and move upwind. Alert Emergency Authority and advise them of the location and nature of hazard. May be violently or explosively reactive. Wear full body clothing with breathing apparatus plus protective gloves. Prevent by any means available, spillage from entering drains and water-courses. Consider evacuation. Shut off all possible sources of ignition and increase ventilation. No smoking or naked lights within area. Use extreme caution to prevent violent reaction. Stop leak only if safe to do so. Water spray or fog may be used to disperse/ absorb vapour. DO NOT enter confined space where gas may have collected. Keep area clear until gas has dispersed. Remove leaking aerosols to a safe place. Release pressure under safe, controlled conditions DO NOT exert excessive pressure on valve; DO NOT attempt to operate damaged valve. Absorb or cover spill with sand, earth, inert materials or vermiculite. If safe, damaged cans should be placed in a container outdoors, away from ignition sources, until pressure has dissipated. Undamaged cans should be gathered and stowed safely. Collect residues and seal in labelled drums for disposal.

**Section 7 Handling and Storage**

**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. DO NOT enter confined spaces until atmosphere has been checked. Avoid smoking, naked lights or ignition sources.

Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. DO NOT incinerate or puncture aerosol cans. DO NOT spray directly on humans, exposed food or food utensils. Avoid physical damage to containers. Always wash hands with soap and water after handling.

Work clothes should be laundered separately. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

**Storage:**

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. Contents under pressure. Store away from incompatible materials. Store in a cool, dry, well ventilated area. Avoid storage at temperatures higher than 40 °C. Store in an upright position. Protect containers against physical damage. Check regularly for spills and leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

**Section 8 Exposure Controls/Personal Protection**

**Exposure Limits**

| CAS no. | Substance or ingredient | WES-TWA | WES-STEL |
|---------|-------------------------|---------|----------|
|         |                         |         |          |

## SAFETY DATASHEET

|            |               |                        |          |  |
|------------|---------------|------------------------|----------|--|
| 110-54-3   | n-hexane      | 72 mg/m <sup>3</sup>   | 20 ppm   |  |
| 68476-85-7 | LPG           | 1800 mg/m <sup>3</sup> | 1000 ppm |  |
| 106-99-0   | 1,3-butadiene | 22 mg/m <sup>3</sup>   | 10 ppm   |  |






The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

### 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. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure. General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in specific circumstances. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

### Exposure controls:

| Control     | Protective measure  |
|-------------|---|
| Eye         | Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]  |
| Respiratory | Type A filter is recommended when exposure limits may be exceeded    |
| Skin        | No special equipment needed when handling small quantities. OTHERWISE: For potentially moderate exposures: Wear general protective gloves, eg. light weight Viton gloves. leather items, such as shoes, belts and watch-bands should be removed and destroyed.     |

## Section 9 Physical and Chemical Properties

### General substance properties:

| Property           | Details        |
|--------------------|----------------|
| Appearance         | Aerosol        |
| Odour              | Characteristic |
| pH                 | No data        |
| Vapour pressure    | No data        |
| Viscosity          | No data        |
| Boiling Point      | 64 - 72 °C     |
| Volatile materials | No data        |

|  |           |
|--|-----------|
| <b>Freezing/melting point</b>              | No data   |
| <b>Solubility</b>                          | No data   |
| <b>Specific gravity/density</b>            | 0.78 g/ml |
| <b>Flash point</b>                         | < 60 °C   |
| <b>Danger of explosion</b>                 | No data   |
| <b>Auto-ignition temperature</b>           | No data   |
| <b>Upper and lower flammability limits</b> | No data   |
| <b>Corrosiveness</b>                       | No data   |

## Section 10 Stability and Reactivity

### Stability:

Stable under normal conditions.

### Conditions to avoid:

Avoid heat, sparks, flames and any other sources of ignition.

### Incompatible materials to avoid:

Avoid contact with acids, bases, amines.

### Hazardous decomposition products:

Combustion will result in the release of carbon monoxide; carbon dioxide and other toxic vapours

## Section 11 Toxicological Information

| Test           | Data and symptoms of exposure  |
|----------------|--|
| <b>Inhaled</b> | The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. Clinical signs of intoxication include presence of destroyed blood pigment (methaemoglobin) in the blood and blood in the urine. Prolonged exposure can cause illness. Short term exposure in the air, can cause eye and upper respiratory tract irritation. Isobutane produces a dose dependent action and at high concentrations may cause numbness, suffocation, exhilaration, dizziness, headache, nausea, confusion, incoordination and unconsciousness in severe cases. The paraffin gases are practically not harmful at low doses. Higher doses may produce reversible brain and nerve depression and irritation. The vapour is discomforting <b>WARNING:</b> Intentional misuse by concentrating/inhaling contents may be lethal. Exposure to toxic levels of butadiene may cause dry nose, mouth and throat, also, fatigue, headache, falling sensation, nausea, respiratory paralysis, central nervous system depression, loss of consciousness and even death. Liver and kidney damage as well as genetic damage may occur.<br>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 incoordination. |
| <b>Oral</b>    | Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industrial environments Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. Isoparaffinic hydrocarbons cause temporary lethargy, weakness, incoordination and diarrhoea.   |
| <b>Dermal</b>  | The material may accentuate any pre-existing dermatitis condition Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions. Spray mist may produce discomfort. The diepoxide of butadiene has been reported to cause mild effect of causing skin tumours in mice when applied topically on its skin. Toxic  |

## SAFETY DATASHEET

|                |   |
|----------------|---|
|                | effects may result from skin absorption Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.  |
| <b>Eye</b>     | Not considered to be a risk because of the extreme volatility of the gas. Limited evidence or practical experience suggests, that the material may cause eye irritation in a substantial number of individuals. Prolonged eye contact may cause inflammation characterised by a temporary redness of the conjunctiva (similar to windburn).   |
| <b>Chronic</b> | Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems. Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. 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. Ample evidence from experiments exists that there is a suspicion this material directly reduces fertility. p-toluidine caused liver cancer in mice that were chronically exposed by mouth, but administration at the same dose did not cause cancer in rats. Most arylamines are very toxic to the blood cell-forming system, and they produce methaemoglobinaemia in humans. High doses congest the spleen and then cause formation of sarcomas (a type of malignant tumour). Main route of exposure to the gas in the workplace is by inhalation. Occupational exposure to 1,3-butadiene, enhanced or caused cancer at different body sites with significant associated mortality, in animal testing and on the basis of human data. The predominant tumours are lymphomas, cancers of the testes, stomach and intestines, breast, thyroid, pancreas, throat and womb. Chronic inhalation or skin exposure to n-hexane may cause damage to nerve ends in extremities, e.g. finger, toes with loss of sensation. gamma-diketones are generally toxic to the nervous system. They can occur as commercial products or as metabolic products. 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. |

|                      | Oral LD <sub>50</sub> mg/m <sup>3</sup> | Dermal LD <sub>50</sub> mg/m <sup>3</sup> | Inhalation LC <sub>50</sub> mg/L |
|----------------------|---|---|----------------------------------|
| n-hexane             | 15840                                   | 3000                                      | 47945,232 /4hr                   |
| 1,3-Butadiene        | 5480                                    |   | 285 /4hr                         |
| Dimethyl-p-toluidine | 980                                     | >2000                                     | 1.4/4hr                          |

## Section 12 Ecological Information

### Summary of Ecotoxicity

Toxic to aquatic life with long lasting effects. Wastes resulting from use of the product must be disposed of on site or at approved waste sites. Do NOT discharge to sewer or waterway

|                      | Fish mg/L                   | Crustacea mg/L              | Algae mg/L                   |
|----------------------|-----------------------------|-----------------------------|------------------------------|
| n-Hexane             | LC <sub>50</sub> 96hr 1.674 | EC <sub>50</sub> 48hr 21.85 | EC <sub>50</sub> 96hr 3.089  |
| LPG                  | LC <sub>50</sub> 96hr 24.11 |                             | EC <sub>50</sub> 96hr 7.71   |
| 1,3-Butadiene        | LC <sub>50</sub> 96hr 8.734 | EC <sub>50</sub> 48hr 33    | EC <sub>50</sub> 96hr 11     |
| Dimethyl-p-toluidine | LC <sub>50</sub> 96hr 6.846 | EC <sub>50</sub> 48hr 13.7  | EC <sub>50</sub> 96hr 15.481 |

|                      | Persistence H <sub>2</sub> O/ Soil | Persistence Air | Bioaccumulation | Mobility |
|----------------------|------------------------------------|-----------------|-----------------|----------|
| n-Hexane             | LOW                                | LOW             | MEDIUM          | LOW      |
| 1,3-Butadiene        | LOW                                | LOW             | LOW             | LOW      |
| Dimethyl-p-toluidine | HIGH                               | HIGH            | LOW             | LOW      |

## Section 13 Disposal Considerations

Containers may still present a chemical hazard/ danger when empty. Return to supplier for reuse/ recycling if possible. Otherwise: If container cannot be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. Where possible retain label warnings and SDS and observe all notices pertaining to the product.

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. Recycle wherever possible or consult manufacturer for recycling options. Consult Land Waste Authority for disposal. Bury or incinerate residue at an approved site. 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.

Only dispose to the environment if a tolerable exposure limit has been set for the substance. Only deposit the hazardous substance into or onto a landfill or sewage facility or incinerator, where the hazardous substance can be handled and treated appropriately.

## Section 14 Transport Information



HAZCHEM

### Land Transport UNDG

|                    |                        |
|--------------------|------------------------|
| Class or division  | 2.1                    |
| Subsidiary Risk    | None                   |
| UN Number          | <b>1950</b>            |
| UN Packing Group   | I                      |
| Shipping Name      | <b>Aerosols</b>        |
| Special Provisions | 63 190 277 327 344 361 |
| Limited Quantities | 1000 ml                |

### Air Transport IATA

|                                    |                |
|------------------------------------|----------------|
| ICAO/IATA Class                    | 2.1            |
| ICAO/IATA Subrisk                  | None           |
| UN/ID Number                       | <b>1950</b>    |
| Packing Group                      |                |
| Special provision                  |                |
| Cargo only                         |                |
| Packing instructions               |                |
| Maximum Qty/pack                   |                |
| Passenger and Cargo                |                |
| Packing instructions               |                |
| Maximum Qty/pack                   |                |
| Passenger & Cargo Limited Quantity |                |
| Packing instructions               |                |
| Maximum Qty/pack                   |                |
| Shipping Name                      | <b>Aerosol</b> |

### Marine Transport IMDG

|                    |                            |
|--------------------|----------------------------|
| IMDG Class         | 2.1                        |
| IMDG Subrisk       |                            |
| UN Number          | <b>1950</b>                |
| UN Packing Group   |                            |
| EmS Number         | F-U, S-U                   |
| Special provisions | 63 190 277 327 344 481 969 |
| Limited quantities | 1000 ml                    |
| Marine pollutant   | Yes                        |
| Shipping Name      | <b>Aerosol</b>             |

## Section 15 Regulatory Information

### HSNO approval number and Group Standard:

|           |                      |
|-----------|----------------------|
| HSR002515 | Aerosols (Flammable) |
|-----------|----------------------|

### Group Standard conditions and other regulations:

| Condition | Requirement |
|-----------|-------------|
|           |             |

|  |   |
|--|---|
| <b>SDS</b>                               | Safety data sheet must be available to a person handling the substance within 10 minutes. |
| <b>Emergency plan</b>                    | Required when present in quantities exceed 3,000Lt (water equivalent)                     |
| <b>Certified handler</b>                 | Not required  |
| <b>Tracking</b>                          | Not required  |
| <b>Bunding and secondary containment</b> | Not applicable  |
| <b>Signage</b>                           | Required when present in quantities exceed 3,000 Lt (water equivalent)                    |
| <b>Compliance Certificate</b>            | Required when present in quantities exceed 3,000 Lt (water equivalent)                    |
| <b>Hazardous Atmosphere Zone</b>         | Required  |
| <b>Fire extinguisher</b>                 | 2x 3.5Kg required when quantities exceed 3,000 Lt (water equivalent)                      |

**N-hexane (CAS 110-54-3) is found on the following regulatory lists**

GESAMP/EHS Composite List - GESAMP Hazard Profiles  
 IMO IBC Code Chapter 17: Summary of minimum requirements  
 IMO MARPOL (Annex II) - List of Noxious Liquid Substances Carried in Bulk  
 IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances  
 IMO Provisional Categorization of Liquid Substances - List 2: Pollutant only mixtures containing at least 99% by weight of components already assessed by IMO  
 International Air Transport Association (IATA) Dangerous Goods Regulations  
 International Maritime Dangerous Goods Requirements (IMDG Code)  
 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)  
 United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)

**LPG (68476-85-0] is found on the following regulatory lists**

International Air Transport Association (IATA) Dangerous Goods Regulations  
 International Maritime Dangerous Goods Requirements (IMDG Code)  
 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)  
 United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)

**1,3-Butadiene (106-99-0] is found on the following regulatory lists**

GESAMP/EHS Composite List - GESAMP Hazard Profiles  
 International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs  
 International Air Transport Association (IATA) Dangerous Goods Regulations  
 International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List Passenger and Cargo Aircraft  
 International Maritime Dangerous Goods Requirements (IMDG Code)  
 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)  
 United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)

**Dimethyl-p-toluidine (99-97-8] is found on the following regulatory lists**

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs  
 International Air Transport Association (IATA) Dangerous Goods Regulations  
 International Maritime Dangerous Goods Requirements (IMDG Code)  
 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)



United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)

**National Inventories**

|             |        |     |
|-------------|--------|-----|
| Australia   | AICS   | Yes |
| Canada      | DSL    | Yes |
| Canada      | NDSL   | No  |
| China       | IESCS  | Yes |
| Europe      | EINECS | Yes |
| Japan       | ENCS   | Yes |
| Korea       | KECI   | Yes |
| New Zealand | NZIoC  | Yes |
| Philippines | PICCS  | Yes |
| USA         | TSCA   | Yes |

**Section 16 Other Information**

**Revision History:**

March 2019 Initial preparation

**Abbreviations:**

| Abbreviation                | Description   |
|-----------------------------|---|
| CAS number                  | Number assigned to chemical in the Chemical Abstracts Service registry                                  |
| HAZCHEM code                | Code used by fire-fighters to determine correct method of action in the case of fire                    |
| HSNO                        | Hazardous Substances and New Organisms (Act)  |
| ICAO Technical Instructions | International Civil Aviation Organization Technical Instructions  |
| IMDG code                   | International Maritime Dangerous Goods code controlled by the International Maritime Organization (IMO) |
| LC <sub>50</sub>            | Lethal concentration 50% - concentration fatal to 50% of the tested population                          |
| LD <sub>50</sub>            | Lethal dose 50% - dose fatal to 50% of the tested population  |
| NZS 5433                    | New Zealand Standard 5433 (Standard for the Transport of Dangerous Goods on Land)                       |
| SDS                         | Safety data sheet   |
| STEL                        | Short term exposure limit   |
| TWA                         | Time weighted average (typically measured as 8 hours)   |
| UN number                   | United nations number   |
| WES                         | Workplace exposure standard   |

**References**

Chemical properties and HSNO classifications derived from the New Zealand chemical classification information database (CCID).

[www.epa.govt.nz](http://www.epa.govt.nz)

Workplace exposure limits derived from Workplace Exposure Standards and Biological Exposure Indices 9th Edition.

***The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material in combination with any other material or in any process, unless specified in the text.***

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End of SDS