Locomax ZF 20W-40

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law, and based on EU 2020/878.
SDS Reference Number: 21579
Issue date: 29/11/2023 Revision date: 17/06/2026 Supersedes version of: 28/01/2026 Version: 3.0

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	Locomax ZF 20W-40
Product code	:	7445
Type of product	:	Railroad Diesel Engine Oil
Product group	:	Trade product

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

Relevant identified uses

Main use category	:	Industrial use,Professional use
Use of the substance/mixture	:	Lubricants and additives
Function or use category	:	Lubricants and additives

Title	Life cycle stage	Use descriptors
General industrial use of lubricants and greases in vehicles or machinery. Includes filling and draining of containers and enclosed machinery (including engines)	Professional, Consumer	SU3, PC17, PC24, PROC1, PROC8b, ERC4, ERC7

Full text of use descriptors: see section 16

1.3. Details of the supplier of the safety data sheet

Manufacturer
Morris Lubricants
Castle Foregate
SY1 2EL Shrewsbury, Shropshire
United Kingdom
T +44 (0) 1743 232200
sds@morris-lubricants.co.uk

1.4. Emergency telephone number

Emergency number	:	+44 (0) 1743 232200 08.45 - 17.00 GMT

Country/Area	Organisation	Emergency number
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]

Endocrine disruptor for the environment, Category 1	EUH430
Endocrine disruptor for human health, Category 1	EUH380
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412

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

Adverse physicochemical, human health and environmental effects

May cause endocrine disruption in humans. Harmful to aquatic life with long lasting effects. May cause endocrine disruption in the environment.

2.2. Label elements

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

Signal word (CLP)	:	Danger
Contains	:	Phenol, dodecyl-, branched
Hazard statements (CLP)	:	EUH380 - May cause endocrine disruption in humans. EUH430 - May cause endocrine disruption in the environment. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP)	:	P202 - Do not handle until all safety precautions have been read and understood. P263 - Avoid contact during pregnancy and while nursing. P273 - Avoid release to the environment. P280 - Wear protective clothing, eye protection, face protection, protective gloves. P308+P313 - IF exposed or concerned: Get medical advice/attention. P501 - Dispose of contents and container to a hazardous or special waste collection point.
EUH-statements	:	EUH208 - Contains reaction mass of: dicalcium (bis(2-hydroxy-5-tetra-propenylphenylmethyl)methylamine)dihydroxide; tri-calcium (tris(2-hydroxy-5-tetra-propenylphenylmethyl)methylamine)tri-hydroxide; poly[calcium ((2-hydroxy-5-tetra-propenyl-phenylmethyl)methylamine)hydroxide]. May produce an allergic reaction.

2.3. Other hazards

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

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Phenol, dodecyl-, branched (121158-58-5), reaction mass of: dicalcium (bis(2-hydroxy-5-tetra-propenylphenylmethyl)methylamine)dihydroxide; tri-calcium (tris(2-hydroxy-5-tetra-propenylphenylmethyl)methylamine)tri-hydroxide; poly[calcium ((2-hydroxy-5-tetra-propenyl-phenylmethyl)methylamine)hydroxide], Reaction products of diphenylamine with nonene, branched (36878-20-3), Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized including distillates (petroleum), hydrotreated, solvent-refined/dewaxed, cat. dewaxed, light/heavy paraffinic C15-C50 (68855-45-8)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Phenol, dodecyl-, branched (121158-58-5), reaction mass of: dicalcium (bis(2-hydroxy-5-tetra-propenylphenylmethyl)methylamine)dihydroxide; tri-calcium (tris(2-hydroxy-5-tetra-propenylphenylmethyl)methylamine)tri-hydroxide; poly[calcium ((2-hydroxy-5-tetra-propenyl-phenylmethyl)methylamine)hydroxide], Reaction products of diphenylamine with nonene, branched (36878-20-3), Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized including distillates (petroleum), hydrotreated, solvent-refined/dewaxed, cat. dewaxed, light/heavy paraffinic C15-C50 (68855-45-8)

The mixture contains substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are 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

Component	
Substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is 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	Phenol, dodecyl-, branched (121158-58-5)

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates, hydrotreated heavy paraffinic substance with national workplace exposure limit(s) (BE, BG, CZ, DK, FI, GB, GR, HU, IE, LT, LV, NL, PL, PT, RO, SE, SK, IS, NO, CH)	CAS-No.: 64742-54-7 EC-No.: 265-157-1 EC Index-No.: 649-467-00-8 REACH-no: UK-20-0823962999-X-XXXX, 01-2119484627-25, UK-01-1759217276-5	≥ 70 – < 90	Not classified
Highly refined mineral oil (C15 - C50) substance with national workplace exposure limit(s) (BE, BG, CZ, DK, FI, GB, GR, HU, IE, LT, LV, NL, PL, PT, RO, SE, SK, IS, NO, CH)	-	≥ 5 – < 10	Not classified
Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized including distillates (petroleum), hydrotreated, solvent-refined/dewaxed, cat. dewaxed, light/heavy paraffinic C15-C50	CAS-No.: 68855-45-8 EC-No.: 701-249-4 REACH-no: 01-2119524018-47, UK-01-2548210003-6	≥ 0.1 – < 5	Aquatic Chronic 4, H413
reaction mass of: dicalcium (bis(2-hydroxy-5-tetra-propenylphenylmethyl)methylamine)dihydroxide; tri-calcium (tris(2-hydroxy-5-tetra-propenylphenylmethyl)methylamine)tri-hydroxide; poly[calcium ((2-hydroxy-5-tetra-propenyl-phenylmethyl)methylamine)hydroxide]	EC-No.: 420-470-4 EC Index-No.: 020-003-00-0	≥ 0.1 – < 1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
Reaction products of diphenylamine with nonene, branched	CAS-No.: 36878-20-3 EC-No.: 701-385-4 REACH-no: 01-2119488911-28, UK-01-2909071404	< 1	Repr. 2, H361f Aquatic Chronic 4, H413
Phenol, dodecyl-, branched substance listed on REACH Candidate List (Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)) substance identified as having endocrine disrupting properties	CAS-No.: 121158-58-5 EC-No.: 310-154-3 EC Index-No.: 604-092-00-9 REACH-no: 01-2119513207-49, UK-01-1625361544-3	≥ 0.1 – < 1	ED ENV 1, EUH430 ED HH 1, EUH380 Skin Corr. 1C, H314 Eye Dam. 1, H318 Repr. 1B, H360F Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

Comments : A petroleum product. DMSO extract < 3 % weight (IP 346)
Mineral oil contained may be described by one or more of the following:
EC No. 265-157-1,Registration No. 01-2119484627-25 (UK-01-1759217276-5),Distillates (petroleum), hydrotreated heavy paraffinic;
EC No. 265-169-7,Registration No. 01-2119471299-27 (UK-01-0119695008-1),Distillates (petroleum), solvent-dewaxed heavy paraffinic;
EC No. 265-158-7,Registration No. 01-2119487077-29 (UK-01-6871927170-9),Distillates (petroleum), hydrotreated light paraffinic;
EC No. 265-159-2,Registration No. 01-2119480132-48 (UK-01-6953758963-7),Distillates (petroleum), solvent-dewaxed light paraffinic

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 exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Move the affected person away from the contaminated area and into the fresh air. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Take off contaminated clothing and wash it before reuse. Gently wash with plenty of soap and water. Wash skin with plenty of water.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Get medical advice/attention if you feel unwell. Do NOT induce vomiting. Call a poison center or a doctor if you feel unwell.

Self protection of the first-aider : First-aiders should pay attention to their own protection and use the recommended personal protective equipment (see section 8).

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

Symptoms/effects after inhalation : None under normal use. Inhalation may cause irritation (cough, short breathing, difficulty in breathing).

Symptoms/effects after skin contact : Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : May cause slight irritation.

Symptoms/effects after ingestion : Although not classified, the product contains mineral oil. If aspirated into the lungs e.g. through vomiting after ingestion, admit to hospital immediately.

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 : Dry chemical, CO2, dry sand, or alcohol-resistant foam. Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

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

5.3. Advice for firefighters

Precautionary measures fire : Keep container closed when not in use.

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Do not handle until all safety precautions have been read and understood. 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 : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Caution : this product can cause the floor to be very slippery.

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

Do not allow to enter drains or water courses. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment	:	Collect spillage. 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. Clear up rapidly by scoop or vacuum. Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid with sand or inert absorbent and remove to safe place. Notify authorities if product enters sewers or public waters. This material and its container must be disposed of in a safe way, and as per local legislation.
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	:	Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling	:	Ensure good ventilation of the work station. Wear personal protective equipment. Do not eat, drink or smoke when using this product. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact during pregnancy/while nursing.
Hygiene measures	:	Wear personal protective equipment. Wash contaminated clothing before reuse. 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 when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Store in a well-ventilated place. Keep container tightly closed.
Storage conditions	:	Do not expose to temperatures exceeding 50 °C/ 122 °F. Keep container closed when not in use. Store in a dry place. Store locked up.
Incompatible products	:	Oxidizing agent. Strong acids. Strong bases.
Storage area	:	Store in a well-ventilated place.
Special rules on packaging	:	Store in a closed container.
Packaging materials	:	Always store 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

Distillates, hydrotreated heavy paraffinic (64742-54-7)	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	5 mg/m³
WEL STEL (OEL STEL)*	15 mg/m³

Distillates, hydrotreated heavy paraffinic (64742-54-7)	
Regulatory reference	EU OEL

*STEL value is calculated based on the TWA limit

Highly refined mineral oil (C15 - C50)	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	5 mg/m³
WEL STEL (OEL STEL)	10 mg/m³
Regulatory reference	EU OEL

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protection equipment

Personal protective equipment:
Wear recommended personal protective equipment.
Personal protective equipment symbol(s):



Eye and face protection

Eye protection:
Chemical goggles or face shield

Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Protective 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:
Avoid contact during pregnancy/while nursing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	amber.
Appearance	:	Liquid.
Odour	:	mild.
Odour threshold	:	Not available
Melting point	:	Not applicable
Freezing point	:	Not available
Boiling point	:	> 320 °C

Flammability	:	Not flammable,Heating may cause a fire.
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	195 °C PMCC
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	Not available
Viscosity, kinematic @ 40°C	:	128.3 mm²/s
Solubility	:	Material nearly insoluble in water. Soluble in organic solvents.
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	0.879
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

Other safety characteristics

Additional information : The product is a complex mixture, the majority of which would not be classed as a VOC. However it cannot be discounted that trace or low levels of VOCs may be present.

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Extremely high or low temperatures. Moisture.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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
Acute toxicity (inhalation)	:	Not classified

Distillates, hydrotreated heavy paraffinic (64742-54-7)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)

Phenol, dodecyl-, branched (121158-58-5)	
LD50 oral rat	2200 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)

Reaction products of diphenylamine with nonene, branched (36878-20-3)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized including distillates (petroleum), hydrotreated, solvent-refined/dewaxed, cat. dewaxed, light/heavy paraffinic C15-C50 (68855-45-8)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)

Additional information : Repeated exposure may cause skin dryness or cracking.

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

Additional information : This product contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP346 test

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

Reaction products of diphenylamine with nonene, branched (36878-20-3)	
NOAEL (animal/male, F0/P)	40 mg/kg
NOAEL (animal/female, F0/P)	40 mg/kg
NOAEL (animal/male, F1)	122 mg/kg
NOAEL (animal/female, F1)	122 mg/kg

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)

Distillates, hydrotreated heavy paraffinic (64742-54-7)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	> 0.98 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized including distillates (petroleum), hydrotreated, solvent-refined/dewaxed, cat. dewaxed, light/heavy paraffinic C15-C50 (68855-45-8)	
NOAEL (oral, rat, 90 days)	300 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents), Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:
NOAEL (dermal, rat/rabbit, 90 days)	≈ 250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

Aspiration hazard : Not classified

Additional information : Although not classified, the product contains mineral oil. If aspirated into the lungs e.g. through vomiting after ingestion, admit to hospital immediately.

Locomax ZF 20W-40	
Viscosity, kinematic @ 40°C	128.3 mm²/s

Reaction products of diphenylamine with nonene, branched (36878-20-3)	
Viscosity, kinematic @ 40°C	3827 mm²/s

11.2. Information on other hazards

Endocrine disrupting properties

Component	
Phenol, dodecyl-, branched (121158-58-5)	Has an endocrine mode of action, i.e. it alters the function(s) of the endocrine system

Other information

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Harmful to aquatic life with long lasting effects.

Additional information : Based on available data, the classification criteria are not met.

Phenol, dodecyl-, branched (121158-58-5)	
EC50 72h - Algae [1]	> 0.765 mg/l Desmodesmus subspicatus

Reaction products of diphenylamine with nonene, branched (36878-20-3)	
LC50 - Fish [1]	> 0.0013 mg/l Oncorhynchus mykiss (Salmo gairdneri)
EC50 - Crustacea [1]	> 100 mg/l Daphnia magna

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized including distillates (petroleum), hydrotreated, solvent-refined/dewaxed, cat. dewaxed, light/heavy paraffinic C15-C50 (68855-45-8)	
NOEC chronic algae	220 mg/l Pseudokirchneriella subcapitata

12.2. Persistence and degradability

Locomax ZF 20W-40	
Persistence and degradability	Not established.

Distillates, hydrotreated heavy paraffinic (64742-54-7)	
Persistence and degradability	Not rapidly degradable

Highly refined mineral oil (C15 - C50)	
Persistence and degradability	Not rapidly degradable

Phenol, dodecyl-, branched (121158-58-5)	
Persistence and degradability	Not rapidly degradable

reaction mass of: dicalcium (bis(2-hydroxy-5-tetra-propenylphenylmethyl)methylamine)dihydroxide; tri-calcium (tris(2-hydroxy-5-tetra-propenylphenylmethyl)methylamine)tri-hydroxide; poly[calcium ((2-hydroxy-5-tetra-propenyl-phenylmethyl)methylamine)hydroxide]	
Persistence and degradability	Not rapidly degradable

Reaction products of diphenylamine with nonene, branched (36878-20-3)	
Persistence and degradability	Not rapidly degradable

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized including distillates (petroleum), hydrotreated, solvent-refined/dewaxed, cat. dewaxed, light/heavy paraffinic C15-C50 (68855-45-8)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Phenol, dodecyl-, branched (121158-58-5), reaction mass of: dicalcium (bis(2-hydroxy-5-tetra-propenylphenylmethyl)methylamine)dihydroxide; tri-calcium (tris(2-hydroxy-5-tetra-propenylphenylmethyl)methylamine)tri-hydroxide; poly[calcium ((2-hydroxy-5-tetra-propenyl-phenylmethyl)methylamine)hydroxide], Reaction products of diphenylamine with nonene, branched (36878-20-3), Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized including distillates (petroleum), hydrotreated, solvent-refined/dewaxed, cat. dewaxed, light/heavy paraffinic C15-C50 (68855-45-8)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Phenol, dodecyl-, branched (121158-58-5), reaction mass of: dicalcium (bis(2-hydroxy-5-tetra-propenylphenylmethyl)methylamine)dihydroxide; tri-calcium (tris(2-hydroxy-5-tetra-propenylphenylmethyl)methylamine)tri-hydroxide; poly[calcium ((2-hydroxy-5-tetra-propenyl-phenylmethyl)methylamine)hydroxide], Reaction products of diphenylamine with nonene, branched (36878-20-3), Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, calcium salts, sulfurized including distillates (petroleum), hydrotreated, solvent-refined/dewaxed, cat. dewaxed, light/heavy paraffinic C15-C50 (68855-45-8)

12.6. Endocrine disrupting properties

Component	
Phenol, dodecyl-, branched (121158-58-5)	The substance is identified for having endocrine disrupting properties but there is no additional data available (see section 2.3)

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.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Disposal must be done according to official regulations.

Additional information : Do not re-use empty containers.

Ecological waste information : The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.

European List of Waste (LoW, EC 2000/532) : 15 01 10* - packaging containing residues of or contaminated by dangerous substances
13 02 05* - mineral-based non-chlorinated engine, gear and lubricating oils

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

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

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

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)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

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

REACH Candidate List (SVHC)

Contains substance(s) listed on the REACH Candidate List in concentrations ≥ 0.1 % or SCL: Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP) (EC 310-154-3, CAS 121158-58-5)

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)

Not listed on the Ozone Depletion list (Regulation EU 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

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)

National regulations

United Kingdom

British National Regulations : GB MCL (Mandatory Classification and Labelling).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out
A chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ACGIH	American Conference of Governmental 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 Abstracts Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
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

Abbreviations and acronyms:	
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 : ECHA (European Chemicals Agency). 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.

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H- and EUH-statements:	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
ED ENV 1	Endocrine disruptor for the environment, Category 1
ED HH 1	Endocrine disruptor for human health, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1

Full text of H- and EUH-statements:	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
EUH380	May cause endocrine disruption in humans.
EUH430	May cause endocrine disruption in the environment.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H360F	May damage fertility.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
EUH208	Contains reaction mass of: dicalcium (bis(2-hydroxy-5-tetra-propenylphenylmethyl)methylamine)dihydroxide; tri-calcium (tris(2-hydroxy-5-tetra-propenylphenylmethyl)methylamine)tri-hydroxide; poly[calcium ((2-hydroxy-5-tetra-propenyl-phenylmethyl)methylamine)hydroxide]. May produce an allergic reaction.

Full text of use descriptors	
ERC4	Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
ERC7	Use of functional fluid at industrial site
PC17	Hydraulic Fluids
PC24	Lubricants, greases, release products
PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities
SU3	Industrial uses: Uses of substances as such or in preparations at industrial sites

The classification complies with : ATP 12

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.