

SAFETY DATA SHEET

According to HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

Section 1: Identification of the Substance/Mixture and of the Supplier

| Product: | 2K Reducer |
|-----------------------------|---|
| Product Use: | Reducing Thinners |
| Restriction of Use: | Refer to Section 15 |
| Cmpany Details: Address: | Marketing Chemicals Ltd 7 Rymer Place, Mangere Bridge Auckland. New Zealand |
| Telephone: | +64 9 634 3862 [8.00 am to 4.30pm – Monday to Friday] |
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| Emergency No: | +64 274 340990 (24 hours) 0800 764 766 (National Poison Centre) |

Date of SDS Preparation:

29 August 2024 v2

Section 2: Hazard Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No: Solvents (Flammable) - HSR0002650

Pictograms:



Signal Word: DANGER

| GHS Category | Hazard Code | Hazard Statement |
|---|-------------|--|
| Flammable Liquids Cat. 2 | H225 | Highly flammable liquid and vapour. |
| Acute inhalation toxicity Cat. 4 | H332 | Harmful if inhaled. |
| Skin irritation Cat. 2 | H315 | Causes skin irritation. |
| Eye irritation Cat. 2 | H319 | Causes serious eye irritation. |
| Reproductive toxicity Cat. 2 | H361 | Suspected of damaging fertility or the unborn child. |
| Specific target organ toxicity – repeated exposure Cat. 2 | H373 | May cause damage to organs through prolonged or repeated exposure. |
| Hazardous to the aquatic environment chronic Cat. 3 | H412 | Harmful to aquatic life with long lasting effects. |

| Prevention Code | Prevention Statement |
|------------------------|--|
| P102 | Keep out of reach of children. |
| P103 | Read carefully and follow all instructions. |
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |

| P233 | Keep container tightly closed. |
|------------------|---|
| P240 | Ground and bond container and receiving equipment. |
| P241 | Use explosion-proof [electrical, ventilating and lighting] equipment |
| P242 | Use non-sparking tools. |
| P243 | Take action to prevent static discharge. |
| P260 | Do not breathe dust, fumes, gas, mist, vapours or spray. |
| P264 | Wash hands thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective clothing as detailed in SDS Section 8. |
| Response code | Response Statement |
| P101 | If medical advice is needed, have product container or label at hand. |
| P312 | Call a POISON CENTER or doctor/physician if you feel unwell. |
| P314 | Get medical advice/attention if you feel unwell. |
| P303 + P361+P353 | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse |
| | skin with water/shower. |
| P304 + P340 | IF INHALED: Remove to fresh air and keep at rest in a position comfortable for |
| | breathing. |
| 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 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P332 + P313 | If skin irritation occurs: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/attention. |
| P362 + P364 | Take off contaminated clothing and wash before reuse. |
| P370 + P378 | In case of fire: Use dry chemical, foam, or carbon dioxide for extinction. |
| Storage Code | Storage Statement |
| P405 | Store locked up. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| Disposal Code | Disposal Statement |
| P501 | Refer to Section 13. |

Section 3: Composition/Information on Ingredients

| Ingredients | Wt% | CAS NUMBER. |
|------------------------|-----------------|-------------|
| Butyl acetate | 45-55 | 123-86-4 |
| Toluene | 15-25 | 108-88-3 |
| PMA Solvent | 8-13 | 108-65-6 |
| Pegasol 1425 | 5-10 | 64742-49-0 |
| Acetone | 5-10 | 67-64-1 |
| Isopropyl Alcohol | 1-5 | 67-63-0 |
| Methyl Isobutyl Ketone | <u>></u> 1-3 | 108-10-1 |

Section 4: First Aid Measures

Routes of Exposure:

If in EyesRinse cautiously with water for several minutes. Remove contact lenses, if present
and easy to do. Continue rinsing. If eye irritation persists: Get medical
advice/attention.If on SkinRemove/Take off immediately all contaminated clothing. Rinse skin with
water/shower. Wash contaminated clothing before reuse. If skin irritation occurs: Get
medical advice/ attention.

| If Swallowed | Rinse mouth. Do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Call a POISON CENTER or doctor/physician if you feel unwell. |
|--------------|---|
| If Inhaled | Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult. |

Most important symptoms and effects, both acute and delayed Symptoms:

| Ingestion | Not applicable. |
|-----------------------|---|
| Inhalation | Harmful if inhaled. |
| Skin | Causes skin irritation. |
| Eyes | Causes severe eye irritation. |
| Chronic | Suspected of damaging fertility or the unborn child. |
| | May cause damage to organs through prolonged or repeated exposure. |
| Notes to Physician | Exposure to high concentrations of this material (e.g., in enclosed spaces or with deliberate abuse) may be associated with cardiac arrhythmias. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. If sympathomimetic drugs are administered, observe for the development of cardiac arrhythmias. |

Section 5: Fire Fighting Measures

| Hazard Type | Highly Flammable Liquid |
|---------------------|--|
| Hazards from | Oxides of Carbon when burned. |
| products | |
| Suitable | Dry chemical, foam, or carbon dioxide. |
| Extinguishing media | |
| Precautions for | Proper respiratory equipment to protect against the hazardous effects of |
| firefighters and | combustion products is recommended. Water in a straight hose stream may cause |
| special protective | fire to spread and should be used as a cooling medium only. Vapour |
| clothing | accumulations may flash and/or explode if ignited. Keep ignition sources, open |
| | flames, etc. away from those fumes. |
| HAZCHEM CODE | 3YE |

Section 6: Accidental Release Measures

Evacuate all unnecessary personnel and ventilate area. Extinguish possible sources of ignition. Only personnel equipped with proper respiratory, skin/eye protection should enter spill area.

Do not allow to enter waterways.

Dike area to contain spill and clean up by absorbing on an inert absorbent or other means. Place in a container for disposal. Dispose of according to Section 13.

Section 7: Handling and Storage

Handling:

- Read label before use.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Keep away from heat, sparks, open flames or hot surfaces. No smoking.
- Keep container tightly closed.
- Open container slowly to relieve any pressure.
- Bond and ground all equipment when transferring from one vessel or container to another.

- This material can accumulate static charge by flow or agitation.
- Vapours can be ignited by static discharge.
- Use explosion proof equipment as directed by local fire codes.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Do not breathe fumes, mist, vapours or spray.
- Wash hands thoroughly after handling.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.

Storage:

- Store locked up.
- Store in a well-ventilated place. Keep cool.
- Keep out of reach of children
- Store unopened containers under cool, dry and ventilated conditions.
- Keep away from heat, sparks and flame.
- Store away from incompatible materials listed in Section 10.

Section 8: Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

| | | TWA | | ST | EL |
|--|------------|-----|-------------------|-------|-------------------|
| Substance | | ppm | mg/m ³ | ppm | mg/m ³ |
| Isopropyl alcohol | [67-63-0] | 400 | 983 | 500 | 1,230 |
| n-Butyl acetate | [123-86-4] | 150 | 713 | 200 | 950 |
| Toluene (skin) (Toluol) | [108-88-3] | 20 | 75 | 100 | 377 |
| Acetone (bio) | [67-64-1] | 500 | 1,185 | 1,000 | 2,375 |
| Hexone (Methyl isobutyl ketone) [108-10-1] | | 50 | 205 | 75 | 307 |

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2023 14TH EDITION.

Personal Protection Equipment



Engineering Controls:

Eye / Face Protection: Body Protection:

Respiratory Protection:

General (mechanical) room ventilation is considered satisfactory in enclosed spaces. Where explosive mixtures may be present, electrical systems safe for such locations must be used.

Wear safety glasses with side shields or goggles when handling this material.

PVC-coated gloves. Avoid skin contact. If skin contact or contamination of clothing is likely, protective clothing should be worn.

Avoid breathing vapour or mist. Use NIOSH approved respiratory protection equipment appropriate to the material.

Section 9: Physical and Chemical Properties

| Appearance | Liquid |
|-----------------|------------------|
| Colour | Clear colourless |
| Odour | Solvent odour |
| Odour Threshold | Not available |

| рН | Not available |
|----------------------------------|------------------|
| Boiling Point | Not available |
| Melting Point | Not available |
| Freezing Point | Not available |
| Flash Point | 4^{0} C |
| Flammability | Highly Flammable |
| Upper and Lower Explosive | 1.2% - 8% |
| Limits | |
| Vapour Pressure | Not available |
| Vapour Density | 3.0 |
| Specific Gravity | 0.80 |
| Solubility in Water | Partly soluble |
| Partition Coefficient: | Not available |
| Auto-ignition Temperature | 485°C |
| Decomposition Temperature | Not available |
| Kinematic Viscosity | Not available |
| Particle Characteristics | Not applicable |
| Evaporation Rate | Not available |
| % Volatiles | 100 |

Section 10: Stability and Reactivity

| Stability of the Substance: | Stable under normal storage and use conditions. |
|--|---|
| Conditions to avoid: | Exposure to excessive heat, open flames and sparks. Avoid conditions that favour the formation of excessive mists and/or fumes. |
| Materials to avoid: | Strong oxidizing agents. |
| Hazardous Decomposition Products: | Oxides of Carbon when burned. |
| Conditions Contributing to Hazardous Polymerization | Will not occur |

Section 11: Toxicological Information

Acute Effects:

| Swallowed | Not applicable. | |
|------------|--|--|
| Dermal | Not applicable. | |
| Inhalation | Harmful if inhaled. Mixture rules calculation = $LD50 = 2.6mg/L$ | |
| Eye | Causes severe eye irritation. | |
| | SPECIES: Rabbit | |
| | RESULT: The test substance was applied at 0.1 ml to the conjunctival sac of one | |
| | eye of each of 6 rabbits (sex not reported) Mild iritis was observed in most eyes | |
| | at 1 hour; slight corneal opacity was observed in 2 eyes at 24 hours, and 1 eye at | |
| | 48 hours. Moderate conjunctival irritation was present in most eyes at 1 and 24 | |
| | hours, but was slight at 48 and 72 hours. All eyes were normal by 7 days. | |
| Skin | Causes skin irritation. | |

Chronic Effects:

| Carcinogenicity | Not applicable. | |
|------------------------------|--|--|
| Reproductive Toxicity | Suspected of damaging fertility or the unborn child. | |
| Germ Cell | Not applicable. | |
| Mutagenicity | | |
| Aspiration | Not applicable. | |
| STOT/SE | Not applicable. | |
| STOT/RE | May cause damage to organs through prolonged or repeated exposure. | |

Individual component information: Acute Toxicity:

| Acute Toxicity. | | | |
|------------------------|--------------------|---------------|-----------------------|
| Chemical Name | Oral – LD50 | Dermal – LD50 | Inhalation – LC50 |
| Butyl Acetate | 3200 mg/kg (rabbit | - | 2mg/l dust (male rat) |
| (Cas No 123-86-4) | | | |
| Toluene (108-88-3) | 636 mg/kg (rat) | - | 12.5 mg/l (vapour) |
| | | | (rat) |
| IPA (67-63-0) | 3600 mg/kg (mouse) | - | - |
| Acetone (67-64-1) | 3000 mg/kg (mouse) | - | - |
| Methyl Isobutyl Ketone | 1600 mg/kg (guinea | - | - |
| (108-10-1) | pig) | | |

Section 12: Ecotoxicological Information

Harmful to aquatic life with long lasting effects.

| Persistence and degradability | No data available |
|-------------------------------|-------------------|
| Bioaccumulation | No data available |
| Mobility in Soil | No data available |
| Other adverse effects | No data available |

<u>Individual component information (Please refer to www.epa.govt.co.nz</u> for full details): Toluene (Cas No 108-88-3):

| Route | Species | Duration | Value |
|---------------------------|------------------------------------|---------------|-----------|
| | | | LC50/EC50 |
| aquatic, fish | oncorhynchus mykiss Rainbow trout, | 96 hr | 5.8 mg/l |
| | donaldson trout | 70 III | |
| Acute aquatic, Crustacean | Daphnia magna (Crustacea) | 48 hr | 11.5 mg/l |
| Chronic, aquatic, | Daphnia magna (Crustacea) | 21 day | 1 mg/L |
| Crustacean | Dapinna magna (Crustacea) | 21 day | |
| Aquatic, Algae | Selenastrum capricornutum | 72 hr | 12.5 mg/l |
| Bioaccumulative | No | | |
| Rapidly Degradable | Yes | | |

Butyl Acetate (Cas No 123-86-4):

| Route | Species | Duration | Value |
|---------------------|--------------------------------------|----------|-----------|
| | | | LC50/EC50 |
| aquatic, fish | Pimephales promelas (Fathead minnow) | 96 hr | 18 mg/l |
| aquatic, Crustacean | Artemia salina (Brine shrimp) | 48 hr | 32 mg/l |
| Bioaccumulative | No | | |
| Rapidly Degradable | Yes | | |

Do not allow to enter waterways.

Section 13: Disposal Considerations

| Disposal Method: | Spent media that has removed toxic chemicals should be examined for specific hazards. Spilled product may be recovered for use if it has not come in contact with liquids or been exposed to significant amounts of gaseous contaminants. Dispose of according to Local Regulations. |
|------------------|--|
| | Ensure any container holding waste product or contaminated spill media is labelled "Hazardous Waste – Flammable" and that the label also has the Flammable Pictogram, waste type identifier, and the business name, address, and phone number. |
| Precautions: | Avoid release to the environment. |

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2020 and SNZ HB 5433:2021



Road, Rail, Sea and Air Transport

| UN No | 1993 |
|----------------------|---|
| Class - Primary | 3 |
| Packing Group | Π |
| Proper Shipping Name | FLAMMABLE LIQUID, N.O.S. |
| Marine Pollutant | No |
| Special Provisions | If the product's individual container is below 1L, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG. |

Section 15: Regulatory Information

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code: Solvents (Flammable) - HSR0002650

| HSW (HS) Regulations 2017 and EPA Notices | Trigger Quantity |
|---|----------------------------------|
| Certified Handler | Not required |
| Location Certificate | 100L (>5L), 250L (<5L), 50L open |
| Tracking Trigger Quantities | Not required |
| Signage Trigger Quantities | 250L |
| Emergency Response Plan | 1000L |
| Secondary Containment | 1000L |
| Fire Extinguishers | 2 x >250L |
| Restriction of Use | None |

Section 16: Other Information

| Glossary | |
|------------------|---|
| EC ₅₀ | Median effective concentration. |
| EEL | Environmental Exposure Limit. |
| EPA | Environmental Protection Authority |
| HSNO | Hazardous Substances and New Organisms. |
| HSW | Health and Safety at Work. |
| LC_{50} | Lethal concentration that will kill 50% of the test organisms inhaling or |
| | ingesting it. |
| LD_{50} | Lethal dose to kill 50% of test animals/organisms. |
| LEL | Lower explosive level. |
| OSHA | American Occupational Safety and Health Administration. |
| TEL | Tolerable Exposure Limit. |
| TLV | Threshold Limit Value-an exposure limit set by responsible authority. |
| UEL | Upper Explosive Level |
| WES | Workplace Exposure Limit |
| References: | * * |
| | |

- 1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
- 2. Workplace Exposure Standards and Biological Exposure Indices Nov 2023 14th edition.
- 3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).

- 4. Transport of Dangerous goods on land NZS 5433:2020
- 5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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