ENEOS X Prime 0W-50

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 21-2-2022 Revision date: 12-6-2025 Supersedes: 25-3-2025 Version: 3.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : ENEOS X Prime 0W-50
Product code : V161500465
Product group : Trade product

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Intended for general public
Main use category : Industrial use,Professional use,Consumer use
Use of the substance/mixture : Lubricant
Function or use category : Lubricants and additives

1.3. Details of the supplier of the safety data sheet

Supplier - ENEOS Europe Limited
8th Floor, Muro, India Street
London, EC3N 2AF
United Kingdom
T +44 20 7186 0400
ENEOS_SCM@eneos.co.uk

Other - Eneos Netherlands B.V.
Atrium 4th Floor
1077 ZX Amsterdam
The Netherlands
ENEOS_SCM@eneos.co.uk

1.4. Emergency telephone number

Emergency number : 0044 20 7186 0400
(Monday to Friday: 8:00 - 17:00)

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital Msida MSD 2090 Msida	112 +356 2545 6508	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals
United Kingdom	NHS 111/NHS 24/NHS Direct		111 0845 4647	or call a doctor

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Precautionary statements (CLP) : P102 - Keep out of reach of children.
EUH-statements : EUH210 - Safety data sheet available on request.
Child-resistant fastening : Not applicable
Tactile warning : Not applicable

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Highly refined low-viscosity mineral oil substance with a Community workplace exposure limit (*/**)(Note L)	-	≥ 50	Asp. Tox. 1, H304
Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	CAS-No.: 36878-20-3 EC-No.: 253-249-4 EC Index-No.: 701-385-4 REACH-no: 01-2119488911-28	1 – 3	Aquatic Chronic 4, H413

*/**: Contains one or more of the following * EC-numbers: 265-157-1, 265-158-7, 265-159-2, 265-169-7; ** REACH registration numbers: 01-2119484627-25, 01-2119487077-29, 01-2119480132-48, 01-2119471299-27

Note L: The harmonised classification as a carcinogen applies unless it can be shown that the substance contains less than 3 % of dimethyl sulphoxide extract as measured by IP 346 (“Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions – Dimethyl sulphoxide extraction refractive index method” Institute of Petroleum, London), in which case a classification in accordance with Title II of this Regulation shall be performed also for that hazard class.

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : At normal ambient temperatures this product will be unlikely to present an inhalation hazard because of its low volatility. May be harmful by inhalation if exposure to vapour, mists or fumes resulting from thermal decomposition products occurs.

Symptoms/effects after skin contact : Unlikely to cause harm to the skin on brief or occasional contact but prolonged or repeated exposure may lead to dermatitis. High pressure injection of product into the skin may lead to local necrosis if the product is not surgically removed.

Symptoms/effects after eye contact : Unlikely to cause more than transient stinging or redness if accidental eye contact occurs.

Symptoms/effects after ingestion : Bad taste. Unlikely to cause harm if accidentally swallowed in small doses, though larger quantities may cause nausea and diarrhoea.

Symptoms/effects upon intravenous administration : Unknown.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustion generates: CO, CO2, POx, NOx, SOx, H2S. Metallic oxides.

Explosion hazard : Not expected to be a fire/explosion hazard under normal conditions of use.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Precautionary measures fire : Do not enter fire area without proper protective equipment, including respiratory protection.

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Other information : Prevent fire fighting water from entering the environment. Sweep up and remove to a suitable, clearly marked container for disposal in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

For non-emergency personnel

Protective equipment : 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. Use protective clothing.

Emergency procedures : Ventilate spillage area.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.
Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures : Do no eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep container tightly closed and in well ventilated place.
Storage conditions : Keep cool. Protect from sunlight.
Incompatible products : Reacts vigorously with strong oxidizers and acids.
Maximum storage period : 5 year
Storage temperature : ≤ 40 °C
Information on mixed storage : Keep away from : Oxidizing materials. Strong acids.
Storage area : Store at ambient temperature.
Special rules on packaging : Keep container tightly closed and dry.
Packaging materials : Store always product in container of same material as original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

Highly refined low-viscosity mineral oil	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOELV TWA (mg/m³)	5 mg/m³
IOELV STEL (mg/m³)	10 mg/m³

DNEL and PNEC

Exposure-value for oil mist : 10 mg/m3 (15 min.) or 5 mg/m3 (8 hours).

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:
Gloves. In case of splash hazard: safety glasses. Eye protection should only be necessary where liquid could be splashed or sprayed.
Personal protective equipment symbol(s):

Eye and face protection

Eye protection:
Safety glasses

Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Protective gloves

Other skin protection
Materials for protective clothing:
PVC gloves. Neoprene or nitrile rubber gloves

Respiratory protection

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment.

Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.
Consumer exposure controls:
PVC gloves. Neoprene or nitrile rubber gloves.
Other information:
Do not put the product-soaked rags into the pockets of working clothes. Do not use cloths stained with the product to dry hands. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke during use. Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Not available
Appearance	:	Oily. Liquid.
Odour	:	characteristic.
Odour threshold	:	Not available
Melting point	:	-52 °C ASTM D 97
Freezing point	:	Not available
Boiling point	:	> 280 °C
Flammability (solid, gas)	:	Non flammable.
Lower explosive limit (LEL)	:	0,6 vol %
Upper explosive limit (UEL)	:	7 vol %
Flash point	:	> 180 °C ASTM D 92
Auto-ignition temperature	:	200 – 410 °C
Decomposition temperature	:	Not available
pH	:	Not available
Viscosity, kinematic	:	> 20,5 mm²/s at 40 °C, ASTM D 445
Solubility	:	insoluble in water.
Log Kow	:	Not available
Vapour Pressure 20°C	:	< 0,1 hPa
Vapour pressure at 50°C	:	Not available

Density : 0,88 kg/l ASTM D 4052
Relative density : Not available
Relative vapour density at 20°C : > 1 (air=1)
Particle characteristics : Not applicable

9.2. Other information

Information with regard to physical hazard classes

Explosion limits : 1 – 7 vol %

Other safety characteristics

Relative evaporation rate (butylacetate=1) : < 0,1
VOC content : 0 %
Other properties : Gas/vapour heavier than air at 20°C

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

10.4. Conditions to avoid

Moisture. Overheating.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids.

10.6. Hazardous decomposition products

CO, CO2, POx, NOx, SOx, H2S. Metallic oxides.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

Highly refined low-viscosity mineral oil	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 Inhalation - Rat (Vapours)	> 20 mg/l/4h

Reaction products of Benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other:

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)
Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity	:	Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	:	Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	:	Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	:	Not classified (Based on available data, the classification criteria are not met)

ENEOS X Prime 0W-50	
Viscosity, kinematic	> 20,5 mm²/s at 40 °C, ASTM D 445

11.2. Information on other hazards

Other information

Other information : Toxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the toxicology of similar products,Likely route of exposure: ingestion, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	:	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Ecology - water	:	This product floats on water and may affect the oxygen-balance in the water.
Hazardous to the aquatic environment, short–term (acute)	:	Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long–term (chronic)	:	Not classified (Based on available data, the classification criteria are not met)

Reaction products of Benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)	
EC50 Daphnia 1	> 100 mg/l Test organisms (species): Daphnia magna
EC50 other aquatic organisms 1	733 mg/l invertebrates
EC50 72h - Algae [1]	600 mg/l

12.2. Persistence and degradability

ENEOS X Prime 0W-50	
Persistence and degradability	Not readily biodegradable.

Highly refined low-viscosity mineral oil	
Persistence and degradability	Rapidly degradable

Reaction products of Benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)	
Persistence and degradability	Rapidly degradable
Biodegradation	0 % Sturm - 28 days

12.3. Bioaccumulative potential

ENEOS X Prime 0W-50	
Bioaccumulative potential	This product is not expected to bioaccumulate through food chains in the environment.

Reaction products of Benzeneamine, N-phenyl- with nonene (branched) (36878-20-3)	
Bioconcentration factor (BCF REACH)	1584,89

12.4. Mobility in soil

ENEOS X Prime 0W-50	
Ecology - soil	Not miscible with water. Spillages may penetrate the soil causing ground water contamination. This product floats on water and may affect the oxygen-balance in the water.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Waste disposal recommendations : Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.
Ecology - waste materials : Every mixture with foreign substances such as solvents, brake- and cooling liquids is forbidden. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly. When not empty dispose of this container at hazardous or special waste collection point.
European List of Waste (LoW, EC 2000/532) : 13 02 06* - Synthetic engine, gear and lubricating oils

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN
14.1. UN number or ID number			
Not regulated for transport			
14.2. UN proper shipping name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available			

14.6. Special precautions for user

Overland transport
Not regulated

Transport by sea
Not regulated

Air transport
Not regulated

Inland waterway transport
Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	**Applicable on**	**Entry title or description**
3(b)	Highly refined low-viscosity mineral oil	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	Reaction products of Benzeneamine, N-phenyl-with nonene (branched)	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

VOC Directive (2004/42)

VOC content : 0 %

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

A chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes		
Section	**Changed item**	**Comments**
1.1	Name	**Added**
2.1	Adverse physicochemical, human health and environmental effects	**Modified**
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	**Removed**
2.2	Precautionary statements (CLP)	**Modified**
2.2	Hazard statements (CLP)	**Removed**
4.1	First-aid measures general	**Modified**
5.3	Firefighting instructions	**Modified**
6.1	Emergency procedures	**Modified**
6.1	General measures	**Modified**
6.3	For containment	**Modified**
7.2	Packaging materials	**Added**
7.2	Storage conditions	**Modified**
9	Flash point	**Modified**
9	Density	**Modified**
12.1	Ecology - general	**Modified**
13.1	Additional information	**Modified**
13.1	Sewage disposal recommendations	**Added**
13.1	Waste disposal recommendations	**Modified**
15.1	REACH Annex XVII	**Added**
16	Abbreviations and acronyms	**Modified**

Abbreviations and acronyms:	
ACGIH	American Conference of Government Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)

Abbreviations and acronyms:	
CSA	Chemical safety assessment
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
ED	Endocrine disruptor
EN	European Standard
EWC	European waste catalogue
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
OSHA	Occupational Safety Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
PPE	Personal protection equipment
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TF	Technical function
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	Unique Formula Identifier

Data sources	:	REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Supplier's safety documents. ECHA (European Chemicals Agency).
Training advice	:	Normal use of this product shall imply use in accordance with the instructions on the packaging.
Other information	:	The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H- and EUH-statements:	
Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
H304	May be fatal if swallowed and enters airways.
H413	May cause long lasting harmful effects to aquatic life.
EUH210	Safety data sheet available on request.

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.