

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

1.1. Product identifier

Product form : Mixture
Product name : 78150 - Motor Oil Synthetic DXI 5W-20
Product code : 78150

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
Function or use category : Lubricants and additives

1.3. Details of the supplier of the safety data sheet

Transnational Blenders bv
Wieldrechtseweg 37
NL 3316 BG Dordrecht, Netherlands, Zuid Holland
Netherlands
T +31 (0)78 6527652
technical@tnb.nl, www.tnb.nl

1.4. Emergency telephone number

| 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) | |

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

Contains no PBT and/or vPvB substances $\geq 0.1\%$ 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 %

78150 - Motor Oil Synthetic DXI 5W-20

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 3: Composition/information on ingredients

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--|--|-------------|--|
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based substance with national workplace exposure limit(s) (BE, BG, CZ, DK, ES, FI, GR, HU, IE, LT, LV, NL, PL, PT, RO, SE, SK, IS, NO, CH); substance with a Community workplace exposure limit (Note L) | CAS-No.: 72623-86-0 EC-No.: 276-737-9 EC Index-No.: 649-482-00-X REACH-no: 01-2119474878-16 | ≥ 55 – < 75 | Asp. Tox. 1, H304 |
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil substance with a Community workplace exposure limit (Note L) | CAS-No.: 72623-87-1 EC-No.: 276-738-4 EC Index-No.: 649-483-00-5 REACH-no: 01-2119474889-13 | ≥ 25 – < 45 | Asp. Tox. 1, H304 |
| Distillates (petroleum), hydrotreated heavy paraffinic substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IT, LT, LV, NL, PL, PT, RO, SE, SI, SK, IS, NO, CH, TR); 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 | ≥ 5 – < 10 | Not classified |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IT, LT, LV, NL, PL, PT, RO, SE, SI, SK, IS, NO, CH, TR); 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 – < 3 | Asp. Tox. 1, H304 |
| Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) (SK) substance with national workplace exposure limit(s) (SK) | CAS-No.: 2215-35-2 EC-No.: 218-679-9 REACH-no: 01-2119953275-34 | ≥ 0.5 – < 3 | Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411 |
| Distillates (petroleum), solvent-refined heavy paraffinic substance with national workplace exposure limit(s) (BE, BG, CZ, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, LT, LV, NL, PL, PT, RO, SE, SI, SK, IS, NO, CH); substance with a Community workplace exposure limit (Note L) | CAS-No.: 64741-88-4 EC-No.: 265-090-8 EC Index-No.: 649-454-00-7 REACH-no: 01-2119488706-23 | ≥ 0.5 – < 3 | Not classified |

Specific concentration limits:

| Name | Product identifier | Specific concentration limits (%) |
|--|---|--|
| Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) | CAS-No.: 2215-35-2 EC-No.: 218-679-9 REACH-no: 01-2119953275-34 | (15 ≤ C < 20) Eye Irrit. 2; H319 (15 ≤ C < 20) Skin Irrit. 2; H315 (20 ≤ C < 100) Eye Dam. 1; H318 |

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

78150 - Motor Oil Synthetic DXI 5W-20

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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 | : Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard. |
| Symptoms/effects after skin contact | : None under normal conditions. |
| Symptoms/effects after eye contact | : None under normal conditions. |
| Symptoms/effects after ingestion | : None under normal conditions. |

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 water jet since it may cause the fire to spread. |

5.2. Special hazards arising from the substance or mixture

| | |
|--|--------------------------------|
| Fire hazard | : No fire hazard. |
| Explosion hazard | : No direct explosion hazard. |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |

5.3. Advice for firefighters

| | |
|--------------------------------|--|
| Precautionary measures fire | : Exercise caution when fighting any chemical fire. |
| Firefighting instructions | : Use water spray or fog for cooling exposed containers. 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. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|------------------|--|
| General measures | : Avoid spilling the product, as this might cause falls. 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. |

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.

78150 - Motor Oil Synthetic DXI 5W-20

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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. 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 | : 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. Avoid contact with skin and eyes. |
| Handling temperature | : ≤ 40 °C |
| 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

| | |
|----------------------------|---|
| Technical measures | : Provide local exhaust or general room ventilation. |
| Storage conditions | : Keep cool. Protect from sunlight. |
| Storage temperature | : ≤ 40 °C |
| Storage area | : Store in a well-ventilated place. Store away from heat. |
| Special rules on packaging | : Keep only in original container. Store in a closed container. |
| 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

| Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7) | |
|---|--------------------------------|
| EU - Indicative Occupational Exposure Limit (IOEL) | |
| IOEL TWA | 5 mg/m ³ |
| IOEL STEL | 10 mg/m ³ |
| Ireland - Occupational Exposure Limits | |
| OEL TWA | 5 ppm Form: inhalable fraction |
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1) | |
| EU - Indicative Occupational Exposure Limit (IOEL) | |
| IOEL TWA | 5 mg/m ³ |
| IOEL STEL | 10 mg/m ³ |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0) | |
| EU - Indicative Occupational Exposure Limit (IOEL) | |
| IOEL TWA | 5 mg/m ³ |

78150 - Motor Oil Synthetic DXI 5W-20

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0) | |
|---|--------------------------------|
| Ireland - Occupational Exposure Limits | |
| OEL TWA | 5 ppm Form: Inhalable fraction |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) | |
| EU - Indicative Occupational Exposure Limit (IOEL) | |
| IOEL TWA | 5 mg/m ³ |
| IOEL STEL | 10 mg/m ³ |
| Ireland - Occupational Exposure Limits | |
| OEL TWA | 5 ppm Form: inhalable fraction |
| Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4) | |
| EU - Indicative Occupational Exposure Limit (IOEL) | |
| IOEL TWA | 5 mg/m ³ |
| IOEL STEL | 10 mg/m ³ |
| Ireland - Occupational Exposure Limits | |
| OEL TWA | 5 ppm Form: inhalable fraction |

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses. Protective clothing.

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Safety glasses

| Eye protection | | | |
|----------------|----------------------|-----------------|----------|
| Type | Field of application | Characteristics | Standard |
| Safety glasses | Droplet | clear | EN 166 |

Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

| Hand protection | | | | | |
|-----------------|----------------------|-------------------|----------------|-------------|------------|
| Type | Material | Permeation | Thickness (mm) | Penetration | Standard |
| Reusable gloves | Nitrile rubber (NBR) | 6 (> 480 minutes) | >0.35 | | EN ISO 374 |

78150 - Motor Oil Synthetic DXI 5W-20

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|---|
| Physical state | : Liquid |
| Colour | : light brown. |
| Odour | : Not available |
| Odour threshold | : Not available |
| Melting point | : Not applicable |
| Freezing point | : -39 °C (ASTM D7346) |
| Boiling point | : Not available |
| Flammability | : Non flammable. |
| Lower explosion limit | : Not available |
| Upper explosion limit | : Not available |
| Flash point | : > 200 °C (ASTM D92) |
| Auto-ignition temperature | : Not available |
| Decomposition temperature | : Not available |
| pH | : Not available |
| Viscosity, kinematic | : 47.9 mm ² /s @ 40°C (ASTM D7042) |
| Solubility | : insoluble in water. |
| Partition coefficient n-octanol/water (Log Kow) | : Not available |
| Vapour pressure | : Not available |
| Vapour pressure at 50°C | : Not available |
| Density | : 851 kg/m ³ @ 15°C (ASTM D4052) |
| Relative density | : Not available |
| Relative vapour density at 20°C | : Not available |
| Particle characteristics | : Not applicable |

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

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

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

78150 - Motor Oil Synthetic DXI 5W-20

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 11: Toxicological information

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

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

| Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7) | |
|---|--|
| LD50 oral (rat) | > 5000 mg/kg 401 Acute Oral Toxicity Test |
| LD50 dermal (rabbit) | > 5000 mg/kg 402 Acute Dermal Toxicity Test |
| LC50 inhalation (rat) (Dust/Mist - mg/l/4h) | > 5 mg/l/4h 403 Acute Inhalation Toxicity Test |

| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1) | |
|---|----------------|
| LD50 oral (rat) | > 5000 mg/kg |
| LD50 dermal (rabbit) | > 2000 mg/kg |
| LC50 inhalation (rat) (Dust/Mist - mg/l/4h) | > 5.53 mg/l/4h |

| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0) | |
|---|--|
| LD50 oral (rat) | > 5000 mg/kg bodyweight 401 Acute Oral Toxicity Test |
| LD50 dermal (rabbit) | > 2000 mg/kg 402 Acute Dermal Toxicity Test |
| LC50 inhalation (rat) (Dust/Mist - mg/l/4h) | > 5.53 mg/l/4h 403 Acute Inhalation Toxicity Test |

| Zinc O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) (2215-35-2) | |
|--|-----------------------------------|
| LD50 oral (rat) | 2230 mg/kg bodyweight OECD 401 |
| LD50 dermal (rabbit) | > 25000 mg/kg bodyweight OECD 402 |
| LC50 inhalation (rat) (mg/l) | > 2 mg/l OECD 403 (1 hour) |

| Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) | |
|--|--|
| LD50 oral (rat) | > 5000 (<) mg/kg 401 Acute Oral Toxicity Test |
| LD50 dermal (rabbit) | > 5000 mg/kg 402 Acute Dermal Toxicity Test |
| LC50 inhalation (rat) (Dust/Mist - mg/l/4h) | > 5 mg/l/4h 403 Acute Inhalation Toxicity Test |

| Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4) | |
|--|--|
| LD50 oral (rat) | > 5000 mg/kg 401 Acute Oral Toxicity |
| LD50 dermal (rabbit) | > 5000 mg/kg 402 Acute Dermal Toxicity |
| LC50 inhalation (rat) (Dust/Mist - mg/l/4h) | > 5.53 mg/l/4h 403 Acute Inhalation Toxicity |

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified

| Zinc O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) (2215-35-2) | |
|--|--------------------|
| NOAEL (animal/male, F1) | 160 mg/kg OECD 422 |

STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

| Distillates (petroleum), 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 in Rodents) |

78150 - Motor Oil Synthetic DXI 5W-20

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| | |
|--|---|
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1) | |
| LOAEL (oral, rat, 90 days) | 125 mg/kg bodyweight/day |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0) | |
| LOAEL (oral, rat, 90 days) | 125 mg/kg bodyweight |
| Zinc O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) (2215-35-2) | |
| NOAEL (oral, rat, 90 days) | 160 mg/kg bodyweight |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) | |
| LOAEL (oral, rat, 90 days) | 125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) |
| NOAEL (dermal, rat/rabbit, 90 days) | ≈ 1000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study) |
| Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4) | |
| LOAEL (oral, rat, 90 days) | 125 mg/kg bodyweight/day |
| Aspiration hazard | : Not classified |
| 78150 - Motor Oil Synthetic DXI 5W-20 | |
| Viscosity, kinematic | 47.9 mm ² /s @ 40°C (ASTM D7042) |
| Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7) | |
| Viscosity, kinematic | > 20.5 mm ² /s @ 40°C |
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1) | |
| Viscosity, kinematic | 47 mm ² /s |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0) | |
| Viscosity, kinematic | 2978 mm ² /s 40°C |
| Zinc O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) (2215-35-2) | |
| Viscosity, kinematic | 270.4 mm ² /s @40°C |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) | |
| Viscosity, kinematic | 150 (1.99 – 847) mm ² /s @40°C |
| Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4) | |
| Viscosity, kinematic | 28.51 mm ² /s @40°C |

11.2. Information on other hazards

No additional information available

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 |

78150 - Motor Oil Synthetic DXI 5W-20

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7) | |
|--|---|
| LC50 - Fish [1] | > 100 mg/l Pimephales promelas |
| EC50 - Crustacea [1] | > 1000 mg/l Daphnia magna |
| EC50 72h - Algae [1] | > 100 mg/l Pseudokirchneriella subcapitata (OECD 201) |
| NOEC chronic fish | 1000 mg/l Oncorhynchus mykiss 14d |
| NOEC chronic crustacea | 10 mg/l Daphnia magna (21d) |
| NOEC chronic algae | 100 mg/l Pseudokirchneriella subcapitata (72h) |
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1) | |
| LC50 - Fish [1] | > 100 mg/l Pimephales promelas |
| EC50 - Crustacea [1] | > 10000 Daphnia magna |
| NOEC chronic fish | 1000 mg/l Oncorhynchus mykiss (14d) |
| NOEC chronic crustacea | 10 mg/l Daphnia magna (21d) |
| NOEC chronic algae | 100 mg/l Pseudokirchneriella subcapitata (72h) |
| Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0) | |
| LC50 - Fish [1] | > 100 mg/l Pimephales promelas (OECD 203) |
| EC50 - Crustacea [1] | > 10000 mg/l Daphnia magna (OECD 202) |
| NOEC chronic fish | 1000 mg/l Oncorhynchus mykiss (14d) |
| NOEC chronic crustacea | 10 mg/l Daphnia magna (21d) |
| NOEC chronic algae | ≥ 100 mg/l Pseudokirchneriella subcapitata (72h) |
| Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) (2215-35-2) | |
| LC50 - Fish [1] | 46 mg/l Sheepshead Minnow |
| LC50 - Fish [2] | 4.5 mg/l Oncorhynchus mykiss |
| EC50 - Crustacea [1] | 23 mg/l Daphnia magna (OECD 202) |
| EC50 72h - Algae [1] | 24 mg/l Desmodesmus subspicatus |
| NOEC chronic fish | 1.8 mg/l Rainbow Trout, 4 Days |
| NOEC chronic crustacea | 0.4 mg/l Daphnia magna (21d) |
| NOEC chronic algae | 10 mg/l Desmodesmus subspicatus (72h) |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) | |
| LC50 - Fish [1] | > 100 mg/l Pimephales promelas |
| EC50 - Crustacea [1] | > 1000 mg/l Daphnia magna |
| EC50 72h - Algae [1] | > 100 mg/l Pseudokirchneriella subcapitata (OECD 201) |
| NOEC chronic fish | > 1000 mg/l Oncorhynchus mykiss (14d) |
| NOEC chronic crustacea | 10 mg/l Daphnia magna (21d) |
| NOEC chronic algae | 100 mg/l Pseudokirchneriella subcapitata (72h) |
| Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4) | |
| LC50 - Fish [1] | > 100 mg/l Pimephales promelas |
| EC50 - Crustacea [1] | > 10000 mg/l Daphnia magna |
| NOEC chronic fish | 1000 mg/l Oncorhynchus mykiss (14d) |
| NOEC chronic crustacea | 10 mg/l Daphnia magna (21d) |

78150 - Motor Oil Synthetic DXI 5W-20

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)

| | |
|--------------------|--|
| NOEC chronic algae | ≥ 100 mg/l Pseudokirchneriella subcapitata (72h) |
|--------------------|--|

12.2. Persistence and degradability

78150 - Motor Oil Synthetic DXI 5W-20

| | |
|-------------------------------|------------------------|
| Persistence and degradability | Not rapidly degradable |
|-------------------------------|------------------------|

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

| | |
|-------------------------------|------------------------|
| Persistence and degradability | Readily biodegradable. |
|-------------------------------|------------------------|

| | |
|----------------|----------------------------|
| Biodegradation | < 60 % OECD TG 301 F (28d) |
|----------------|----------------------------|

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)

| | |
|-------------------------------|--------------------|
| Persistence and degradability | Rapidly degradable |
|-------------------------------|--------------------|

| | |
|----------------|------|
| Biodegradation | 31 % |
|----------------|------|

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)

| | |
|-------------------------------|----------------------------|
| Persistence and degradability | Not readily biodegradable. |
|-------------------------------|----------------------------|

| | |
|----------------|---------------------|
| Biodegradation | 31 % 28 d OECD 301F |
|----------------|---------------------|

Zinc O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) (2215-35-2)

| | |
|-------------------------------|----------------------------|
| Persistence and degradability | Not readily biodegradable. |
|-------------------------------|----------------------------|

| | |
|----------------|---------------------------|
| Biodegradation | 1.5 % OECD TG 301 B (28d) |
|----------------|---------------------------|

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)

| | |
|-------------------------------|------------------------|
| Persistence and degradability | Readily biodegradable. |
|-------------------------------|------------------------|

| | |
|----------------|----------------------------|
| Biodegradation | < 60 % OECD TG 301 F (28d) |
|----------------|----------------------------|

Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)

| | |
|-------------------------------|----------------------------|
| Persistence and degradability | Not readily biodegradable. |
|-------------------------------|----------------------------|

| | |
|----------------|----------------------|
| Biodegradation | 31 % OECD 301F (28d) |
|----------------|----------------------|

12.3. Bioaccumulative potential

Zinc O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) (2215-35-2)

| | |
|---|-------------|
| Partition coefficient n-octanol/water (Log Kow) | 2.21 @ 20°C |
|---|-------------|

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)

| | |
|-------------------------------------|-----|
| Bioconcentration factor (BCF REACH) | 260 |
|-------------------------------------|-----|

Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)

| | |
|---|---------|
| Partition coefficient n-octanol/water (Log Pow) | 3.9 – 6 |
|---|---------|

12.4. Mobility in soil

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)

| | |
|----------------|------------------------|
| Ecology - soil | Adsorbs into the soil. |
|----------------|------------------------|

Zinc O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate) (2215-35-2)

| | |
|----------------|------------------------|
| Ecology - soil | Adsorbs into the soil. |
|----------------|------------------------|

78150 - Motor Oil Synthetic DXI 5W-20

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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. |
| 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. |
| European List of Waste (LoW, EC 2000/532) | : 13 02 06* - synthetic engine, gear and lubricating oils |
| HP Code | : HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye. |

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 regulated for transport | | | | |
| 14.2. UN proper shipping name | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.3. Transport hazard class(es) | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.4. Packing group | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.5. Environmental hazards | | | | |
| Not regulated | 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

78150 - Motor Oil Synthetic DXI 5W-20

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Rail 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)

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 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 (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 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 (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 (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

No chemical safety assessment has been carried out

SECTION 16: Other information

| Indication of changes | | |
|-----------------------|--|----------|
| Section | Changed item | Comments |
| | Revision date | Modified |
| | Supersedes | Modified |
| 1.1 | Name | Modified |
| 2.2 | EUH-statements | Modified |
| 3 | Composition/information on ingredients | Modified |
| 4.1 | First-aid measures for first aider | Added |
| 4.1 | First-aid measures general | Added |
| 4.2 | Symptoms/effects after eye contact | Added |
| 4.2 | Symptoms/effects after ingestion | Added |

78150 - Motor Oil Synthetic DXI 5W-20

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Indication of changes | | |
|-----------------------|-------------------------------------|-----------------|
| Section | Changed item | Comments |
| 4.2 | Symptoms/effects after inhalation | Added |
| 4.2 | Symptoms/effects after skin contact | Added |
| 5.2 | Explosion hazard | Added |
| 5.2 | Fire hazard | Added |
| 5.3 | Firefighting instructions | Added |
| 6.1 | Emergency procedures | Added |
| 6.1 | General measures | Modified |
| 6.3 | For containment | Modified |
| 7.1 | Additional hazards when processed | Added |
| 7.2 | Packaging materials | Added |
| 7.2 | Storage conditions | Modified |
| 9 | Viscosity, kinematic | Modified |
| 9 | Density | Modified |
| 13.1 | Sewage disposal recommendations | Added |
| 13.1 | Waste disposal recommendations | Added |
| 13.1 | Regional waste regulation | Added |
| 13.1 | Additional information | 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 |
| BLV | Biological limit value |
| BOD | Biochemical oxygen demand (BOD) |
| COD | Chemical oxygen demand (COD) |
| DMEL | Derived Minimal Effect level |
| DNEL | Derived-No Effect Level |
| EC-No. | European Community number |
| EC50 | Median effective concentration |
| EN | European Standard |
| 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 |

78150 - Motor Oil Synthetic DXI 5W-20

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:

| | |
|---------|--|
| NOAEL | No-Observed Adverse Effect Level |
| NOEC | No-Observed Effect Concentration |
| OECD | Organisation for Economic Co-operation and Development |
| OEL | Occupational Exposure Limit |
| PBT | Persistent Bioaccumulative Toxic |
| PNEC | Predicted No-Effect Concentration |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS | Safety Data Sheet |
| STP | Sewage treatment plant |
| ThOD | Theoretical oxygen demand (ThOD) |
| TLM | Median Tolerance Limit |
| VOC | Volatile Organic Compounds |
| CAS-No. | Chemical Abstract Service number |
| N.O.S. | Not Otherwise Specified |
| vPvB | Very Persistent and Very Bioaccumulative |
| ED | Endocrine disruptor |

Full text of H- and EUH-statements:

| | |
|-------------------|---|
| Aquatic Chronic 2 | Hazardous to the aquatic environment – Chronic Hazard, Category 2 |
| Asp. Tox. 1 | Aspiration hazard, Category 1 |
| EUH210 | Safety data sheet available on request. |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H411 | Toxic to aquatic life with long lasting effects. |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |

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.