

Name of the product: **ETEX[®] Oil Additive for Diesel Engines of Heavy Trucks (>16t)**Internal code of the product: **E/007**

Page 1 of 16

Date of issue: **15.08.2019.**Date of revision: **15.08.2019.****SECTION 1. Identification of the substance / mixture and of the company / undertaking.****1.1. Product identifier:**

Product name: ETEX[®] Oil Additive for Diesel Engines of Heavy Trucks (>16t)
REACH Registration No.: Not applicable for mixtures.
CAS No.: Not applicable for mixtures.
EC No.: Not applicable for mixtures.
Index No.: Not applicable for mixtures.

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

Relevant identified uses: **SU21** – Consumer uses;
SU22 – Professional uses;
PC17 – Hydraulic fluids;
PC24 – Lubricants, greases, release products;
PROC20 – Use of functional fluids in small devices;
ERC2 – Formulation into mixture;
ERC7 – Use of functional fluid at industrial site;
ERC9a – Widespread use of functional fluid (indoor);
ERC9b – Widespread use of functional fluid (outdoor);
ERC10a – Widespread use of articles with low release (outdoor).

Uses advised against: Not applicable.

Reason why uses advised against: Not applicable.

1.3. Details of the Supplier of the safety data sheet:

Official supplier: "CrossChem" Ltd.;
Street address/P.O. Box: "Naftaluka", Olaines pagasts, Olaines novads,
LV-2127, Latvia. (Office, factory, warehouse).
National Registration No.: 40003888244
Telephone number: +371 67491030 (Administration)
E-mail: info@crosschem.lv
Homepage: <https://crosschem.lv/>
E-mail address of competent person, responsible for the SDS:
girts.betmanis@crosschem.lv

1.4. Emergency telephone number:

State Fire and Rescue Service: **(+371) 112**

Working hours: 24 hours a day, 365 days a year.

National Toxicology Center: **(+371) 67042468; (+371) 67000610**

Opening hours: Working days from 8:00 to 17:00, weekends and public holidays from 9:00 to 15:30.

Other notes: Help is provided in Latvian, Russian and English.

SECTION 2. Hazards identification.**2.1 Classification of the substance or mixture:**

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

Asp. Tox. 1 (**H304** – May be fatal if swallowed and enters airways).

**2.2 Label elements:**

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

According to Regulation (EC) No. 1272/2008 (CLP), product needs labelling –

H304 – May be fatal if swallowed and enters airways.

Name of the product: **ETEX® Oil Additive for Diesel Engines of Heavy Trucks (>16t)**

Internal code of the product: **E/007**

Page 2 of 16

Hazard pictograms: **GHS08** – Health hazard.
Signal word: Dgr. – Danger.
Hazard statements: **H304** – May be fatal if swallowed and enters airways.
Precautionary statements: **P301+P310:** IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician;
P331: Do NOT induce vomiting;
P405: Store locked up;
P501: Dispose of contents/container in accordance to local waste regulations.

Supplemental Hazard information (EU):
Not applicable.

2.3. Other hazards: Combustible product, poorly flammable.

SECTION 3. Composition/ information on ingredients.

3.1. Substance: Not applicable.
3.2. Mixtures:

Name of the substance	CAS No.	EC No.	REACH No.	Classification according to (EC) No. 1272/2008.	W%/W
White mineral oil (Petroleum)	8042-47-5	232-455-8	01-2119487078-27-XXXX	Asp. Tox. 1 (H304 – May be fatal if swallowed and enters airways).	95 – 99 %
Serpentinite (Mineral)	Not available.	Not available.	Not available.	Not applicable.	1 – 5 %

SECTION 4. First aid measures.



4.1. Description of first aid measures:

General information:

Remove contaminated, saturated clothing immediately. In case of accident or unwellness, seek medical advice immediately. Keep the victim calm. If the person is unconscious, place person in stable recovery position. Consult a physician. Show this safety data sheet to the doctor in attendance.

Following inhalation:

If fumes, aerosols or combustion products are inhaled, remove the person from contaminated area to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial resuscitation (CPR). In every cases where there is doubt of person's life or if symptoms remain, seek medical advice.

Following skin contact:

Wash the affected area thoroughly with soap and plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. If irritation remains, seek medical advice.

Following eye contact:

Promptly flush eyes with water, continuing for at least 15 minutes, occasionally lifting the upper and lower eyelids, to ensure thorough rinsing. Remove contact lenses if possible and if safe to do. If irritation, redness or blinking persists, consult a doctor immediately.

Following ingestion:

If the product has been swallowed, rinse mouth with water, do not induce vomiting. Keep affected person warm and treat for shock. If the person is conscious, give him/her a glass of water to drink immediately. Never introduce anything into the mouth of an unconscious person. If the person feels unwell, seek medical attention.

Self-protection of the first aider:

Pay attention to self protection. Comply with general hygiene requirements. Avoid inhalation of aerosol. Product contact with eyes is prohibited. Avoid repeated or prolonged contact with skin or clothing. Wear suitable protective clothing and gloves.

Name of the product: **ETEX[®] Oil Additive for Diesel Engines of Heavy Trucks (>16t)**

Internal code of the product: **E/007**

Page 3 of 16

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

Eyes: Direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness.

Skin: Localized redness, swelling, itching and dryness of the skin.

Inhalation: Inhalation of oil droplets or aerosols may cause discomfort and may produce chemical inflammation of the lungs. Inhalation may be harmful or fatal.

Ingestion: Abdominal pain, stomach upset, nausea, vomiting and diarrhea may occur.

CNS symptoms: Not applicable.

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

Notes to doctor: Treat Symptomatic.

SECTION 5. Firefighting measures.



5.1. Extinguishing media:

Suitable extinguishing media:

Use the most efficient and the most suitable extinguishing agent for surroundings to extinguish the fire. Standard agents are acceptable: water fog, chemical foam, alcohol resistant foam, dry fire powder, sand, carbon dioxide (CO₂) and as well as other inert gases can be used at confined spaces (subject to regulations).

Unsuitable extinguishing media:

Do not use direct water jets on the burning product - they could cause splattering and spread the fire. Simultaneous use of foam and water on the same surface must be avoided as water destroys the foam.

5.2. Special hazards arising from the substance or mixture:

Hazardous combustion products:

Combustion is likely to give a complex mixture of airborne solid and liquid particules and gases, including Carbon Monoxide (CO) and Carbon dioxide (CO₂) and unidentified organic compounds. Short-term exposures to smoke and gases may lead to irreversible lung injury without early signs of symptoms.

5.3. Advice for firefighters:

Special protective equipment for fire-fighters:

Do not enter fire area without proper protective equipment, including respiratory protection. When the potential chemical hazard is unknown, in enclosed, confined or poorly ventilated spaces, a self-contained breathing apparatus should be worn (SCBA). During burning irritating and poisonous gases can be released, therefore use SCBA with a comprehensive facial mask, and protective fire-fighting clothing (including: fire helmet, overalls, pants, boots, gloves, eye and face protection.) must be worn.

Fire fighter's clothing conforming to European standard **EN469** provides a basic level of protection for chemical incidents and includes helmets, protective boots and gloves. Clothing not conforming to **EN469** may not be suitable in any chemical incident.

Use SCBA with a chemical protection suit only where personal (close) contact is likely to happen. Use SCBA with gas-tight suit when in close proximity to the substance or if its vapors or smoke is likely to arise.

5.4. Additional information:

Stay down-wind during firefighting.

Promptly isolate the scene by removing all unauthorized persons from the area of the incident if there is a fire.

A pressure increase will occur if containers are exposed to heat, therefore evaporation of solution can result in rupture of container, it may burst. Cool containers with a cold water spray. If there is no risk, move the containers away from the heat source. Shut off sources of ignition. Stop spill/release if it can be done with minimal risk. Water mist may be useful in minimizing or dispersing vapors. If possible, collect used extinguishing media separately, to prevent it from entering drains.

Name of the product: **ETEX[®] Oil Additive for Diesel Engines of Heavy Trucks (>16t)**Internal code of the product: **E/007**Page **4** of **16****SECTION 6. Accidental release measures.****6.1. Personal precautions, protective equipment and emergency procedures:****For non-emergency personnel:**

Put on appropriate protective equipment (see Section 8.). Alert an emergency expert. Eliminate sources of ignition (electricity, sparks, fires, flares), do not smoke. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering the area. Do not touch or walk through spilled material. Stop or contain leak if safe to do so. The recommendations are the same as for emergency help providing staff.

For emergency responders:

Wear appropriate protective equipment (see Section 8.), to prevent contact with the product and inhalation of fumes or mist. Ensure to supply adequate ventilation and fresh air in closed rooms. Eliminate sources of ignition and heat (electricity, sparks, fires, flares). Stop or contain leak at the source if safe to do so. Do not touch or walk through spilled material. Isolate and evacuate the danger zone, reduce the presence of persons, who are not involved in the rescue operation.

6.2. Environmental precautions:

Do not allow large quantities of product to enter drains, surface waters, ground water, and in case of large accidental spill into the water supply, inform local authorities immediately, to stop the water supply and use. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up:**For containment:**

When inside buildings or confined space ensure adequate ventilation is provided. Clogging or cover drains. In the event of a major leak, stop the flow of product by using: booms and pads, which can be found in spill kit if, it is safe to do. Scoop as much product as possible in to tight and secure containers. Absorb remains in vermiculite, dry sand, silica gel or any absorbent non-combustible material, place the used absorbent in closed, secure and suitable containers. After containing the substance, rinse the area with plenty of water. In case of soil contamination, remove contaminated soil for remediation or disposal according to local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers.

For cleaning up:

Dispose of the material collected in secure containers according to regulations in section 13. After containing spill, clean up remains by diluting with water and mop up. In the case of small spills, wipe the surface with non-combustible absorbent material, clean surface with water afterwards. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.

6.4. Other information:

See Section 8 for personal protective equipment and Section 13 for waste disposal.

SECTION 7. Handling and storage.**7.1. Precautions for safe handling:****Protective measures:**

Use only in dry, well ventilated areas. Handle opened container with care, close after use. Handle in accordance with good industrial hygiene and safety procedures. Avoid contact with the eyes. Avoid repeated or prolonged contact with skin. Avoid inhalation of mist. Avoid spilling or spraying in enclosed spaces. Be aware of slipping. Avoid splashing and splash filling of bulk volumes. Use appropriate protective equipment: protective clothing, gloves, goggles and respirator necessary (see Section 8.). Washing facility at the workplace required.

Measures to prevent fire:

Follow preventative fire protection regulations. Keep away from sources of sparks and ignition – do not smoke. Take precautionary measures against static discharges. Use only in well ventilated areas. Work clothing that becomes wet should be immediately removed due to its combustion hazard. Empty containers may contain combustible product residues. Do not weld, solder, drill, cut or perform similar operations unless they have been properly cleaned.

Name of the product: **ETEX[®] Oil Additive for Diesel Engines of Heavy Trucks (>16t)**

Internal code of the product: **E/007**

Page 5 of 16

Measures to prevent aerosol and dust generation:

Avoid spraying in enclosed spaces.

Measures to protect the environment:

Sufficient ventilation must be guaranteed for refilling, transfer, or open use. Air ventilation systems should be equipped with washable filters.

Advice on general occupational hygiene:

Provide adequate ventilation in areas where aerosol is formed. Avoid contact with eyes and skin. Provide easy access to water supply and eye wash facilities, show where to locate those. Wash your hands with mild soap and water after use, before breaks, at the end of the working day. Do not eat, drink or smoke when using the product and in areas where product is handled, stored and processed. "NO SMOKING" signs should be placed in the working area. Regular cleaning of equipment, work area and clothing is recommended. Do not store with food, drinks or animal food.

7.2. Conditions for safe storage, including any incompatibilities:

Technical measures and storage conditions:

Do not store close to heat sources, sparks or fire. Storage temperature – can be stored at ambient temperature (up to 45°C), can be stored at low temperatures (up to -60°C). Protect containers against physical damage. Good general ventilation should be sufficient to control worker exposure to vapor. If this product exceeds exposure limits, use process enclosures: local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Packaging materials:

Suitable packing material: Aluminium, iron, copper, glass, polypropylene (PP), polytetrafluoroethylene (PTFE), polyfluoroethylene (PFE), vinylidene fluorides (PVDF), high density polyethylene (HDPE), polyethylene (PE), polysulfone (PSU). For containers, or container linings use mild steel, stainless steel.

Non suitable packaging materials: No data available.

Product can be packed in the package chosen by the buying customer, as long as it ensures safe transportation and storage of the product.

Requirements for storage rooms and vessels:

Store product protected from direct sunlight in a dry, cool and well-ventilated area. Floors must be leak-proof or covered with insulation material. It is recommended to use anti-spill container under the IBC containers or drums. Storage installations should be designed with adequate bunds to prevent ground and water pollution in case of leaks or spills. Contact local authorities for further information on storage requirements.

Containers that have been opened must be carefully reinforced and kept upright to prevent leakage. Keep containers tightly closed when not in use. Keep containers protected from physical damage. Check regularly for leaks. Keep preferably in the original container. Containers and pipelines have to be labelled clearly and permanently. Do not remove the hazard labels of the containers (even if they are empty). Do not store in unlabeled containers.

Storage class: Storage class 10 (Combustible liquids as far as not in storage class 3)

Further information on storage conditions:

Product has a shelf life of 5 years, in unopened manufacturers packing, if stored in a cool and dry location and away from direct sunlight. Only substances of the same storage class can be stored together.

7.3. Specific end use(s):

Use only as oil additive for diesel engines of heavy trucks.

Name of the product: **ETEX® Oil Additive for Diesel Engines of Heavy Trucks (>16t)**

Internal code of the product: **E/007**

Page 6 of 16

SECTION 8. Exposure controls/personal protection.

8.1. Control parameters:

Components with workplace control parameters:

Component	CAS No.	Value	Control parameter	Base
White mineral oil	8042-47-5	OEL 8h	5 mg/m ³	Occupational health and safety requirements for exposure to chemicals at work spaces
White mineral oil	8042-47-5	Short term, 15 min.	20 mg/m ³	
Serpentine (Mineral)	Not available.	OEL 8h	No data available.	
Serpentine (Mineral)	Not available.	Short term, 15 min.	No data available.	

DNEL values of exposure to human health:

The product is mixture of white mineral oil. DNEL of the product is not determined. The physicochemical properties and DNEL value of the pure white mineral oil, which could have the most negative effect, according to REACH dossier of white mineral oil, is provided.

Mode of exposure	Type of exposure	DNEL value (workers)	DNEL value (public consumers)	The most negative physicochemical effect
Inhalation	Acute effect, systemic	(iii)	(iii)	Not applicable.
Inhalation	Acute effect, local	(iii)	(iii)	Not applicable.
Inhalation	Chronic effect, systemic	160 mg/m ³	35 mg/m ³	No hazard identified.
Inhalation	Chronic effect, local	(iii)	(iii)	Not applicable.
Dermal	Acute effect systemic	(iii)	(iii)	Not applicable.
Dermal	Acute effect, local	(iii)	(iii)	Not applicable.
Dermal	Chronic effect, systemic	220 mg/kg bw/day	93 mg/kg bw/day	No hazard identified.
Dermal	Chronic effect, local	(iii)	(iii)	Not applicable.
Through eyes	Acute effect, local	(iii)	(iii)	Not applicable.
Oral	Acute effect, systemic	(ii)	(iii)	Not applicable.
Oral	Acute effect, local	(ii)	(iii)	Not applicable.
Oral	Chronic effect, systemic	(ii)	40 mg/kg bw/day	No hazard identified.
Oral	Chronic effect, local	(ii)	(iii)	Not applicable.

i) hazard identified but no DNEL available, ii) no exposure expected, iii) no hazard identified

Predicted no effect concentration values:

PNEC of the product is not determined. PNEC of pure white mineral oil, according to REACH dossier is provided.

Name of the product: **ETEX[®] Oil Additive for Diesel Engines of Heavy Trucks (>16t)**

 Internal code of the product: **E/007**

Page 7 of 16

Environmental protection target	PNEC value
Fresh water	White mineral oil: No data available: testing technically not feasible.
Freshwater sediments	White mineral oil: No data available: testing technically not feasible.
Marine water	White mineral oil: No data available: testing technically not feasible.
Marine sediments	White mineral oil: No data available: testing technically not feasible.
Food chain	(ii)
Microorganisms in sewage treatment	White mineral oil: No data available: testing technically not feasible.
Soil (agricultural)	White mineral oil: No data available: testing technically not feasible.
Air	(ii)

i) hazard identified but no PNEC available; ii) no exposure expected; iii) no hazard identified.

Based on evaluation of all the ecological toxicity data discussed above, white mineral oil does not meet the criteria for classification as an environmental hazard under the EU CLP Regulation (EC No. 1272/2008).

8.2. Exposure controls:

Appropriate engineering controls:

Good general ventilation should be provided to control worker exposure to airborne contaminants of vapor or mists, especially in confined spaces. Adhere to good industrial hygiene rules when using or handling the product. Provide access to water, hand-wash facilities and showers, as well as easy access to eye wash. Do not use tools that can generate sparks and flames, avoid static electricity, use tools that are grounded. Do not expose the container to mechanical damage.

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

Personal protection equipment:

Eye and face protection:

Use eye and face accessories that have been tested and approved in accordance with relevant standards such as: NIOSH (US) or EN 166 (EU). It is recommended to use polycarbonate safety glasses, goggles, tightly fitting goggles or face shield.

Body protection:

Choose the type of body protection according to the situation, concentration and quantity of the hazardous substance, and the specific concentration at the workplace. Wear an apron or a lab coat. Workwear must comply with EN ISO 13688 standard and special work shoes must comply with EN ISO 20347:2012 standard. It is recommended to use impervious clothing. Flame retardant and antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection:

Where risk assessment shows, air-purifying respirators are appropriate, use a half-face or full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) or just A1 – brown colour (LVS EN 141) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and accessories tested and approved in accordance with relevant national and international standards, NIOSH (USA) or CEN (EU).

Skin protection:

Gloves should be inspected before use. Use appropriate glove removal techniques (without touching the inside of the glove) to avoid contact with the product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practice. Wash and dry your hands. The gloves used must be chemically resistant in accordance with EN 420 or EN ISO 374-1 standards. Protective gloves must be made of one of the materials, with the relevant specifications listed in the table below:

Glove material	Minimum glove thickness (mm)	Penetration time (min)	Break through time for white mineral oils (min)
Buthyl rubber	0.30	>480	>60
Nitrile rubber/ Nitrile latex	0.40	>480	>60
Fluorocarbon rubber	0.40	>480	>60
Polychloroprene	0.50	>480	<60

Name of the product: **ETEX[®] Oil Additive for Diesel Engines of Heavy Trucks (>16t)**Internal code of the product: **E/007**Page **8** of **16**

Natural rubber/Natural latex	0.50	>480	< 30
Polyvinyl chloride	0.50	>480	60
Neoprene	0.50	>480	>60

* Please note that the penetration time of the glove material in this section has been set at 22°C and using pure Ammonium nitrate substance. When working at a higher temperature, the resistance of the glove material may be considerably lower, and in such cases, the permitted life of the glove must be shortened. A 1.5-times increase / decrease in the layer thickness doubles / halves the breakthrough time. This data only applies to the pure substance. We recommend that when you start using a new type or other manufacturer's gloves, make sure that they are chemically and mechanically resistant to working conditions. If you have any doubt about the suitability of the gloves, please contact the suppliers of gloves. Transferred to mixtures of substances, these figures should only be taken as an aid to orientation.

Thermal hazards: Combustible product, poorly flammable.

8.3. Environmental exposure controls:

Do not allow product to enter drains, surface waters or ground waters. See Section 6. for substance related measures to prevent exposure to environment.

SECTION 9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties:

- a) **Appearance:** Amber (light brown) liquid at 20°C and a pressure of 1013 hPa.
- b) **Odour:** Mild oil odour.
- c) **Odour threshold:** Not specified.
- d) **pH:** Not specified.
- e) **Melting/freezing point:** -60°C to -30°C (-40°C thickening point).
- f) **Initial boiling point and boiling range:**
218°C to 800°C (Pure white mineral oil -ASTM D 1160 (CONCAWE, 2010a)).
- g) **Flash point:** 112°C to 268°C (Open Cup, ASTM D-92).
- h) **Evaporation rate:** Not specified.
- i) **Flammability:** Not classified as flammable according to CLP Regulation (EC No. 1272/2008).
- j) **Upper/lower flammability or explosive limits:**
Not specified.
- k) **Vapour pressure:** ≤0.01 kPa at 20°C (Pure white mineral oil, (CONCAWE, 2010a)).
- l) **Vapour density:** Not specified.
- m) **Relative density:** 810 to 894 kg/m³ at 15°C (CONCAWE, 2010a).
- n) **Solubility:** Insoluble in water.
- o) **Partition coefficient: n-octanol/water:**
Not specified.
- p) **Auto-ignition temperature:**
325°C to 355°C (Pure white mineral oil. ASTM E 659, CONCAWE, 2010a).
- q) **Decomposition temperature:**
Not specified.
- r) **Viscosity:** 21 to 99.8 mm²/s at 40°C (Pure white mineral oil ,CONCAWE, 1993).
3.08 to 15 mm²/s at 100°C (CONCAWE, 1997).
- s) **Explosive properties:** Based to column 2 of Annex VII to the REACH Regulation, does not apply, product is not explosive. There are no chemical functional groups associated with explosive properties.
- t) **Oxidising properties:** Based on column 2 of Annex VII to the REACH Regulation, does not apply, product is not oxidising. There are no chemical functional groups associated with oxidising properties.

9.2 Other safety information:

Specific gravity: 0.86 at 15.6°C

SECTION 10. Stability and reactivity.

10.1. Reactivity:

Stable under regular conditions of transportation and use (see Section 7. "Handling and Storage").

Name of the product: **ETEX® Oil Additive for Diesel Engines of Heavy Trucks (>16t)**

 Internal code of the product: **E/007**

Page 9 of 16

10.2. Chemical stability:

Stable under storage, transportation and using conditions at lowered and normal ambient temperatures (-60°C to +45°C), (see Section 7. "Handling and Storage").

10.3. Possibility of hazardous reactions:

No hazardous reactions will occur when handled and stored according to provisions.

10.4. Conditions to avoid:

Avoid direct sunlight, heat, flames, sparks and incompatible materials. Do not damage product containers.

10.5. Incompatible materials:

 Store separately from strongly **oxidizing substances** of storage class 5.1A and any **oxidizing agents**, such as chlorine, nitric acid, permanganates, bromine pentafluoride, nitrosyl perchlorate or chromate solutions. Store away from **strong acids**, infectious, radioactive and explosive substances.

The substance should not be stored with substances with which hazardous chemical reactions are possible.

10.6. Hazardous decomposition products:

 Product forms carbon monoxide (CO), carbon dioxide (CO₂) and unidentified organic compounds when burnt.

SECTION 11. Toxicological information.

11.1. Information on toxicological effects:

Toxicity studies of the product are not available. As the product is mixture of white mineral oil, information on toxicity, according to REACH dossier, is provided on white mineral oil.

Acute toxicity:
Effects on humans: No data available.

Effects on animals:

Routes of exposure	Exposure dose, concentration	Species	Method	Symptoms, effects	Remark
Acute oral toxicity	LD50: 5000 mg/kg bw	Rat	OECD 401	No adverse effect observed.	ECHA
Acute inhalation toxicity	LC50: 5 mg/L air	Rat	OECD 403	No adverse effect observed.	ECHA
Acute dermal toxicity	LD50: 2000 mg/kg bw	Rabbit	OECD 402	No adverse effect observed.	ECHA

Other information: No data available.

Assessment / Classification:

 Based on evaluation of all the acute toxicity data discussed above, product does not meet the criteria for classification as acute oral, inhalation or dermal toxicants under EU CLP Regulation (**EC No. 1272/2008**).

Skin corrosion/irritation:
Effects on humans: No data available.

Effects on animals:

Exposure type	Exposure time	Observation time	Species	Method	Symptoms, effects	Remark
Single application of 0.5 mL of pure white mineral oil	24 h	24 h and 72h	Rabbit (New Zealand White)	OECD 404	No adverse effect observed.	ECHA

Other information: No data available.

Assessment / Classification:

 Based on skin irritation scores of 0.0 for both erythema and edema, after 24 hours exposure, product does not meet the criteria for classification as a skin irritant as defined by the EU CLP Regulation (**EC No. 1272/2008**).

Name of the product: **ETEX® Oil Additive for Diesel Engines of Heavy Trucks (>16t)**

Internal code of the product: **E/007**

Page **10** of **16**

Serious eye damage/irritation:

Effects on humans: No data available.

Effects on animals:

Exposure type	Exposure time	Observation time	Species	Method	Symptoms, effects	Remark
Single drop of 0.1 ml	Held in the eye for 20 to 30 seconds	24h, 48h, 72h, day4 , day 5, and day 7.	Rabbit (New Zealand white)	OECD 405	No adverse effect observed.	ECHA

Other information:

A very mild irritation occurred in one rabbit in the unrinsed group at 24 hours, but was completely reversible by 48 hours. A second rabbit in the unwashed group exhibited a very mild irritation at 48 hours, but was completely reversible by 72 hours.

Assessment / Classification:

Based on a lack of corneal and iridial irritation, and a conjunctival irritation, product does not meet the criteria for classification as an eye irritant as defined by the EU CLP Regulation (**EC No. 1272/2008**).

Respiratory or skin sensitisation:

Effects on humans: No data available.

Effects on animals:

Exposure dose, concentration	Exposure time	Observation time	Species	Method	Symptoms, effects	Remark
Administration of 0.5 ml white mineral oil on skin	6h	24h and 48h	Guinea pig (Hartley)	OECD 406	No adverse effect observed.	ECHA

Other information: No data available.

Assessment / Classification:

Product is not considered skin sensitizer based on the information presented above.

Germ cell mutagenicity:

Effects on humans: No data available.

Effects on animals:

Exposure dose, concentration	Exposure time	Observation time	Species	Method	Symptoms, effects	Remark
10, 50, 100, 500 and 1000 µg/ml	Once a day	6 months	Mouse lymphoma L5178Y cells	OECD 476 (In vitro)	Negative genotoxicological effect.	ECHA
1, 2.5, or 5.0 g/kg	Once a day	24, 48, and 72 hours after exposure.	Mouse (CD-1)	OECD 474 (In vivo)	No adverse effect observed.	ECHA

Other information: Endpoint Conclusion: No adverse effect observed (negative)

Assessment / Classification:

Based on in vitro and in vivo mutagenicity data, product is not classified as mutagens under EU CLP Regulation (**EC No. 1272/2008**).

Carcinogenicity:

Effects on humans: No data available.

Effects on animals:

Exposure dose, concentration	Exposure time	Observation time	Species	Method	Symptoms, effects	Remark
Orally 1200 mg/kg bw/day	Once a day	2 years	Rat	OECD 453	No adverse effect observed.	ECHA

Name of the product: **ETEX® Oil Additive for Diesel Engines of Heavy Trucks (>16t)**

Internal code of the product: **E/007**

Page **11** of **16**

Inhalation 100 mg/m ³ air	Once a day	2 years	Rat	OECD 453	No adverse effect observed.	ECHA
--------------------------------------	------------	---------	-----	----------	-----------------------------	------

Other information: See ECHA for more detailed description of studies of carcinogenicity.

Assessment / Classification:

Based on the data presented above, product is not classified as carcinogenic according to EU CLP Regulation (**EC No. 1272/2008**).

Reproductive toxicity:

Effects on humans: No data available.

Effects on animals:

Exposure dose, concentration	Exposure time	Observation time	Species	Method	Symptoms, effects	Remark
Oral 2000 mg/kg bw/day; Inhalation 1000 mg/kg bw/day	4h, 5 days/week	5 months	Rats	OECD 415	No observed effect on fertility.	ECHA

Other information:

Dermal administration of white mineral oil had no adverse effects on reproductive parameters or development of pups in a one-generation study.

Assessment / Classification:

Professional, primary or secondary exposure of white mineral oil is unlikely to affect fertility. Based on available data, the classification criteria are not met.

Summary of evaluation of the CMR properties:

Effects on humans: No data available.

Effects on animals:

Exposure dose, concentration	Exposure time	Observation time	Species	Method	Symptoms, effects	Remark
Oral: gavage. 5000 mg/kg	Once a day; Gestation day 6 to day 19.	2 years	Rats (Sprague-Dawley)	OECD 414	No embryotoxic / teratogenic effects	ECHA

Other information: No data available.

Assessment / Classification:

Developmental studies did not provide sufficient evidence to cause a strong suspicion of developmental toxicity.

Therefore white mineral oil is not classified as a developmental toxicant according to Annex I of EU CLP Regulation (**EC No. 1272/2008**).

STOT-single exposure:

Effects on humans: No data available.

Effects on animals: No data available.

Other information: No data available.

Assessment / Classification:

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

STOT-repeated exposure:

Effects on humans: No data available.

Effects on animals:

Exposure dose, concentration	Exposure time	Observation time	Species	Method	Symptoms, effects	Remark
Orally: 0, 60, 120, 240, or 1200 mg/kg/day	Daily	24 months	Rats (CDF(F-344)/CrIBR)	OECD 453	No adverse effect observed.	ECHA

Name of the product: **ETEX® Oil Additive for Diesel Engines of Heavy Trucks (>16t)**

Internal code of the product: **E/007**

Page **12** of **16**

Inhalation of aerosol: 0, 50, 210 and 1000 mg/m ³	6 h per day/ 5 days a week	4 weeks	Rats (Sprague-Dawley)	OECD 412	No adverse effect observed.	ECHA
Dermally: 0, 125, 500, or 2000 mg/kg/day	Single exposure	13 weeks	Rats (Sprague-Dawley)	OECD 411	No adverse effect observed.	ECHA

Other information: No data available.

Assessment / Classification:

Based on the lack of adverse effects, even with the highest doses administered, an oral chronic NOEL of ≥ 1200 mg/kg bw/day, and a dermal subchronic NOAEL of ≥ 2000 mg/kg bw/day, white mineral oil is not classified under EU CLP Regulation (**EC No. 1272/2008**).

Aspiration hazard:

Effects on humans: No data available.

Effects on animals: No data available.

Other information: Aspiration may cause pulmonary oedema and pneumonitis.

Assessment / Classification: Based on available data, the classification criteria are not met.

SECTION 12. Ecological information.

12.1 Toxicity:

Studies of ecological impact of the product are not available. As the product is mixture of white mineral oil, information about ecological impact, according to REACH dossier, is provided of white mineral oil.

Acute (short-term) toxicity:

Target parameter	Value	Species	Method	Exposure time	Remark
LL50	10 000 mg/L.	Freshwater fish - <i>Leuciscus idus melantous</i> L	OECD 203	96 h	ECHA
LL50	100 mg/L	Freshwater fish - <i>Oncorhynchus mykiss</i>	OECD 203	96 h	ECHA
LL50	100 mg/L	Marine invertebrates - <i>Daphnia magna</i>	-	48 h	ECHA
LC50	100 mg/L	Algae - <i>Pseudokirchneriella subcapitata</i>	OECD 201	72 h	ECHA

Chronic (long-term) toxicity:

Target parameter	Value	Species	Method	Exposure time	Remark
LC50	1, 10, 100 and 1000 mg/L.	Water invertebrates - <i>Daphnia magna</i>	OECD 211	21 days	ECHA

White mineral oil has a very low short-term toxicity to fish.

12.2. Persistence and degradability:

Biodegradation: No data available.

Aerobic: No data available.

Anaerobic: No data available.

Other information: No data available.

12.3. Bioaccumulative potential:

Partition coefficient n-octanol /water (log Kow): No data available.

Bioconcentration factor (BCF): No data available.

12.4. Mobility in soil:

Name of the product: **ETEX[®] Oil Additive for Diesel Engines of Heavy Trucks (>16t)**

Internal code of the product: **E/007**

Page **13** of **16**

Known or predetermined prevalence in environmental compartments:

No data available.

Surface tension: No data available.

Adsorption / Desorption: No data available.

The substance has low mobility in soil. Product has poor solubility in water.

12.5. Results of PBT and vPvB assessment:

In accordance with Regulation (EC) No 1907/2006, Annex XIII, white mineral oil does not meet the PBT and vPvB criteria and is not a PBT or vPvB substance.

12.6. Other adverse effects: None.

12.7. Additional information: No data available.

SECTION 13. Disposal considerations.

13.1 Waste treatment methods:

Product / Packaging disposal:

In accordance to annex III of "Commission notice on technical guidance on the classification of waste" (2018/C 124/01), **unused** product, without any impurities, is **not** classified as hazardous waste by **HP5**.

In accordance to Commission decision (2014/955/EU), European Waste Catalog (EWC) and Republic of Latvia Cabinet of Ministers Regulation No. 302, used product in mixture with other engine oils is classified as hazardous waste (see EWC codes).

Dispose of collected material as used material. Burn in a chemical incinerator equipped with an afterburner and scrubber. Contact nearest waste disposal facility for further instructions.

Collection of small amounts of products: Place in a collection container for halogen-free organic solvents and halogen-free organic solutions. Collection vessels must be clearly labelled with a systematic description of their contents. Store the vessels in a well-ventilated location away from direct exposure of sun.

Empty the product cans or drums, free them from as much of the product as possible. The packing needs to be cleaned. In accordance with Regulation (EC) No. 1357/2014, empty packaging, clean from product, is not classified as hazardous waste. Re-use or dispose clean packing material.

If packing contains product or is contaminated, or if packing cannot be cleaned, dispose of it as a **used** product.

Dispose of product and its packaging safely in accordance with regional and national environmental regulations.

Waste codes / waste designations according to EWC:

According to the European Waste Catalog (EWC) and European List of Waste (LoW), the applicable codes for product are:

13 02 05 mineral-based non-chlorinated engine, gear and lubricating oils (AH – absolute hazard);

13 02 06 synthetic engine, gear and lubricating oils (AH – absolute hazard);

13 02 08 other engine, gear and lubricating oils (AH – absolute hazard);

15 01 02 plastic packaging (MN – Mirror non-hazardous);

15 01 04 metallic packaging (MN – Mirror non-hazardous);

15 01 07 glass packaging (MN – Mirror non-hazardous);

15 01 10 packaging containing residues of or contaminated by hazardous substances (MH – Mirror hazardous).

Sewage disposal-relevant information:

Waste should not be disposed of by release into sewers.

Other disposal recommendations: It is the responsibility of the waste treatment company to make a final decision on the relevant waste management, disposal or recycling method in accordance with regional, national or European legislation and possible adaptation to local conditions.

Name of the product: **ETEX[®] Oil Additive for Diesel Engines of Heavy Trucks (>16t)**

 Internal code of the product: **E/007**

 Page **14** of **16**
SECTION 14. Transport information.

ADR	IMDG	ICAO-TI/IATA-DGR	ADN	RID
14.1. UN Number:				
Not applicable.				
14.2. UN proper shipping name:				
Not applicable.				
Transport document description:				
Not applicable.				
14.3. Transport hazard class(es):				
Not applicable.				
14.4. Packing group:				
Not applicable.				
14.5. Environmental hazards:				
Not classified as environmentally hazardous.				

14.6. Special precautions for users:

Road transport (ADR):	Not applicable.
Transport by sea (IMDG):	Not applicable.
Air transport (IATA):	Not applicable.
Inland waterway transport (ADN):	Not applicable.
Rail transport (RID):	Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

SECTION 15. Regulatory information.
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:
EU regulations:

- Regulation (EC) **No. 1907/2006** of the European Parliament and Council of 18. December 2006 on Registration, Evaluation, Authorization and Restriction of Chemicals (REACH);
- Commission Regulation (EU) **No. 2015/830** of 28 May 2015 amending Regulation (EC) No. 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH);
- Commission regulation (EU) **No. 552/2009** of 22 June 2009 amending Regulation (EC) No. 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as regards Annex XVII;
- Regulation (EC) No. **1272/2008** - classification, labelling and packaging of substances and mixtures (CLP);
- Commission regulation (EU) **No. 1357/2014** of 18 December 2014 replacing Annex III to Directive 2008/98/EC of the European Parliament and of the Council on waste and repealing certain Directives;
- Regulation **649/2012/EU** concerning the export and import of hazardous chemicals (PIC);
- Regulation **850/2004/EC** on persistent organic pollutants (POP);
- European Agreement concerning the International Carriage of Dangerous Goods by Road (**ADR**);
- European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (**ADN**).
- Commission notice on technical guidance on the classification of waste **2018/C 124/01**;
- Directive **2008/98/EC** of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives;
- Regulation (EC) **No. 166/2006** of the European Parliament and of the Council of 18 January 2006 concerning the establishment of a European Pollutant Release and Transfer Register and amending Council Directives 91/689/EEC and 96/61/EC;
- **2014/955/EU**: Commission Decision of 18 December 2014 amending Decision 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council Text with EEA relevance.

International regulations:

- Regulations concerning the International Carriage of Dangerous Goods by Rail (**RID**);
- International Maritime Dangerous Goods Code (**IMDG**);

Name of the product: **ETEX® Oil Additive for Diesel Engines of Heavy Trucks (>16t)**Internal code of the product: **E/007**Page **15** of **16**

- International Convention for the Prevention of Pollution from Ships (**MARPOL 73/78**);
- International Aviation Transport Association regulations (**IATA**);
- International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (**IBC Code**).

National regulations (Latvia):

- Chemical Substances Law;
- Republic of Latvia Cabinet of Ministers Regulation **No. 795**: "Procedures for Registration of Chemical Substances and Mixtures and Their Database";
- Republic of Latvia Cabinet of Ministers Regulation **No. 325**: "Labour Protection Requirements when Coming in Contact with Chemical Substances at Workplaces";
- Republic of Latvia Cabinet of Ministers Regulation **No. 302**: "Provisions regarding the waste classification and the characteristics rendering the hazardous waste";
- Republic of Latvia Cabinet of Ministers Regulation **No. 107**: "Procedure for Classification, Labeling and Packaging of Chemicals and Chemical Products";
- Labour Protection Law;
- **LVS EN 149 + A1:2009** - Standard for disposable dust respirators with or without valve according to which they are labeled with FFP1, FFP2 or FFP3 depending on protection class;
- **LVS EN 143:2002 + AC/AC:2005** - Standard for dust filters P1, P2, P3 for use with half masks and full face masks;
- **LVS EN 141:2002** - Standard for gas and combined filters;
- **LVS EN 14387:2004+A1:2008** - Respiratory protective devices. Gas filter(s) and combined filter(s). Requirements, testing, marking;
- **EN 420**: The standard of glove safety;
- **LVS EN 388** - "Protective gloves against mechanical effects";
- **EN469** - Protective clothing for firefighters - Requirements for firefighting protective clothing;
- **LVS EN ISO 374-1** - "Protective gloves against dangerous chemicals and microorganisms";
- **LVS EN 166:2002** - "Individual eye protection. Specifications";
- **LVS EN ISO 13688** - "Protective clothing - General requirements";
- **LVS EN ISO 20347:2012** - "Personal protective equipment - Occupational footwear"

15.2. Chemical safety assessment:

No chemical Safety Assessment has been carried out for this mixture.

SECTION 16. Other information.**16.1. Indication of changes:**Release Date: **15.08.2019.**Date of revision: **15.08.2019.**Version: **1.0.****16.2. List of abbreviations and acronyms used throughout the Safety Data Sheet:****CPR** – Artificial respiration or cardiopulmonary resuscitation;**SCBA** – Self-contained breathing apparatus;**OEL** – Occupational exposure limit;**DNEL** – Derived no effect level;**PNEC** – Predicted no effect concentration;**STOT** – Specific target organ toxicity;**CMR** – Carcinogenic, mutagenic and reprotoxic chemicals;**LD50** – Median lethal dose;**LC50** – Median lethal concentration;**PBT/ vPvB** – Persistent, bioaccumulative and toxic and very persistent and very bioaccumulative;**OECD** – Organisation for Economic Co-operation and Development;**ppm** – parts per million;**bw** – body weight;

Name of the product: **ETEX[®] Oil Additive for Diesel Engines of Heavy Trucks (>16t)**Internal code of the product: **E/007**Page **16** of **16****16.3. Key literature references and sources for data:**

Toxnet, Pubchem, ECHA, Gestis substance database.

The information provided in this safety data sheet is based on the data provided by the manufacturer and on our present-day knowledge of the product, which is considered to be correct. The information is intended to give you advice and guidance only on safe use, recycling, storage, transportation and disposal. The information cannot be transferred to other products. In case of mixing the product with other products or in case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

The above information is considered to be correct, but does not mean that it is complete.