



Trusted Aerosol Performance

SAFETY DATA SHEET

Section 1 – IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Zap Engine Degreaser Liquid
Product Code: 7868 5L, 7869 20L
Uses: Multipurpose engine degreaser and water soluble cleaner.
Company: Chemz Limited
Address: 80 Rangitane Place
Whakatu, Hastings
Telephone: +64 6 877 9690
Email: info@chemz.co.nz
Emergency Number 24 hr: 0800 764 766 (0800 POISON) National Poison Centre

Section 2 – HAZARDS IDENTIFICATION

Classification of the product

Considered a hazardous substance according to the Hazardous Substance (Minimum Degrees of Hazard) Regulations NZ.
Classified as a dangerous goods for transport purposes.

GHS Classifications:

Flammable Liquids Category 3
Aspiration hazard Category 1
Eye irritation Category 2
Aquatic toxicity (Chronic) Category 2

HSNO Classifications:

3.1C Flammable Liquids: medium hazard
6.1E Acutely toxic (aspiration)
6.4A Irritating to the eye
9.1B Toxic to the aquatic environment with long lasting effects



Signal Words: Danger

Hazard Statements

H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.

Section 3 – COMPOSITION INFORMATION ON INGREDIENTS

| Hazardous Ingredients | CAS No. | Proportion, % m/m |
|----------------------------------|-------------|-------------------|
| Kerosene | 8008-20-6 | 30 - 60 |
| Naphtha (Petroleum) Hydrotreated | 64742-82-1 | 30 - 60 |
| Nonyl Phenol Ethoxylate | Proprietary | < 10 |
| Butoxyethanol | 111-76-2 | < 10 |
| Non Hazardous Ingredients | - | to 100% |

Section 4 – FIRST AID MEASURES

If medical advice is needed, have product container or label at hand.



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If exposed or if you feel unwell: Call a POISON CENTRE or doctor.

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| Ingestion: | IF SWALLOWED: Immediately call a POISON CENTRE or doctor. Do NOT induce vomiting. Obtain immediate medical attention. |
| Eye contact: | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice. |
| Skin contact: | IF ON SKIN: Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice. |
| Inhalation: | IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTRE or doctor. |
| Notes to physician: | Treat symptomatically and supportively. No specific antidote. |

Section 5 – FIRE-FIGHTING MEASURES

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| General fire hazards: | Flammable liquid and vapour. |
| Specific hazards: | Containers can build up pressure if exposed to heat and/or fire and may explode. Vapours may form an explosive mixture with air. Vapours can travel to a source of ignition and flash back. Contents may float and be re-ignited on surface water. |
| Further advice: | On burning may emit toxic fumes including those of carbon monoxide and carbon dioxide. Fire fighters to wear self-contained breathing apparatus if risk of exposure to products of combustion. Use water spray to keep fire-exposed containers cool. |
| Extinguishing media: | For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or foam. Do not discharge extinguishing waters into the aquatic environment. |
| Protective equipment: | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. |
| Firefighting instructions: | In the event of fire, cool containers with water spray to prevent vapour pressure build up. Move containers from fire area if you can do so without risk. Runoff can cause environmental damage. |
| Hazchem Code: | 3Y |

Section 6 – ACCIDENTAL RELEASE MEASURES

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| Minor spills: | Clean up all spills immediately. Wipe up with absorbent material. Avoid breathing vapours and contact with skin and eyes. Wear protective clothing, gloves and safety glasses. Provide ventilation in workplace environment if necessary. Remove all sources of ignition. If safe to do, damaged containers should be placed in a container outdoors, away from all ignition sources. |
| Major spills: | Evacuate the spill area and move upwind. Call the Fire Brigade. Remove all sources of ignition. May be violently or explosively reactive. Increase ventilation if possible. Wear breathing apparatus and protective gloves. If safe to do so, prevent spillage from entering drains or water courses. If material enters drains, advise emergency services. Use absorbent (soil, sand or other inert material). Collect and seal in properly labeled containers for disposal. Undamaged containers should be gathered and stored safely, away from ignition sources. |

Section 7 – HANDLING AND STORAGE

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| Handling Precautions: | Read product label before use. Keep out of reach of children. This product is flammable. Keep away from heat and open flames. No smoking. Do not use near an open flame or other ignition source. Gloves and eye protection are recommended. Keep container tightly closed. Avoid release to the environment. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. |
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Avoid personal contact with liquid. Use in a well-ventilated area. Avoid breathing vapour. Wash hands with soap and water thoroughly after handling and before eating, drinking and smoking. Use good occupational work practice.

Storage:

Store in a well ventilated, cool, dry place. Keep away from heat, sparks, and flame. Keep container tightly closed. Store away from incompatible materials. Store locked up.

Section 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

No value assigned for product. Exposure standards for constituents (NZ WES);

| Material | TWA, mg/m ³ | STEL, mg/m ³ | Cat/Notices |
|----------------------------------|------------------------|-------------------------|---------------|
| Kerosene | 350 mg/m ³ | Not available | Not available |
| Naphtha (Petroleum) Hydrotreated | 525 mg/m ³ | Not available | Not available |
| Butoxyethanol | 121 mg/m ³ | Not available | Skin |
| Nonyl Phenol Ethoxylate | Not available | Not available | Not available |

Emergency Limits (TEEL)

Temporary Emergency Exposure Limits

| Material | TEEL-1 | TEEL-2 | TEEL-3 |
|----------------------------------|-----------------------|-------------------------|-------------------------|
| Kerosene | 290 mg/m ³ | 1,100 mg/m ³ | 6,600 mg/m ³ |
| Naphtha (Petroleum) Hydrotreated | 300 ppm | 395 ppm | 395 ppm |
| Butoxyethanol | 60 ppm | 120 ppm | 700 ppm |
| Nonyl Phenol Ethoxylate | Not available | Not available | Not available |

** indicates value is 50 - 99% of LEL, *** indicates value is 100% or more of LEL

Emergency Limits (IDLH)

Immediately Dangerous To Life or Health (IDLH) Values

| Material | Original IDLH | Revised IDLH |
|----------------------------------|---------------|---------------|
| Kerosene | Not available | Not available |
| Naphtha (Petroleum) Hydrotreated | Not available | Not available |
| Butoxyethanol | 700 ppm | Not available |
| Nonyl Phenol Ethoxylate | Not available | Not available |

Additional Information:

Wash hands thoroughly after handling.

Engineering Controls:

No controls generally required when handling small quantities. Use with adequate ventilation.

Larger quantities: General exhaust is adequate under normal operating conditions. Exhaust ventilation should be designed to prevent accumulation and recirculation in the workplace. Ventilation equipment and lighting should be explosion-resistant.

Protective Equipment:

Eye and face protection: Safety glasses or goggles are recommended.

Skin Protection: No special equipment needed for minor exposure to small quantities. For moderate exposures, wear general protective light weight latex gloves or chemical resistant gloves.

Other Protection: Protective clothing such as overalls, apron and boots are recommended for moderate or heavy use. Operators insulated from earth may develop static charges sufficient to ignite flammable gas/air mixtures. Avoid by wearing low resistivity outer material.

Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace.

Respiratory Protection: Where the concentration of gas/particulates in the breathing zone exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Use Type AX-P filter (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88)

The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator.



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Cartridge performance is affected by humidity. Cartridges should be changed after 2 hours of continuous use unless the humidity is less than 75%, when cartridges can be used for 4 hours. Used cartridges should be discarded daily, regardless of the length of time used.

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

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| Appearance: | Clear, almost colourless liquid. |
| Odour: | Slight hydrocarbon odour. |
| Odour Threshold: | Not available. |
| pH: | Not applicable. |
| Melting Point, °C: | Not available. |
| Freezing Point, °C: | Not available. |
| Initial Boiling Point, °C: | 150 |
| Boiling Point Range, °C: | 150 – 200 |
| Flash Point, °C: | 42 |
| Flammability: | Flammable liquid and vapour. |
| Explosion Limit, % v/v: | LEL 1.0% UEL 6.0% |
| Vapour Pressure, kPa: | Not available. |
| Vapour Density (Air = 1): | > 1 |
| Relative Density: | 0.84 |
| Solubility: | Forms an emulsion with water. |
| Partition Coefficient: | Not available (n-octanol/water) |
| Autoignition Temp, °C: | Not available. |
| Decomposition Temp, °C: | Not available. |
| Kinematic Viscosity, mm²/s: | Not available. |
| Particle Characteristics: | Not available. |

Section 10 – STABILITY AND REACTIVITY

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| Reactivity: | Not reactive. |
| Chemical Stability: | Product is considered stable under normal conditions of use. Hazardous polymerisation will not occur. |
| Possible Hazardous Reactions: | Avoid reaction with oxidising agents. |
| Conditions to Avoid: | Avoid elevated temperatures, open flames or ignition sources. |
| Incompatible Materials: | Oxidisers. |
| Hazardous Decomposition Products: | Combustion products include carbon monoxide, carbon dioxide and other pyrolysis products typical of burning organic material. |

Section 11 – TOXICOLOGICAL INFORMATION

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| Basis for Assessment: | Information given is based on product testing, and/or similar products, and/or components. |
| Acute Oral Toxicity: | LD ₅₀ estimated to be > 5,000 mg/kg (based on component mixture). |
| Acute Dermal Toxicity: | LD ₅₀ estimated to be > 5,000 mg/kg (based on component mixture). |
| Acute Inhalation Toxicity: | LC ₅₀ estimated to be > 20 mg/L, Rat 4 hour (based on component mixture). |
| Aspiration Hazard: | May be fatal if swallowed and enters airways. |



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Toxicity of Components:

| Material | Toxicity | Irritation |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Kerosene | Oral (rat) LD ₅₀ > 5,000 mg/kg Dermal (rabbit) LD ₅₀ > 5,000 mg/kg Inhalation (rat) LC ₅₀ > 20 mg/L 4 hr | Eye irritant. Slight skin irritant. |
| Naphtha (Petroleum) Hydrotreated | Oral (rat) LD ₅₀ 4,500 mg/kg Dermal (rabbit) LD ₅₀ > 5,000 mg/kg Inhalation (rat) LC ₅₀ > 20 mg/L 4 hr | Eye irritant. |
| Butoxyethanol | Oral (rat) LD ₅₀ 1,300 mg/kg Dermal (rabbit) LD ₅₀ > 2,000 mg/kg Inhalation (rat) LC ₅₀ > 4.9mg/L 4 hr | Moderate skin irritant. Moderate eye irritant. |
| Nonyl Phenol Ethoxylate | Oral (rat) LD ₅₀ 1,378 mg/kg Dermal (rabbit) LD ₅₀ > 5,000 mg/kg | Moderately irritating to the skin. Moderately irritating to the eyes. |

Not Available: Applies to data either not available or does not fill the criteria for classification.

Skin Irritation:

Prolonged/repeated contact may cause defatting of the skin and dermatitis.

Eye Irritation:

May cause serious eye irritation. Avoid direct contact with eyes.

Inhalation:

High concentrations of vapour may cause drowsiness or dizziness.

Respiratory Irritation:

Inhalation of vapours may cause irritation to the respiratory system.

Sensitisation:

Not expected to be a contact or respiratory sensitiser.

Mutagenicity:

Not expected to be mutagenic.

Carcinogenicity:

Not expected to be carcinogenic.

Reproductive toxicity:

Not expected to be toxic.

STOT, single exposure:

Not available.

STOT, repeated exposure:

Not available.

STOT (Narcotic):

Not expected to be narcotic. High concentrations may cause drowsiness or dizziness.

Repeated Dose Toxicity:

Prolonged and repeated contact by inhalation is not expected to produce cumulative health effects. Chronic dermal exposure may result in irritant contact dermatitis.

Hydrocarbon solvents have few toxicologically important effects. They can cause chemical pneumonitis if aspirated into the lung. Volatile solvents can cause acute CNS effects and respiratory irritation at concentrations above recommended exposure levels.

Additional Information:

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as being carcinogens.

Section 12 – ECOTOXICITY INFORMATION

Ecotoxicity:

For Hydrocarbons: log Kow 1, BCF ~ 1

| Material | Test | Value, mg/L |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| Liquid Product | Not available | Not available |
| Kerosene | Fish LC ₅₀ , 96 hr Crustacean EC ₅₀ , (Daphnia 48 hr) Algae EC ₅₀ , 72 hr | 10 – 100 mg/L 10 – 100 mg/L 1 – 10 mg/L |
| Naphtha (Petroleum) Hydrotreated | Fish, Crustacean, Algae toxicity: Non-hazardous. | > 100 mg/L |



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| Butoxyethanol | Fish LC ₅₀ (Oncorhynchus mykiss, 96 hr) | 1,474 mg/L |
| | Crustacean EC ₅₀ (Water Flea, 48 hr) | 1,550 mg/L |
| | Algae EC ₅₀ (Pseudokirchneriella subcapitata 72 hr) | 1,840 mg/L |
| Nonyl Phenol Ethoxylate | Fish LC ₅₀ 96 hr | 5 – 10 mg/L |
| | Crustacean EC ₅₀ (Daphnia 48 hr) | 1 – 10 mg/L |

Persistence/degradability: No data available for all ingredients (Air, Water, Soil).

Bioaccumulation Potential: No data available for all ingredients

Mobility in Soil: No data available for all ingredients.

Aquatic Ecotoxicity: Components are harmful to aquatic life with long lasting effects.

Other Adverse Effects: No data available.

Section 13 – DISPOSAL CONSIDERATIONS

Material Disposal: Product wastes are ecotoxic and should be disposed of in accordance with applicable regulations. Do not dispose into the environment, in drains or in water courses. Waste product should not be allowed to contaminate soil or water. Large quantities should be handled by a suitable disposal facility. Incineration in an authorised facility is suggested.

Container Disposal: Recycle empty container if possible or dispose in landfill. Product containers are also considered wastes of the same class of the contents and should be disposed of in accordance with applicable regulations.

If it is a class 6, 8 or 9 it must be disposed by treating it so it is no longer a hazardous substance. If it contains components that are bioaccumulative and not rapidly degradable, it must be treated so that the substance is no longer a hazardous substance.

Container Recycling: Recyclable plastic – Recycle if possible. Packages which hazardous content have been appropriately treated to remove residual contents removed may be recycled.

Workplace: Send empty containers to a plastics recycler or commercial waste stream.

Section 14 – TRANSPORT INFORMATION

Transport: Classified as a Dangerous Good for transport purposes.

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S.

UN Number: 1993

Dangerous Goods Class: 3

Transport Labels Required: Class 3 Flammable, Marine Pollutant (Land, Sea and Air)



Subsidiary Risk: Not applicable

Packing Group: III

Marine Pollutant: Yes

EMS Number F-E, S-D

DG Segregation: This product is classified as a Dangerous Goods. Consult the Land Transport Rule: Dangerous Goods 2005, and NZS 5433:2012 Transport of Dangerous Goods on Land for information.



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Section 15 – REGULATORY INFORMATION

| | |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EPA Approval Number: | HSR002528 Cleaning Products (Flammable) Group Standard 2020. |
| EPA Hsno Controls: | Refer to www.epa.govt.nz for information on Controls. This substance is to be managed using the conditions specified in an applicable Group Standard. |
| Inventory Listing | NZIOC (New Zealand Inventory of Chemicals); All components of this product are listed. |
| SDS regulations | This Safety Data Sheet was prepared in accordance with the EPA Hazardous Substances (Safety Data Sheets) Notice July 2017 (Consolidated 30 September 2022). |

Section 16 – OTHER INFORMATION

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| Additional information | <p>Personal Protective Equipment Guidelines: The recommendation for protective equipment contained is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.</p> <p>Health Effects from Exposure: It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.</p> |
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| | | |
|----------------------|-------------------|------------------------------------------------------------------|
| Abbreviations | CAS | Chemical Abstract Service number |
| | EMS | Emergency Response Procedures for Ships Carrying Dangerous Goods |
| | EPA | Environmental Protection Agency |
| | GHS | Globally Harmonized System |
| | IARC | International Agency for Research on Cancer |
| | IATA | International Air Transport Association |
| | IMDG | International Maritime Dangerous Goods |
| | LC ₅₀ | Lethal Concentration, 50% / Median Lethal Concentration |
| | LD ₅₀ | Lethal Dose, 50% / Median Lethal Dose |
| | LEL | Lower Explosion Limit |
| | mg/m ³ | Milligrams per Cubic Metre |
| | NZIoC | New Zealand Inventory of Chemicals |
| | N.O.S. | Not otherwise specified |
| | OEL | Occupational Exposure Limit |
| | PEL | Permissible Exposure Limit |
| | STEL | Short-Term Exposure Limit |
| | STOT-RE | Specific target organ toxicity (repeated exposure) |
| | STOT-SE | Specific target organ toxicity (single exposure) |
| | TLV | Threshold Limit Value |
| | TWA | Time Weighted Average |
| | UEL | Upper Explosion Limit |

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Chemz Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material. If clarification or further information is needed, the user should contact their Chemz representative or Chemz Limited at the contact details on page 1. Chemz Limited's responsibility for the material as sold is subject to the terms and conditions of sale.

End of sds.