# SAFETY DATA SHEET

**Issue Date** 14-Aug-2017 **Revision Date** 14-Aug-2017 **Version** 1

## Section 1: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

**Product identifier**

**Product Name** Norski Epoxy Clean Up Thinners

**Description** Clear colourless liquid with a strong sweet acetone-like odour

**Other means of identification**

**UN Number** 1193

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Industrial Solvent

**Details of the supplier of the safety data sheet**

**Manufacturer**

Norski Holdings Ltd
10 Northpoint Street
Plimmerton
Wellington 5247
New Zealand

For further information, please contact

**Contact Point** +64 (04) 233 6184
**E-mail address** Enquiries@norski.co.nz

**Emergency telephone number**

**Emergency Telephone** +64 0800 500 341

## Section 2: HAZARD(S) IDENTIFICATION

Product is classified as hazardous according to Schedules 1 to 6 of the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 of the HSNO Act, 1996.

**HSNO Classification:** 3.1B: Highly flammable ; 6.1E: Acute Toxicity (Oral); 6.1E (Aspiration); 6.3B: Skin Irritant; 6.4A: Eye Irritant; 6.9B: Target Organs/Systems (Repeated)

**EPA New Zealand Approval Code:** HSR002650; Solvents (Flammable) Group Standard 2006

**Signal Word:** **DANGER**

**Label elements**

**Hazard Statements:**

| | |
|---|---|
| H225 | Highly flammable liquid and vapour |
| H303 | May be harmful if swallowed |
| H304 | May be fatal if swallowed and enters airways |
| H316 | Causes mild skin irritation |
| H319 | Causes serious eye irritation |
| H373 | May cause damage to organs through prolonged or repeated exposure |

**Precautionary Statements:**

| | |
|---|---|
| P102 | Keep out of reach of children |
| P103 | Read label before use |
| P210 | Keep away from heat, sparks, open flames and hot surfaces. No smoking. |
| P233 | Keep container tightly closed |
| P240 | Ground container and receiving equipment |
| P241 | Use explosion-proof equipment |
| P242 | Use non-sparking tools |
| P243 | Take precautionary measures against static discharge |
| P260 | Do not breathe vapours |
| P264 | Wash hands and exposed skin thoroughly after handling |
| P280 | Wear protective gloves and eye protection |

**Response Statements:**

| | |
|---|---|
| P101 | If medical advice is needed, have product container or label at hand |
| P312 | Call a POISON CENTRE or doctor if you feel unwell |
| P301 +P310 | IF SWALLOWED: Immediately call a POISON CENTRE or doctor. |
| P331 | Do NOT induce vomiting. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing |
| P337 + P313 | If eye irritation persists: Get medical advice |
| P332 + P313 | If skin irritation occurs: Get medical advice |
| P370 + P378 | In case of fire: Stop leak if safe to do so |

**Storage Statements:**

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

**Disposal Statements:**

P501 Dispose of product and containers in accordance with local regulations

## Section 3: COMPOSITION AND INFORMATION ON INGREDIENTS

| Chemical Ingredient | CAS Number | Proportion (% w/w) |
|---|---|---|
| **Methyl ethyl ketone** | **78-93-3** | **100** |

## Section 4: FIRST AID MEASURES

**For advice, contact the National Poisons Centre (Phone New Zealand: 0800 764 766) or a doctor.**

| | | |
|---|---|---|
| | | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. |
| **Inhalation** | : | Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical |

| | | |
|---|---|---|
| | | surveillance for 48 hours. In the event of any complaints or symptoms, avoid further exposure. |
| **Skin contact** | : | Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse. |
| **Ingestion** | : | Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |

**Swallowed**
If swallowed, do NOT induce vomiting. Rinse mouth. Begin artificial respiration if the victim is not breathing.
Use mouth to nose rather than mouth to mouth. Obtain medical attention.
If vomiting occurs spontaneously, ensure persons hips higher than head to avoid aspiration into lungs.

**Skin Contact**
If skin contact occurs, remove contaminated clothing and flush skin with running water. If irritation persists, get medical advice.

**Eye Contact**
Hold eyelids apart and flush the eye continuously with running water. Remove contact lenses, if present and easy to do. Continue flushing for at least 15 minutes. Get medical attention if irritation persists.

**Inhalation**
Move the victim to fresh air immediately. Keep warm and at rest until recovered. Begin artificial respiration if breathing has stopped. Get medical attention.

**First Aid facilities**
Provide eye baths and safety showers close to areas where splashing may occur.

**Medical Attention**
Treat according to symptoms. Causes nervous system depression. Gastric lavage may be indicated if ingested. Do not wait for symptoms to develop. General measures should be taken to control acidosis and maintain urine output.

## Section 5: FIREFIGHTING MEASURES

Highly flammable liquid and vapour. Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress, providing fire fighters with this Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways. Vapours are heavier than air so able to spread along ground and distant ignition is possible.

**Suitable extinguishing media:** Alcohol resistant foam, water spray or fog. On small fires may use dry chemical powder, carbon dioxide, sand or earth. Keep adjacent containers cool by spraying with water. Do not use water jet.

**Hazards from combustion products:** Carbon dioxide and carbon monoxide.

**Precautions for fire fighters and special protective equipment:** Full protective clothing and self-contained breathing apparatus.

**Hazchem Code:** 3YE

## Section 6: ACCIDENTAL RELEASE MEASURES

**Emergency Procedures:**

Highly flammable liquid and vapour. Avoid contact with spilt material. Prevent product from escaping to drains and waterways. Contain leaking packaging in a containment vessel. Prevent any vapours from building up in confined areas. Vapours heavier than air and can spread across the ground. Ensure that drain valves are closed at all times. Clean up and report spills immediately or accidental release immediately to relevant authorities according to applicable regulations.

**Methods and materials for containment:**

**Major Land Spill**

- Eliminate sources of ignition.
- Warn occupants of downwind areas of possible fire and explosion hazard.
- Prevent product from entering sewers, watercourses, or low-lying areas.
- Keep the public away from the area.
- Do not walk through or touch spilled material.
- Shut off the source of the spill if safe to do so.
- Advise authorities if substance has entered a watercourse or sewer or has contaminated soil or vegetation.
- Take measures to minimise the effect on the groundwater.
- Contain, absorb or cover the spilled liquid with dry sand or earth, or other non-combustible material.
- A vapour-supressing foam may be used to reduce vapour
- Recover by pumping – use non-sparking tools, explosion-proof pump or hand pump or with a suitable absorbent material.
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See "First Aid Measures" and "Stability and Reactivity".

**Major Water Spill**

- Eliminate any sources of ignition.
- Warn occupants and shipping in downwind areas of possible fire and explosion hazard.

- Notify the port or relevant authority and keep the public away from the area.
- Shut off the source of the spill if possible and safe to do so.
- Confine the spill if possible.
- Remove the product from the surface by skimming or with suitable absorbent material.
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See “First Aid Measures” and “Stability and Reactivity”.

## Section 7: HANDLING AND STORAGE

**Precautions for safe handling:**

When present in quantities greater than 250L (when in containers greater than 5L) or 500L (when in containers up to and including 5L), this product must be locked up if not under the control of an Approved Handler who holds a current test certificate.

This product is highly flammable. Do not open near open flame, sources of heat or ignition. No smoking. Keep container closed. Handle containers with care. Open slowly to control possible pressure release. Material will accumulate static charge. Use grounding leads to avoid discharge (electrical spark).

**Conditions for safe storage:**

Store in a cool, dry well ventilated place away from direct sunlight. Do not pressurise, cut, heat or weld containers - residual vapours are highly flammable. This product will fuel a fire in progress.

**Incompatible materials:**

Natural, neoprene or nitrile rubbers, aluminium, plastics.

## Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Health Exposure Standards:**

Workplace Exposure Standards (WES), have been set by Worksafe NZ for this substance.

| | WES-TWA | WES-STEL |
|---|---|---|
| Methyl ethyl ketone $_{BIO}$ | 150 ppm (445 mg/m$^3$) | 300 ppm (890 mg/m$^3$) |

**Biological Limit Values:**

Methyl ethyl ketone (MEK) 2 mg/L in urine (at end of work shift)

**Ventilation**

The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be handled in a fume hood. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment.

**Personal Protective Equipment:**

**Respiratory Protection:** Where concentrations in air may exceed the limits described in the National Exposure Standards, it is recommended to use a half-face filter mask suitable for organic gases and

vapours (boiling point >65 $^0$C) to protect from overexposure by inhalation. A type “A” filter material is considered suitable for this product.

**Eye protection:**
Always use chemical splash goggles.

**Skin/ Body Protection:**
Always wear chemical resistant clothing with long sleeves and safety shoes/boots when handling this product.
Wear butyl rubber or polyvinyl alcohol type gloves.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

| Property | Unit of measurement | Typical value |
|---|---|---|
| Appearance | - | Clear, colourless liquid |
| Boiling Point/ Range | °C | 79 – 80.5 |
| Flash Point | °C | -4 |
| Density @ 20°C | g/m$^3$ | 0.804 – 0.806 |
| Vapour Pressure @ 20°C | Pa | 9500 |
| Vapour Density @ 20°C | kPa | 2.4 |
| Autoignition Temperature | °C | 515 |
| Explosive Limits in Air | % by vol | 1.8 – 11.5 |
| Viscosity @ 20°C | cSt | Not applicable |
| Volatiles | % vol/vol | 100 |
| Volatile organic carbon content | % | 66.6 |
| Evaporation rate | nBuAc = 1 | 3.7 |
| Solubility in water | g/L | Miscible |

The values listed are indicative of this product’s physical and chemical properties. For a full product specification, please consult the Product Data Sheet

## Section 10: STABILITY AND REACTIVITY

**Chemical stability:** Stable at room temperature and pressure

**Conditions to avoid:** Sources of heat and ignition, open flames. Contact with strong oxidising agents.

**Hazardous decomposition products:**

No decomposition products except on burning. See “Fire Fighting Measures” and “Hazardous Reactions”. Incomplete combustion results in generation of carbon monoxide.

**Hazardous reactions:** Strong oxidizers, heat and sources of ignition.

## Section 11: TOXICOLOGICAL INFORMATION

**Acute Effects:**

**Ingestion**

May be harmful if swallowed. Ingestion of large amounts of product will result in central nervous system depression with symptoms such as headaches, dizziness, hallucinations, euphoria, tingling of the extremities, vomiting and possible loss of consciousness. Aspiration to the lungs may cause chemical pneumonitis which may be fatal.

**Eye Contact**

The liquid and vapour is irritating to eyes and may cause inflammation. Repeated or prolonged exposure may produce conjunctivitis.

**Skin Contact**

This product is irritating to the skin and prolonged or repeated exposure may result in dryness and cracking of skin.

**Inhalation**

May be irritating to respiratory system. Inhalation of high concentrations may result in nervous system depression which can lead to dizziness, headaches, nausea, vomiting and loss of appetite.

**Chronic Effects**

Repeated of prolonged ingestion of this product could result in liver or kidney damage.
Causes slight foetotoxicity but effects are seen only at high doses.

**Other Health Effects Information**

The effects of this product in combination with n-hexane are potentiated (greatly increased). This means that the effects suffered by ingestion or inhalation will be increase or experienced more quickly.

**Toxicological Information:**

| | |
|---|---|
| Methyl ethyl ketone | Oral $LD_{50}$ (rat) 2737 mg.kg |

## Section 12: ECOLOGICAL INFORMATION

**Aquatic Toxicity:**
Product is not identified as being harmful in the aquatic environment.

**Persistence/ Biodegradability:**
Product is readily biodegradable. Oxidises rapidly by photo-chemical reactions in air.

**Mobility:**
Product is soluble in water.

**Environmental Exposure Standards:**
None set

## SECTION 13 DISPOSAL CONSIDERATIONS

**Disposal Methods:**

Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still contain residue and vapour that are highly flammable and harmful. Ensure that empty packaging is allowed to dry.

**Special Precautions:**

This product is not suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers. This product is ashless and can be burned directly in appropriate equipment. In the absence of a

designated industrial incinerator, this product should be treated and disposed through chemical waste treatment facility, or considered for use in solvent recycling.

## SECTION 14 TRANSPORT INFORMATION

| Road and Rail Transport | | Marine Transport | | Air Transport | |
|---|---|---|---|---|---|
| UN No | 1193 | UN No | 1193 | UN No | 1193 |
| Proper Shipping Name | METHYL ETHYL KETONE | Proper Shipping Name | METHYL ETHYL KETONE | Proper Shipping Name | METHYL ETHYL KETONE |
| DG Class | 3 | DG Class | 3 | DG Class | 3 |
| Sub. Risk | None | Sub. Risk | None | Sub. Risk | None |
| Pack Group | II | Pack Group | II | Pack Group | II |
| Hazchem | 3YE | Hazchem | 3YE | Hazchem | |

**Dangerous Goods Segregation**

This product is classified as Dangerous Goods Class 3, Packing Group II.

Please consult the Land Transport Rule: Dangerous Goods 2005, and NZS 5433:2012 Transport of Dangerous Goods on Land for information.


## Section 15: REGULATORY INFORMATION

**Country/ Region:** New Zealand, Asia Pacific

**Inventory:** AICS, NZIoC

**Status:** Listed

**EPA New Zealand Approval Code:** HSR002650; Solvents (Flammable) Group Standard 2006

## Section 16: ANY OTHER RELEVANT INFORMATION

**Revision Note** New Format

**Key or legend to abbreviations and acronyms used in the safety data sheet**

**Disclaimer**

**This information is given without any warranty or representation. We do not assume any legal responsibility for same, nor do we give permission, inducement, or recommendation to practice any patented invention without a license. It is offered solely for your consideration, investigation, and verification. Before using any product, read its label.**

**End of Safety Data Sheet**