

Material Safety Data Sheet

1. IDENTIFICATION OF MATERIAL AND SUPPLIER

PRODUCT NAME: MPD 996

Synonyms: None

Recommended Use: Industrial Degreaser

Supplier: Minehan Agencies Pty Ltd

Address: 29 Camuglia Street GARBUTT Townsville Queensland Australia 4814

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Emergency telephone number: 0408 777 800 (24Hrs Australia)

2. HAZARDS IDENTIFICATION

This product is classified as:

Hazardous Substance according to criteria of the National Occupational Health and Safety Commission (NOHSC).

NOT Dangerous Goods according to the Australian Dangerous Goods Code (ADG Code).

| | |
|--|--|
| Approved Criteria Classification (Calculated). | Xi: IRRITANT R36/37/38 Safety Phrases S2, S36/37/39 |
| SUSDP Classification | Poison S5 (sodium hydroxide) |
| ADG Classification | None allocated |
| Un Number | None allocated |

EMERGENCY OVERVIEW

| | |
|-----------------------------|---|
| COLOUR | PALE BLUE |
| PHYSICAL DESCRIPTION | LIQUID |
| ODOUR | CITRUS |
| MAJOR HEALTH HAZARD | Eye damage, Respiratory tract irritant, Skin irritant. |

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POTENTIAL HEALTH EFFECTS

Inhalation: Short term exposure. Irritation, nausea, vomiting, difficulty breathing, headache, drowsiness, symptoms of drunkenness, lung congestion. **Long term Exposure.** Possible respiratory tract damage, may trigger pre-existing respiratory complaints.

Skin Contact: Short term exposure. Defatting redness and irritation. **Long term exposure.** Prolonged exposure to a diluted form may cause irritation, redness and dermatitis.

Eye Contact: Short term exposure. Severe irritation, possible eye damage. **Long-term exposure.** Permanent damage to eyes.

Ingestion: Short term exposure. Severe irritation to mouth, oesophagus and stomach. Headaches, nausea, and severe abdominal pain may result. **Long-term exposure.** Permanent Gastrointestinal damage.

Carcinogen Status

| | |
|-------|----------------|
| NOHSC | Not Classified |
| NTP | Not Classified |
| IARC | Not Classified |

3. COMPOSITION / INFORMATION ON INGREDIENTS

| CHEMICAL ENTITY | CAS No | PROPORTION W/W % |
|--|------------|------------------|
| Sodium Hydroxide | 1310-73-2 | 0.5-2% |
| Sodium dodecylbenzenesulphonate | 25155-30-0 | 5-10% |
| Ethylene glycol monobutyl ether | 111-76-2 | 5-10% |
| d-Limonene | 5989-27-5 | 5-10% |
| Fatty amine ethoxylate | --- | 5-10% |
| Sodium metasilicate pentahydrate | 10213-79-3 | 1-5% |
| Alkyl Alcohol ethoxylate | 68131-39-5 | 1-5% |
| Sodium xylene sulphonate | 1300-72-7 | 1-5% |
| Disodium Cocoampho dipropionate | 68604-71-7 | 1-5% |
| Other ingredients determined not to be hazardous | | to 100% |
| Other ingredients determined not to be hazardous | | to 100% |

4. FIRST AID MEASURES

Poison Information Centres in each State capital city can provide additional assistance for Scheduled Poisons: Phone (Australia 13 1126).

Inhalation: Remove victim from exposure. Remove contaminated clothing and loosen remaining clothing. Perform artificial respiration if needed. Allow patient to assume most comfortable position and keep warm. Seek medical attention.

Skin Contact: Remove contaminated clothing. Wash contaminated skin for at least 15-20mins with of water, or until no evidence of the chemical remains (this product will feel slippery or soapy on the skin.). If swelling, redness, blistering, or irritation occurs seek medical advice. Wash clothing before re-use.

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Eye Contact: Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. If present, remove contact lenses. Seek medical attention. **Note to Physician.** Can cause corneal burns

Ingestion: Immediately rinse mouth with water. Do NOT induce vomiting. Seek medical attention.

Notes to Physician: Treat symptomatically. Suggest intubation BEFORE any emesis due to foaming properties of this product.

5. FIRE FIGHTING MEASURES

Flash Point: Not a Flammable or Combustible liquid.

Fire and Explosion Hazard: Non-combustible material. Closed containers exposed to heat may explode.

Specific Hazards: Spills are a serious slip hazard.

Fire Fighting: Move container from fire area if it can be done without risk. Dam for later disposal. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. **Suitable Extinguishing Media:** Not combustible, however, if material is involved in a major fire use water fog to keep drums cool. Use foam, CO₂ or dry chemical powder to extinguish surrounding fire.

Hazardous Decomposition in Products: On burning may emit fumes including carbon monoxide, carbon dioxide, Sulphur dioxide and partially burned hydrocarbons. Fire fighters to wear self-contained breathing apparatus if risk of exposure to vapour or products of combustion.

Hazchem Code: None allocated

6. ACCIDENTAL RELEASE MEASURES

Alkaline liquid. Stop leak if possible without personal risk. Wear protective equipment to prevent personal injury (see section 8). **Small spills (< 5L)** Cover with an absorbent material (soil, sand or other inert material). Collect and seal in properly labelled containers for disposal. Hose down area with large amounts of water. Caution, Slip Hazard. **Large spills (>5L)** Prevent run off into drains and waterways. Dam material. Cover with absorbent material. Collect and seal in properly labelled containers for disposal. Neutralise residual material with a mild acid (citric or acetic). Hose down area with large amounts of water. Keep unnecessary people away, isolate hazard area and deny entry. If contamination of sewers or waterways has occurred, advise local emergency services.

7. HANDLING AND STORAGE

Store in a well-ventilated area. Store in a cool, dry place and out of direct sunlight. Store away from foodstuffs and strong acids. Store in original containers. Do not store in aluminium containers. Keep containers closed when not in use – check regularly for leaks. This material is a Scheduled Poison and must be stored, maintained and used in accordance with the relevant regulations. Handle using good industrial hygiene practices (see section 8 on personal protection).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits: No value has been assigned for this specific material by NOHSC. However exposure limits for ingredients are shown below

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| Ingredient | TWA | STEL | Notices |
|---------------------------------|--------|-------|---------|
| Ethylene glycol monobutyl ether | 25 ppm | 35ppm | Sk |
| Sodium Hydroxide | 2ppm | 5ppm | |

TWA – the Time-Weighted Average airborne concentrations over an eight hour working day, for a five day week over an entire working life.

STEL (Short Term Exposure Limit) – the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight hour work day. According to current knowledge, these concentrations should neither impair the health of, nor cause undue discomfort to, nearly all workers.

Sk Notice – absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

Sen Notice- Sensitiser. The substance can cause a specific immune response in some people. An affected individual may subsequently react to minute levels of that substance.

These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. Exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Biological Limit Value: No biological limit allocated.

Engineering Controls: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards and prevent exposure to vapours, mists and fumes. Use in well ventilated area. Keep containers closed when not in use.

Personal Protection Equipment

Respirator Type (AS 1716): If inhalation risk exists, wear organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Eye Protection: Safety glasses with side shields or goggles should be worn as described in Australian Standard AS/NZS 1337 – Eye Protectors for Industrial Applications.

Glove Type: Impervious PVC or rubber gloves should be worn.

Clothing: Suitable protective clothing should be worn eg: cotton overalls buttoned at neck and wrist.

Work/Hygienic Practices: Avoid skin and eye contact. Always wash hands before smoking, eating, drinking or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|------------------|---------------------|----------------------|---------------------------|
| Physical State | Liquid | Water Solubility | Soluble |
| Colour | Light Blue | Vapour Pressure | 0.4mmHg |
| Odour | Citrus | Vapour Density | Above 1 (air =1) |
| Boiling Point | Approx 100°C | Evaporation Rate | Slower than butyl acetate |
| Melting Point | NA | % Volatiles | 85% |
| Freezing Point | NA | Flash Point | Not Flammable |
| Specific Gravity | 1.03g/ml (water =1) | Flammability Limits | NA |
| Ph (neat) | 12-13 | Ignition Temperature | NA |

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10. STABILITY AND REACTIVITY

Reactivity: Stable at normal temperatures and pressure.

Conditions to Avoid: Avoid contact with incompatible materials.

Incompatibilities: Strong Oxidising Agents, Strong Acids
Explosive reactions may occur with strong oxidising agents.
Violent heat producing reactions may occur with strong acids.

Hazardous Decomposition: Thermal decomposition products include, sulphur dioxide, carbon dioxide, carbon monoxide, and Nitrous oxides.

Polymerisation: Will not polymerise.

11. TOXICOLOGICAL INFORMATION

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Local Effects: Irritant: Inhalation, skin, eyes.
Target Organs: Eyes, skin and respiratory system.

Classification of Hazardous Ingredients

| Ingredients | R Phrases |
|---------------------------------|-------------------|
| Alcohol Ethoxylate (LA8) | R22 R36/38 |
| d-Limonene | R36/37/38 |
| Disodium Cocoampho dipropionate | R36/38 |
| Ethylene Glycol Monobutyl ether | R20/21/22, R36/38 |
| Fatty amine ethoxylate | R36 |
| Sodium dodecylbenzylsulphonate | R22, R36/38 |
| Sodium Hydroxide | R35, R41 |
| Sodium metasilicate | R34, R37 |
| Sodium Xylene Sulphonate | R36/38 |
| | |
| | |
| | |

Individual Ingredient Information

Alcohol Ethoxylate

Irritation Data: Mild irritation to human skin and eyes

Toxicity Data: No LD50 data available

Local Effects: Irritation to skin and eyes

Acute Toxicity Level; Ingestion will cause abdominal pain, nausea, and vomiting.

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Target Organs: Skin & Eyes

Mutagenic Data: No test data available

Reproduction Effects Data: No test data available

d-Limonene

Irritation Data: skin rabbit 10%/24hr mild.

Toxicity Data: oral LD50 mouse 5600mg/kg

Local Effects: Irritation to lungs and thorax

Acute Toxicity Level: Toxic by ingestion

Target Organs: Respiratory System, CNS

Mutagenic Data: mouse fibroblast 0.5pph/21day (enzymatic activation step)

Reproduction Effects Data: Lowest published toxic dose: mouse 3546mg/kg (7-12 day preg) specific developmental abnormalities

Disodium cocoampho dipropionate

Irritation Data: eye irritation, rabbit, moderate. Skin irritation, rabbit, non-irritating. Respiratory irritation, no test data found.

Toxicity Data: Inhalation, rat LC50 64000ppm/1hr. Dermal, no test data found. Oral, rat LD50 5ml/Kg

Local Effects: Irritation eye and skin

Acute Toxicity Level: Toxic by ingestion.

Target Organs: Not known

Mutagenic Data: No test data available

Reproduction Effects Data: No test data available.

Ethylene glycol monobutyl ether

Irritation Data: 500mg open skin-rabbit mild; 100mg eyes-rabbit severe; 100mg/24hr eyes-rabbit moderate.

Toxicity Data: The lethal oral dose of ethylene glycols in humans is approximately 1.4ml/kg, which would be equivalent to approximately 100ml of pure Ethyleneglycol monobutyl ether for a 70kg person. LD50 rat oral 1.48 g/kg. LD50 rabbit oral 0.32g/kg. LD50 rabbit dermal 400mg/Kg

Local Effects: Irritant: inhalation, skin, eyes

Acute Toxicity Level: Toxic: inhalation, dermal absorption, ingestion.

Target Organs: Blood, Central Nervous System, Kidneys.

Mutagenic Data: A statically significant increase in mutations not generally observed in cell cultures at any concentration for a range of tests.

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Reproduction Effects Data: May damage the developing foetus.
TCLo: ihl-rat 200ppm/6H (6-15D preg)
TCLo: ihl-rbt 200ppm/6H (6-18D preg)

Fatty Amine Ethoxylate

Irritation Data: Irritant to eyes

Toxicity Data: No LD50 data available

Local Effects: Irritation to eyes

Acute Toxicity Level: No test data available.

Target Organs: Eyes

Mutagenic Data: No test data available

Reproduction Effects Data: No test data available

Sodium Dodecylbenzenesulphonate

Irritation Data: Eye rabbit, 250ug/24H, severe; eye rabbit 1%, severe; Skin rabbit 20mg/24H moderate.

Toxicity Data: LD50 intravenous mouse, 105 mg/kg; LD50 oral mouse, 1330mg/kg; LD50 oral rat, 438mg/kg.

Local Effects : Irritant, skin, eyes and Respiratory System

Acute Toxicity Level: Toxic by ingestion

Target Organs: Skin, eyes, Respiratory System

Mutagenic Data: No information available

Reproduction Effects Data: No information available

Sodium Hydroxide

Irritation Data: Skin Human, Patch test, 0.2ml of 0.5% soln, irritating for 55% of volunteers. Eye Rabbit, 0.004-0.2% non-irritant, 0.4% mild, 1.2% corrosive.

Toxicity Data: Repeated dose; no valid studies available. However under normal safe handling conditions and use (ie non-irritating) Sodium Hydroxide is not expected to be systemically available in the body.

Local Effects: Causes severe burns to eyes and skin. May cause severe respiratory tract irritation with possible burns. May cause severe digestive tract irritation with possible burns.

Acute Toxicity Level: Dependant on concentration and dose. Lethality has been reported for animals at doses 240-400mg/Kg. Fatal ingestion and fatal dermal exposure has been reported in humans. One person who ingested 10g of Sodium Hydroxide (equivalent to 45mls of Coil Shine) in water suffered transmural necrosis of the esophagus and stomach and died 3 days after admission to hospital. A 42-year-old female swallowed approximately 30mls of 16%

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Sodium Hydroxide solution (equivalent to 20mls Coil Shine), it resulted in a 9cm stricture of the esophagus which was treated by gastric antral patch esophagoplasty.

Target Organs: Eyes, skin, mucous membranes, respiratory system

Mutagenic Data: Both *in vitro* and *in vivo* genetic toxicity tests indicated no evidence for a mutagenic activity.

Reproduction Effects Data: It can be stated that the substance will neither reach the foetus nor reach the male and female reproductive organs, which shows that there is no risk for developmental toxicity and no risk for toxicity to reproduction

Ref: OECD SIDS Initial Assessment Report, Sodium Hydroxide, Paris, 26-28 March 2002.

Sodium Metasilicate Pentahydrate

Irritation Data: 250mg/24H, skin human, severe; 250mg/24H, skin rabbit, severe; 250mg/24H, skin guinea pig, moderate.

Toxicity Data: LD50 oral rat, 1153mg/kg; LD50 oral mouse, 770mg/kg; LDLo oral dog 250mg/kg

Local Effects: Corrosive: inhalation, skin eye, ingestion

Acute Toxicity Level: Moderately Toxic by ingestion. Lowest published toxic dose, oral human, 1mg/kg (acute renal failure).

Target Organs: Eyes, Skin, and Respiratory System

Mutagenic Data: No information available

Reproduction Effects Data: TDLo oral rat male, 15mg/kg; TDLo subcutaneous rat male, 9766ug/kg.

Sodium Xylene Sulphonate

Irritation Data: Irritating to human eyes.

Toxicity Data: Lowest published toxic dose: mouse 20800mg/kg/17day, changes to liver weight

Local Effects: Eye irritation.

Acute Toxicity Level: No LD50 test data available.

Target Organs: Eyes.

Mutagenic Data: No test data available.

Reproduction Effects Data: No test data available.

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12. ECOLOGICAL INFORMATION

General Statement: Do not allow large quantities (>20L) of this product to enter the waterways. Strong alkaline effect will be detrimental to aquatic life.

Ecotoxicity: This product is hazardous to the environment due to the high alkali content (pH effect). The effect of this product on an organism depends on the buffer capacity of the aquatic or terrestrial ecosystem. LC50 (Sodium Hydroxide) values of acute toxicity tests with aquatic organisms ranged between 33 and 189 mg/L.

Persistence and Degradability: No specific information available for this product

Mobility: Very mobile in soil and very soluble in water. No transport to air

13. DISPOSAL CONSIDERATIONS

Refer to State/Territory Land Waste Management Authority for disposal, show this MSDS for their consideration. Empty containers not to be recycled or used for any other purpose. Dispose in accordance with local regulations.

14. TRANSPORTATION INFORMATION

| | |
|-----------------------------|---------------------|
| UN No | None allocated |
| Proper Shipping Name | None allocated |
| ADG Code | Not Dangerous Goods |
| Sub Risk | None |
| Packing Group | None |
| Special Precautions | None |
| Hazchem Code | None |
| EPG | None |
| Segregations | Yes |

15. REGULATORY INFORMATION

SUSDP: Poison S5

AICS: All of the constituents of this material are listed on the ACIS.

16. OTHER INFORMATION

Issue Date: Dec 2010

Reason(s) For Issue: Updated format to comply with NOHSC: 2011(2003).

Labelling Details

First line of Label must read: CAUTION

Other statements to include:

R36/37/38 Irritating to eyes skin and respiratory system.
S2 Keep out of reach of children.

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| | |
|-----------|--|
| S26 | In case of contact with eye/s, do NOT rub eyes as this may scratch the cornea, rinse immediately with plenty of water and seek medical advice. |
| S36/37/39 | Wear Suitable protective clothing, gloves and eye/face protection |
| S45 | In case of accident or if you feel unwell, seek medical advice immediately (show the label wherever possible). |

Abbreviations & Acronyms

SUSPD: Standard for the Uniform Scheduling of Drugs and Poisons

ADG: Australian Code for the Transport of Dangerous Goods by Road and rail

N.O.S. Not Otherwise Specified

CAS No: Chemical Abstracts Service Registry Number

UN No: United Nations Number

R-Phrases: Risk Phrases

S-Phrases: Safety Phrases

HAZCHEM Code: Hazardous Chemical emergency action code

NOHSC: National Occupational Health and Safety Commission

IARC: International Agency for Research into Cancer

ACIS: Australian Inventory of Chemical Substances

NTP: National Toxicology Program (USA)

Literary references:

Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(41999)]

National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC: 2011(2003)]

Exposure Standards for Atmospheric Contaminants in the Occupational Environment

Guidance Note [NOHSC: 3008(1995)] National Exposure Standards [NOHSC: 10005(1999)]

List of Designated Hazardous Substances [NOHSC: 10005(1999)]

Standard for the Uniform Scheduling of Drugs and Poison No. 17

The Australian Code for the Transport of Dangerous Goods by Road and Rail EDITION 6

Disclaimer

This MSDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product and in particular how to safely handle and use the product in the workplace.

Since Minehan Agencies Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace i.e. a risk analysis.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact Minehan Agencies Pty Ltd.