72390 - WAVE POWER EXCELLENCE 15W-40

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Issue date: 2-9-2016 Revision date: 28-4-2019 Version: 2.0

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	72390 - WAVE POWER EXCELLENCE 15W-40
Product code	:	72390
Type of product	:	Lubricant

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

1.2.1. Relevant identified uses

Industrial/Professional use spec	:	Industrial For professional use only
Function or use category	:	Lubricants and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

North Sea Lubricants B.V.
Ampèrestraat 5
3846AN Harderwijk - The Netherlands
T +31 651345369
support@northsealubricants.com - www.northsealubricants.com

1.4. Emergency telephone number

Emergency number	:	+31 (0)786527652 Monday to Friday: 09:00 - 16:00 (CET)

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]

EUH-statements	:	EUH210 - Safety data sheet available on request.

2.3. Other hazards

Other hazards not contributing to the classification	:	Flammable liquids. Prolonged or repeated skin contact with the material will remove natural oils which leads to a dermatitis. Spills of this product present a serious slipping hazard.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] substance with a Community workplace exposure limit (Note L)	(CAS-No.) 64742-54-7 (EC-No.) 265-157-1 (EC Index-No.) 649-467-00-8 (REACH-no) 01-2119484627-25	≥ 75	Not classified
Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] substance with a Community workplace exposure limit (Note L)	(CAS-No.) 64742-65-0 (EC-No.) 265-169-7 (EC Index-No.) 649-474-00-6 (REACH-no) 01-2119471299-27	1 – 2,5	Not classified
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased	(CAS-No.) 68784-26-9 (EC-No.) 272-234-3 (REACH-no) 01-2119524004-56	0,5 – 2,5	Aquatic Chronic 4, H413
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts	(CAS-No.) 84605-29-8 (EC-No.) 283-392-8 (REACH-no) 01-2119493626-26	0,5 – 2,5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits**
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts	(CAS-No.) 84605-29-8 (EC-No.) 283-392-8 (REACH-no) 01-2119493626-26	(15 ≤C ≤ 100) Skin Irrit. 2, H315 (15 ≤C < 20) Eye Irrit. 2, H319 (20 <C ≤ 100) Eye Dam. 1, H318

Note L : The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO 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. This note applies only to certain complex oil-derived substances in Part 3.
Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash skin with plenty of water.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. Rinse eyes with water as a precaution.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. 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 adequate first aid, no further treatment is required unless symptoms reappear. Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation : After adequate first aid, no further treatment is required unless symptoms reappear.
Symptoms/effects after skin contact : After adequate first aid, no further treatment is required unless symptoms reappear.
Symptoms/effects after eye contact : After adequate first aid, no further treatment is required unless symptoms reappear.
Symptoms/effects after ingestion : After adequate first aid, no further treatment is required unless symptoms reappear.

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 : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing and eye/face protection.
Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:	Ensure good ventilation of the work station. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.
Hygiene measures	:	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

Storage conditions	:	Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use. Store in a well-ventilated place. Keep cool.
Incompatible products	:	Strong bases. Strong acids.
Incompatible materials	:	Sources of ignition. Direct sunlight.
Storage temperature	:	45 °C
Storage area	:	Store away from heat. Store in a well-ventilated place.
Special rules on packaging	:	Keep only in original container. Store in a closed container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)	
EU - Occupational Exposure Limits	
IOELV TWA (mg/m³)	5 mg/m³
Belgium - Occupational Exposure Limits	
Limit value (mg/m³)	5 mg/m³
Bulgaria - Occupational Exposure Limits	
OEL TWA (mg/m³)	5 mg/m³
Croatia - Occupational Exposure Limits	
GVI (granična vrijednost izloženosti) (mg/m³)	5 mg/m³
Czech Republic - Occupational Exposure Limits	
Expoziční limity (PEL) (mg/m³)	5 mg/m³
Expoziční limity (NPK-P) (mg/m³)	10 mg/m³
Denmark - Occupational Exposure Limits	
Grænseværdie (langvarig) (mg/m³)	1
Netherlands - Occupational Exposure Limits	
Grenswaarde TGG 8H (mg/m³)	5 mg/m³
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (mg/m³)	5 mg/m³
ACGIH STEL (mg/m³)	10 mg/m³

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)	
EU - Occupational Exposure Limits	
IOELV TWA (mg/m³)	5 mg/m³
IOELV STEL (mg/m³)	10 mg/m³
Bulgaria - Occupational Exposure Limits	
OEL TWA (mg/m³)	5 mg/m³
OEL STEL (mg/m³)	10 mg/m³
Croatia - Occupational Exposure Limits	
GVI (granična vrijednost izloženosti) (mg/m³)	5 mg/m³
KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m³)	10 mg/m³
Czech Republic - Occupational Exposure Limits	
Expoziční limity (PEL) (mg/m³)	5 mg/m³
Expoziční limity (NPK-P) (mg/m³)	10 mg/m³
Denmark - Occupational Exposure Limits	
Grænseværdie (langvarig) (mg/m³)	1 mg/m³
Netherlands - Occupational Exposure Limits	
Grenswaarde TGG 8H (mg/m³)	5 mg/m³

8.2. Exposure controls

Appropriate engineering controls:
Use adequate ventilation to keep oil mist below applicable standard. Use splash goggles when eye contact due to splashing is possible. Ocular shower with suitable liquid.

Personal protective equipment:
Gloves. Safety glasses. Protective clothing. Avoid all unnecessary exposure.

Hand protection:
Neoprene or nitrile rubber gloves. Chemical resistant PVC gloves (to European standard EN 374 or equivalent). Time of penetration is to be checked with the glove producer

Eye protection:
Chemical goggles or safety glasses. Use splash goggles when eye contact due to splashing is possible. EN 166

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
Where excessive vapour, mist, or dust may result, use approved respiratory protection equipment. Particle filter. EN 143

Personal protective equipment symbol(s):

Environmental exposure controls:
Avoid release to the environment.

Other information:
Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	light yellow.
Odour	:	No data available
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	Not applicable
Freezing point	:	-33 °C
Boiling point	:	No data available
Flash point	:	230 °C
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Non flammable.
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	877,8 kg/m³ @15°C
Solubility	:	insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Viscosity, kinematic	:	90,2 mm²/s @40°C
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available

9.2. Other information

No additional information available

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

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)	
LD50 oral (rat)	> 5000 mg/kg bodyweight
LD50 dermal (rabbit)	> 5000 mg/kg
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5,53 mg/l/4h

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)	
LD50 oral (rat)	> 5000 mg/kg bodyweight
LD50 dermal (rabbit)	> 5000 mg/kg
LC50 inhalation (rat) (Vapours - mg/l/4h)	> 5,53 mg/l/4h

Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased (68784-26-9)	
LD50 oral (rat)	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal (rabbit)	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)	
LD50 oral (rat)	3100 mg/kg
LD50 dermal (rat)	> 2002 mg/kg bodyweight)
LC50 inhalation (rat) (mg/l)	> 2,3 mg/l/4h

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

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

STOT-single exposure : Not classified
Additional information : Based on available data, the classification criteria are not met

STOT-repeated exposure : Not classified
Additional information : Based on available data, the classification criteria are not met

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight
NOAEL (dermal, rat/rabbit, 90 days)	≈ 1000 mg/kg bodyweight

Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased (68784-26-9)	
NOAEL (oral, rat, 90 days)	200 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEL (dermal, rat/rabbit, 90 days)	≈ 250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)	
NOAEL (oral, rat, 90 days)	160 mg/kg bodyweight

Aspiration hazard : Not classified
Additional information : Based on available data, the classification criteria are not met

72390 - WAVE POWER EXCELLENCE 15W-40	
Viscosity, kinematic	90,2 mm²/s @40°C

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 : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Not classified

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)	
LC50 fish 1	> 100 mg/l Pimephales promelas
EC50 Daphnia 1	> 10000 mg/l Daphnia magna
NOEC chronic fish	10 mg/l Oncorhynchus mykiss
NOEC chronic crustacea	10 mg/l Daphnia magna
NOEC chronic algae	> 100 mg/l Pseudokirchneriella subcapitata

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)	
LC50 fish 1	100 mg/l
EC50 Daphnia 1	10000 mg/l
EC50 72h algae (1)	3 mg/l

Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased (68784-26-9)	
LC50 fish 1	> 1000 mg/l Pimephales promelas
EC50 Daphnia 1	> 1000 mg/l Daphnia magna
EC50 96h algae (1)	> 500 mg/l Pseudokirchneriella subcapitata
NOEC chronic fish	> 1000 mg/l Pimephales promelas
NOEC chronic crustacea	> 1000 mg/l
NOEC chronic algae	> 500 mg/l Pseudokirchneriella subcapitata

Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)	
LC50 fish 1	4,5 mg/l Cyprinodon variegatus
EC50 Daphnia 1	23 mg/l Daphnia magna
NOEC chronic crustacea	0,4 mg/l
NOEC chronic algae	10 mg/l

12.2. Persistence and degradability

72390 - WAVE POWER EXCELLENCE 15W-40	
Persistence and degradability	Not established.

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	31 % 28 d OECD 301F

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)	
Persistence and degradability	Not biodegradable.
Biodegradation	31 % 28 d OECD 301F

Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased (68784-26-9)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	13,4 % 28 Days

Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	1,5 % 28 Days (OECD 301 B)

12.3. Bioaccumulative potential

72390 - WAVE POWER EXCELLENCE 15W-40	
Bioaccumulative potential	Not established.

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)	
Partition coefficient n-octanol/water (Log Kow)	> 4

Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] (64742-65-0)	
Bioconcentration factor (BCF REACH)	260
Partition coefficient n-octanol/water (Log Pow)	9,2

Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased (68784-26-9)	
BCF fish 1	2,2 14 Days
Bioconcentration factor (BCF REACH)	2,2
Partition coefficient n-octanol/water (Log Pow)	9,5

Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)	
Partition coefficient n-octanol/water (Log Pow)	0,56

12.4. Mobility in soil

Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased (68784-26-9)	
Ecology - soil	Adsorbs into the soil.

Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)	
Ecology - soil	Adsorbs into the soil.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR)	:	Not applicable
UN-No. (IMDG)	:	Not applicable
UN-No. (IATA)	:	Not applicable
UN-No. (ADN)	:	Not applicable
UN-No. (RID)	:	Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR)	:	Not applicable
Proper Shipping Name (IMDG)	:	Not applicable
Proper Shipping Name (IATA)	:	Not applicable
Proper Shipping Name (ADN)	:	Not applicable
Proper Shipping Name (RID)	:	Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR)	:	Not applicable
Packing group (IMDG)	:	Not applicable
Packing group (IATA)	:	Not applicable
Packing group (ADN)	:	Not applicable
Packing group (RID)	:	Not applicable

14.5. Environmental hazards

Dangerous for the environment	:	No
Marine pollutant	:	No
Other information	:	No supplementary information available

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

Air transport

No data available

Inland waterway transport

No data available

Rail transport

No data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances
Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.
Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

Germany

Water hazard class (WGK)	:	WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1)
Hazardous Incident Ordinance (12. BImSchV)	:	Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

Ministry's list of carcinogens	:	Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.],Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).],Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased,Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts are listed
Ministry's list of mutagens	:	Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.],Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).],Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased,Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts are listed
NON-exhaustive list of reproductive toxins - Breastfeeding	:	None of the components are listed
NON-exhaustive list of reproductive toxins - Fertility	:	None of the components are listed
NON-exhaustive list of reproductive toxins - Evolution	:	None of the components are listed

Denmark

Danish National Regulations	:	Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:			
Section	**Changed item**	**Change**	**Comments**
	Revision date	Added	

Abbreviations and acronyms:	
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
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
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
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
PNEC	Predicted No-Effect Concentration
PBT	Persistent Bioaccumulative Toxic
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

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.

Other information : None.

Full text of H- and EUH-statements:	
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

EUH210	Safety data sheet available on request.

SDS EU (REACH Annex II)

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