

Safety Data Sheet

eNZoil New Transformer Oil

Inhibited



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Section 1. Identification

Product Name eNZoil New Transformer Oil Inhibited
Product Code eNZoil New Oil
SDS No. 00005

Relevant identified uses of the substance or mixture:

Use of the substance/ mixture Insulating Oil for transformer (power & distribution) and switch gear. For specific application advice see appropriate Technical Data Sheet

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Emergency Telephone Number 111

New Zealand National Poisons Centre 0800 764 766

Section 2. Hazard(s) identification

GHS7 Classification Identified hazard as follows:
Aspiration Hazard Category 1
Hazardous to Aquatic Environment Category 2

NZTA Classification DG9

GHS label elements



Hazard pictograms

Signal word DANGER

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Hazard statements	6.1 - May be fatal if swallowed and enters airways. Miscellaneous Dangerous Goods Class 9 3Z 3082 ECO TOXIC Class 9
Specific hazards	Inhalation: Droplets of product aspirated into lungs or vomiting may cause chemical pneumonia Skin: Short term contact with skin is unlikely to cause any problems; excessive or prolonged and repeated contact and poor hygiene conditions may result in dryness, dermatitis, erythema, oil acne, cracking and defatting of the skin. Eye: Eye contact may result in slight irritation and redness. Ingestion: May result in nausea or stomach discomfort. Carcinogenicity: Based on OSHA 1910.1200 and IARC study requirements, this product does not require labelling. Meets EU requirement of less than 3% (w/w) DMSO extract for total polycyclic aromatic compound (PAC) using IP 346. Eco Toxic Pollutant – toxic to fish and plants.

Precautionary statements

Prevention	Do not inhale gas / mist / vapours or spray produced by the product Use personal protective equipment as required
Response	P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.
Storage	P405 - Store locked up.
Disposal	P501 - Dispose of contents and container in accordance with all local, regional, national, and international regulations.
Supplemental label elements	Not applicable.
Other hazards which do not result in classification	De-fatting to the skin.

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Section 3. Composition and ingredient information

Substance/mixture

Hydrotreated base oil (IP 346 DMSO extract < 3%). Proprietary performance additives.

INGREDIENT	COMPOSITION %	CAS NO
Distillates (petroleum), hydrotreated Light Paraffinic Index No 649-466-00-2	20-100	64742-53-6 265-156-6
Distillates (petroleum), hydrotreated light paraffinic Index No 649-468-00-3	0-40	64742-55-8 265-158-7
Lubricating Oils (petroleum), C15-30, Hydrotreated Neutral Oil-based Index No 649-482-00-X	0-40	72623-86-0 276-737-9
LUBRICATING OILS (PETROLEUM), C20-50, HYDROTREATED NEUTRAL OIL-BASED Index No 649-483-00-5	0-20	72623-87-1 276-738-4
DISTILLATES (PETROLEUM), SOLVENT-REFINED HEAVY NAPHTHENIC Index No 649-457-00-3	0-10	64741-96-4 265-097-6
DISTILLATES (PETROLEUM), SOLVENT-REFINED LIGHT PARAFFINIC Index No 649-455-00-2	0-10	64741-89-5 265-091-3
2,6-di-tertiary-butyl-para-cresol	<0.40	128-37-0

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures – Contact emergency services if deemed necessary.

Eye contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.

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Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
Skin contact	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Aspiration hazard if swallowed. Can enter lungs and cause damage. Get medical attention immediately.
Most important symptoms/effects, acute and delayed	See Section 11 for more detailed information on health effects and symptoms.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	Treatment should in general be symptomatic and directed to relieving any effects. Product can be aspirated on swallowing or following regurgitation of stomach contents, and can cause severe and potentially fatal chemical pneumonitis, which will require urgent treatment. Because of the risk of aspiration, induction of vomiting and gastric lavage should be avoided. Gastric lavage should be undertaken only after endotracheal intubation. Monitor for cardiac dysrhythmias.
Specific treatments	No specific treatment.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Section 5. Firefighting measures

Suitable extinguishing media	In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.
Unsuitable extinguishing media	Do not use water jet
Specific hazards arising from the chemical	In a fire or if heated, a pressure increase will occur, and the container may burst.
Hazardous thermal decomposition products	Fumes, smoke, carbon monoxide.
Special protective actions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Section 6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures

For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapour or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling. Contact emergency personnel
For emergency responders	Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

Methods and material for containment and cleaning up

Small spill	Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Contaminated absorbent material may pose the same hazard as the spilt product. Dispose of via a licensed waste disposal contractor.
Land Spill:	Shut off source taking normal safety precautions. Take measures to minimize the effects on ground water. Recover by pumping using explosion proof equipment or contain spilled liquid with sand or other suitable absorbent and remove mechanically into containers. If necessary, dispose of absorbed residues as directed in Section 13.
Water Spill:	Notify port and relevant authorities. Confine with booms if skimming equipment is available to recover the spill for later recycling or disposal.

Section 7. Handling and storage

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Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Avoid breathing vapour or mist. Avoid contact with eyes, skin and clothing. Empty containers retain product residue and can be hazardous. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container. Do not swallow. Aspiration hazard if swallowed.

Can enter lungs and cause damage. Never siphon by mouth.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash with soap and water thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/ containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Not suitable

Prolonged exposure to elevated temperature

Section 8. Exposure controls/personal protection

Control parameters / Occupational exposure limits

Components	CAS-No.	Source	TWA	Value	Notations
Hyvolt 1	64742-53-6	ACGIH TLV	LTEL	10 mg/m ³	Oil mists
2,6-di-tertiary-butyl-para-cresol	128-37-0	NZWESAC	WES-TWA	10mg/m ³	

LTEL: Long Term Exposure Limits - Time Weight Average (TWA) over 8 hours. STEL: Short Term Exposure Limits - Time Weight Average (TWA) over 15 Minutes Note: Limits Shown for guidance only. Follow applicable regulations

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Appropriate engineering controls

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygienemeasures

Wash hands, fore-arms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety glasses with side shields.

Skin protection Hand protection

Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacture and with a full assessment of the working conditions.

Skinprotection

Use of protective clothing is good industrial practice.

Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin.

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	Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.
	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	Appropriate footwear and any additional skin protection measures should be
	selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
	The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
Refer to standards:	Respiratory protection: AS/NSS 1715 and AS/NSS 1716 Gloves: AS/NSS 2161.1 Eye protection: AS/NSS 1336 and AS/NSS 1337

Section 9. Physical and chemical properties

Appearance

Physical state	Liquid
Colour	Water White
Odour	Mild
Threshold pH	Not applicable
Melting point	Not available
Boiling point	>296°C (>565°F)
Flash Point	Closed cup: >147°C (>296.6°F) [Pensky-Martens.]
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable. Based on - Physical state
Lower and upper explosive (flammable) limits	UEL = 7% (V) LEL = 0.9% (V)
Solubility	Negligible in water
Relative Density	0.884 (15°C)

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Density	0.881 (20°C)
Auto-ignition temperature	315°C (599°F)
Decomposition temperature	Not available.
Viscosity	Kinematic: 10.0 mm ² /s (10.0 cSt) at 40°C, 2.51 mm ² /s (2.51 cSt) at 100°C

Section 10. Stability and reactivity

Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame).
Incompatible materials	Reactive or incompatible with the following materials: oxidising materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Aspiration hazard	Name: Light Viscosity Hydrotreated Naphthenic Oils Result: 6.1 Acute Toxicity - Category 1
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Information on likely routes of exposure	Routes of entry anticipated: Dermal, Inhalation.
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Potential acute health effects

Eye contact	No known significant effects or critical hazards.
Inhalation	Vapour inhalation under ambient conditions is not normally a problem due to low vapour pressure.
Skin contact	Defatting to the skin. May cause skin dryness and irritation.
Ingestion	Aspiration hazard if swallowed -- harmful or fatal if liquid is aspirated into lungs.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	No specific data.
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Inhalation	May be harmful by inhalation if exposure to vapour, mists or fumes resulting from thermal decomposition products occurs.
Skin contact	Adverse symptoms may include the following: irritation, dryness, cracking.
Ingestion	Adverse symptoms may include the following: nausea or vomiting

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Eye contact	Potential risk of transient stinging or redness if accidental eye contact occurs.
Inhalation	Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.
Skin contact	Prolonged or repeated contact can de-fat the skin and lead to irritation, cracking and/ or dermatitis.
Ingestion	Ingestion of large quantities may cause nausea and diarrhoea.

General

Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.

Section 12. Ecological information

Mobility in soil

Soil/water partition coefficient (K_{oc})	Not available.
Mobility	Spillages may penetrate the soil causing ground water contamination.
Other ecological information	Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

Section 13. Disposal considerations

Disposal methods	The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable recycling plant. Dispose of
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	<p>surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled.</p> <p>Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.</p> <p>USED OILS FROM TRANSFORMERS AND SWITCHGEAR:</p> <p>Used oil contaminated with PCBs requires expert handling and disposal to avoid serious pollution. If it is suspected that oil is contaminated with PCBs it should be kept separate from, and never mixed with other waste oils. Contact the Local Authority for disposal advice.</p>
Special Precautions for Landfill or Incineration	No additional special precautions identified.

Section 14. Transport information

	New Zealand	IMDG	IATA
UN number	3Z 3082	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	- Class 9 miscellaneous Dangerous Good, Ecotoxic	-	-
Packing group	- 3	-	-
Environmental hazards	ECO Toxic, Class 9	No.	No.
Additional information	-	-	-

Special precautions for user Not available.

Section 15. Regulatory information

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Standard Uniform Schedule of Medicine and Poisons	- Not regulated.
Model Work Health and Safety Regulations - Scheduled Substances -	Not listed substance
HSNO Approval Number	HSR002605
Group Standard	Lubricant Group Standard 2017
International lists	
National inventory REACH Status	For the REACH status of this product please consult your company contact, as identified in Section 1.
Australia inventory (AICS)	All components are listed or exempted.
Canada inventory	All components are listed or exempted.
China inventory (IECSC)	At least one component is not listed.
Japan inventory (ENCS)	All components are listed or exempted.
Korea inventory (KECI)	All components are listed or exempted.
Philippines inventory (PICCS)	Not determined.
Taiwan Chemical Substances Inventory (TCSI)	Not determined.
United States inventory (TSCA 8b)	All components are listed or exempted.

Section 16. Any other relevant information

History

Date of printing	08/10/2025
Date of issue/Date of revision	07/10/2025
Date of previous issue	01/04/2025
Version	5

Product Stewardship

Key to abbreviations	ADG = Australian Dangerous Goods ATE = Acute Toxicity Estimate BCF = Bio concentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods
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LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) NOHSC = National Occupational Health and Safety Commission

STEL = Short term exposure limit

SUSMP = Standard Uniform Schedule of Medicine and Poisons UN = United Nations

TWA = Time weighted average VOC = Volatile Organic Compound

SADT = Self-Accelerating Decomposition Temperature

Varies = may contain one or more of the following 101316-69-2, 101316-70-5, 101316-71-6, 101316-72-7, 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4,

64741-97-5, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-64-9, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1, 74869-22-0, 90669-74-2

Procedure used to derive the classification

Classification Asp. Tox. 1, 6.1

Justification Calculation method

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from eNZoil (NZ) Ltd.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. eNZoil (NZ) Ltd shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact eNZoil to ensure that this document is the most current available.

Issue	5.3
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