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**	**90**

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

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End of Safety Data Sheet