SAFETY DATA SHEET

According to Regulation (US HCS) 29 CFR 1910.1200

ZF Lifeguard eFluid 3

Version number: 1

Issued: 2026-11-10

SECTION 1: Identification

Product identifier

Trade name

ZF Lifeguard eFluid 3

Article No.

AA02.927.146

Recommended use of the chemical and restrictions on use

Product type

Mixture.

Use

Transmission fluids

Not suitable for use in

No uses advised against identified

Supplier's details

SDS created by

Global Division B Product Compliance Mgmt. System (BWC)

Supplier

ZF Services, LLC

Address
ZF Services Region North
America Headquarters
777 Hickory Hill Drive
Vernon Hills
60061 Illinois
USA

Telephone
+1 847 478 6868

Email
msds.zf-aftermarket@zf.com

Contact person

Global Division B Product Compliance Mgmt. System (BWC)

Email address

msds.zf-aftermarket@zf.com

Emergency phone number

1-800-222-1222 (general poison US emergency number) (+49) 89 19 240

Available outside office hours

Yes

SECTION 2: Hazard identification

Classification of the substance or mixture and any national or regional information

Classification according to Regulation (US HCS) 29 CFR 1910.1200

Classification

Reproductive toxicity, hazard category 2

Hazard statements

H361

Description

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200): The product has been classified as hazardous according to the legislation in force.

Label elements, including precautionary statements

Labeling according to Regulation (US HCS) 29 CFR 1910.1200

Hazard pictograms



Signal word

Warning

Hazard statements

H361 Suspected of damaging fertility or the unborn child.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in classification

Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

Mixture

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Specific concentration limits ATE	Note
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7 265-157-1 01-2119484627-25 649-467-00-8	≥60 - ≤80%	Asp. Tox. 1	H304 - -		ATE (oral): >5000 mg/kg; ATE (dermal): >5000 mg/kg; ATE (inhalation): 5 mg/kg
mineral oil	- - - -	≥3 - ≤7%	Asp. Tox. 1	H304 - -		□□□ (CSCL): (9)-1692; □□□ (ISHL): (9)-1692; □□: [JIS Z 7253]

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Specific concentration limits ATE	Note
Distillates (petroleum), hydrotreated light 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 C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.]	64742-55-8 265-158-7 01-2119487077-29 649-468-00-3	≥0.1 - ≤1%	Asp. Tox. 1	H304 - -		-
Bis(nonylphenyl)amine	36878-20-3 - - -	≥0.1 - ≤1%	Repr. 2	H361 - -		-
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7 265-157-1 01-2119484627-25 649-467-00-8	≥0.1 - ≤1%	-	- - -		ATE (oral): >5000 mg/kg; ATE (dermal): >5000 mg/kg; ATE (inhalation): 5 mg/kg

Product based on
Any concentration shown as a range is to protect confidentiality or is due to batch variation.
Note: Mineral oil of petroleum origin. Product containing mineral oil with less than 3% DMSO extract as measured by IP 346 The product is made from synthetic base oils
There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Substance additional information
For the complete text of H- / EUH-statements mentioned in this section, see section 16.

SECTION 4: First-aid measures

Description of necessary first-aid measures

Inhalation
Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact
Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Eye contact
Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Ingestion
Wash out mouth with water. Remove dentures if any. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects:
Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : Defatting to the skin. May cause skin dryness and irritation.
Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms:
Eye contact : No specific data.
Inhalation: reduced fetal weight; increase in fetal deaths; skeletal malformations.
Skin contact: irritation; redness; dryness; cracking; reduced fetal weight; increase in fetal deaths; skeletal malformations.
Ingestion: reduced fetal weight; increase in fetal deaths; skeletal malformations.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments : No specific treatment.
Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

SECTION 5: Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media

Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media

Do not use water jet.

Specific hazards arising from the chemical (e.g. nature of any hazardous combustion products).

In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products:
carbon monoxide, carbon dioxide, Silicon Dioxide, hydrogen fluoride, fluorophosgen, nitrogen oxides, phosphorus oxides.

Special protective actions for fire-fighters

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Other

Remark : Non-flammable.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. Provide adequate ventilation.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill: Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

Large spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Contaminated absorbent material may pose the same hazard as the spilled product. Dispose of via a licensed waste disposal contractor.

Reference to other sections

No data available

SECTION 7: Handling and storage

Precautions for safe handling

Preventive handling precautions

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

General hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

Control parameters

Exposure limits

See below OEL table.

Biological exposure indices: No exposure indices known.

Advisory OEL: Mineral oil mist: USA: OSHA (PEL) TWA 5 mg/m3, NIOSH (REL) TWA 5 mg/m3, STEL 10 mg/m3, ACGIH (TLV) TWA 5 mg/m3 (highly refined).

National occupational exposure limits

Ingredient	CAS No. EC No.	Exposure limit ppm / mg/m³	Source	Remark	Year
Distillates (petroleum), hydrotreated heavy paraffinic	- -	- / 5	NIOSH REL (United States, 10/2020) [OIL MIST MIN-ERAL]	TWA 10 hours: Form: Mist.	2020
Distillates (petroleum), hydrotreated heavy paraffinic	- -	- / 10	NIOSH REL (United States, 10/2020) [OIL MIST MIN-ERAL]	STEL 15 minutes: Form: Mist	2020
Distillates (petroleum), hydrotreated heavy paraffinic	- -	- / 5	OSHA PEL (United States, 5/2018) [Oil mist, mineral]	TWA 8 hours	2018
Distillates (petroleum), hydrotreated heavy paraffinic	- -	- / 5	ACGIH TLV (United States, 1/2025) [Mineral Oil, pure, highly and severely refined] A4	TWA 8 hours: Form: Inhalable fraction.	2025
Distillates (petroleum), hydrotreated heavy paraffinic	- -	- / 5	NIOSH REL (United States, 10/2020) [OIL MIST MIN-ERAL]	TWA 10 hours: Form: Mist.	2020
Distillates (petroleum), hydrotreated heavy paraffinic	- -	- / 10	NIOSH REL (United States, 10/2020) [OIL MIST MIN-ERAL]	STEL 15 minutes: Form: Mist	2020
Distillates (petroleum), hydrotreated heavy paraffinic	- -	- / 5	OSHA PEL (United States, 5/2018) [Oil mist, mineral]	TWA 8 hours	2018

Ingredient	CAS No. EC No.	Exposure limit ppm / mg/m³	Source	Remark	Year
Distillates (petroleum), hydrotreated heavy paraffinic	- -	- / 5	ACGIH TLV (United States, 1/2025) [Mineral Oil, pure, highly and severely refined] A4.	TWA 8 hours: Form: Inhalable fraction	2025
Distillates (petroleum), hydrotreated light paraffinic	- -	- / 5	NIOSH REL (United States, 10/2020) [OIL MIST MINERAL]	TWA 10 hours: Form: Mist.	2020
Distillates (petroleum), hydrotreated light paraffinic	- -	- / 10	NIOSH REL (United States, 10/2020) [OIL MIST MINERAL]	STEL 15 minutes: Form: Mist.	2020
Distillates (petroleum), hydrotreated light paraffinic	- -	- / 5	OSHA PEL (United States, 5/2018) [Oil mist, mineral]	TWA 8 hours	2018
Distillates (petroleum), hydrotreated light paraffinic	- -	- / 5	ACGIH TLV (United States, 1/2025) [Mineral Oil, pure, highly and severely refined] A4.	TWA 8 hours: Form: Inhalable fraction.	2025

Appropriate engineering controls

Appropriate engineering controls

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment Symbols



Eye / face protection

safety glasses with side-shields.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Hydrocarbon-proof gloves. Fluorinated rubber. nitrile rubber Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. In case of prolonged contact with the product, it is recommended to wear gloves complying with ISO 21420 and EN 374 standards, protecting at least for 480 minutes and having a thickness of 0,38 mm at least. These values are indicative only. The level of protection is provided by the material of the glove, its technical characteristics, its resistance to the chemicals to be handled, the appropriateness of its use and its replacement frequency.

Other skin protection

Wear work clothing with long sleeves.
Protective shoes or boots.

Respiratory protection

Ensure adequate ventilation and check that a safe, breathable atmosphere is present before entry into confined spaces. In case of insufficient ventilation, wear suitable respiratory equipment. The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses.

Environmental exposure controls

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

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state
Liquid. [limpid]

Colour
Yellow.

Odour
Characteristic.

Melting point / freezing point
Technically not possible to measure

Boiling point or initial boiling point and boiling range
>316°C (>600.8°F)
Method
ISO 3405

Flammability
Non-flammable. [solid, gas]

Lower and upper explosion limit
Lower: 0.9%;
Upper: 7%

Flash point
Open cup: 200°C (392°F)
Method
Cleveland Open Cup (COC)

Auto-ignition temperature
>200°C (>392°F)
Method
ASTM E 659

Decomposition temperature
Not applicable.

pH
Product is non-soluble (in water).
Not applicable.

Kinematic viscosity
23 mm2/s (23 cSt) [40°C (104°F)]

Solubility
No data available

Water solubility
Not soluble

Partition coefficient n-octanol/water
Not applicable.

Vapour pressure
<0.01 kPa (<0.075 mm Hg) [room temperature];
Not applicable. [50°C]

Density and/or relative density
0.839 g/cm³ [15°C]
Method
ISO 12185

Relative density
0.839
Method
ISO 12185

Relative vapour density
No data available

Particle characteristics
Not applicable.

Other information
Vapor density: >2 [Air = 1]

SECTION 10: Stability and reactivity

Reactivity
No specific test data related to reactivity available for this product or its ingredients.

Chemical stability
Stable under recommended storage and handling conditions (see Section 7).

Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

No specific data.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

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

SECTION 11. Toxicological information

Information on the likely routes of exposure

Acute toxicity

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

ATEmix[oral]: 213675.2 mg/kg

Product / Substance name CAS / EC no.	Dose descriptor	Value / Dose	Exposure route	Duration of exposure	Test animals	Method / Guideline	Remarks
Distillates (petroleum), hydrotreated heavy paraffinic -	LD50	>5000 mg/kg	oral	-	Rat [Male, Female]	OECD [401 Read across]	-
Distillates (petroleum), hydrotreated heavy paraffinic -	LD50	>5000 mg/kg	dermal	-	Rabbit - Male, Female	OECD [402 Read across]	-

Product / Substance name CAS / EC no.	Dose descriptor	Value / Dose	Exposure route	Duration of exposure	Test animals	Method / Guideline	Remarks
Distillates (petroleum), hydrotreated heavy paraffinic -	LC50	>5 mg/l	Inhalation	4 hr [Dusts and mists]	Rat - Male, Female	OECD [403 Read across]	-
Reaction products of diphenylamine with nonene, branched -	LD50	>5000 mg/kg	oral	-	Rat - Male, Female	OECD [Equivalent or similar to guideline OECD 401]	Toxic effects: No mortality was observed at a single dose of 5000 mg/kg bw.
Distillates (petroleum), hydrotreated heavy paraffinic -	LD50	>5000 mg/kg	oral	-	rat	OECD [420]	-
Distillates (petroleum), hydrotreated light paraffinic -	LD50	>5000 mg/kg	dermal	-	rabbit	OECD [402]	-
Distillates (petroleum), hydrotreated heavy paraffinic -	LD50	>5000 mg/kg	dermal	-	rabbit	OECD [402 Read across]	-
Distillates (petroleum), hydrotreated heavy paraffinic -	LC50	>5 mg/l	Inhalation	4 hr [Dusts and mists]	Rat	OECD [403 Read across]	-

Product / Substance name CAS / EC no.	Dose descriptor	Value / Dose	Exposure route	Duration of exposure	Test animals	Method / Guideline	Remarks
Distillates (petroleum), hydrotreated heavy par-affinic -	LD50	>5000 mg/kg	oral	-	Rat	OECD [401 Read across]	-
Distillates (petroleum), hydrotreated light paraffinic -	LC50	>5 mg/l	inhalation	4 hr [Dusts and mists]	rat	OECD [403]	-

Skin corrosion/irritation
Based on available data, the classification criteria are not met.

Serious eye damage/irritation
Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation
Based on available data, the classification criteria are not met.
Contains sensitizer. May produce an allergic reaction.

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

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

Reproductive toxicity
Based on available data, the classification criteria are met.

STOT-single exposure
Based on available data, the classification criteria are not met.

STOT-repeated exposure
Based on available data, the classification criteria are not met.

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

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation: reduced fetal weight, increase in fetal deaths, skeletal malformations.
Skin contact: irritation, redness, dryness, cracking, reduced fetal weight, increase in fetal deaths, skeletal malformations.
Ingestion: reduced fetal weight, increase in fetal deaths, skeletal malformations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Potential chronic health effects:
Reaction products of diphenylamine with nonene, branched: Sub-chronic - Rat - Male, Female - Oral - LOAEL
OECD [According to guideline OECD 408]: 100 mg/kg

Toxicity in case of inhalation

No known significant effects or critical hazards.

Toxicity in case of skin contact

Defatting to the skin. May cause skin dryness and irritation.

Toxicity in case of eye contact

No known significant effects or critical hazards.

Mixtures

General : No known significant effects or critical hazards.
Carcinogenicity: During use in engines, contamination of oil with low levels of combustion products occurs. Used motor oils have been shown to cause skin cancer in mice following repeated application and continuous exposure. Brief or intermittent skin contact with used motor oil is not expected to have serious effects in humans if the oil is thoroughly removed by washing with soap and water.
Mutagenicity : No known significant effects or critical hazards.
Reproductive toxicity : Suspected of damaging fertility or the unborn child.

Toxicity in case of ingestion

No known significant effects or critical hazards.

Information on other hazards

No data available

SECTION 12: Ecological information

Toxicity

Acute toxicity

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

Acute fish toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species
mineral oil -	LC50	>100 mg/l	96 hr	Pimephales promelas

Acute algae toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Method / Guideline	Remark
Distillates (petroleum), hydrotreated heavy paraffinic -	LL50	>100 mg/l	72 hr	Pseudokirchneriella subcapitata	OECD [201]	Effect: (growth rate)
Distillates (petroleum), hydrotreated light paraffinic -	EC50	>100 mg/l	48 hr	Pseudokirchneriella subcapitata	OECD [201]	-
mineral oil -	EC50	>100 mg/l	72 hr	Scenedesmus quadricauda	-	-
Distillates (petroleum), hydrotreated heavy paraffinic -	EC50	>100 mg/l	72 hr	Pseudokirchneriella subcapitata	OECD [201]	Effect: (growth rate)

Acute crustacean toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Method / Guideline	Remark
Distillates (petroleum), hydrotreated heavy paraffinic -	EC50	>10000 mg/l	48 hr	Daphnia magna	OECD [202]	Effect: Mobility
mineral oil -	EC50	>10000 mg/l [	48 hr	Daphnia	-	-
Distillates (petroleum), hydrotreated heavy paraffinic -	LL50	>10000 mg/l	48 hr	Daphnia magna	OECD [202]	Effect: Mobility
Distillates (petroleum), hydrotreated light paraffinic -	EC50	>10000 mg/l	48 hr	Daphnia magna	OECD [202]	-

Chronic toxicity

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

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Method / Guideline	Remark
Distillates (petroleum), hydrotreated heavy paraffinic -	NOEL	10 mg/l	21 d	Daphnia magna	-	Effect: Reproduction
Distillates (petroleum), hydrotreated heavy paraffinic -	NOEL	>100 mg/l	72 hr	Pseudokirchneriella subcapitata	OECD [201]	Effect: (growth rate)
Distillates (petroleum), hydrotreated light paraffinic -	NOEL	>1000 mg/l	21 d	Oncorhynchus mykiss	-	-

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Method / Guideline	Remark
Distillates (petroleum), hydrotreated light paraffinic -	NOEL	10 mg/l	21 d	Daphnia magna	OECD [211]	-
Distillates (petroleum), hydrotreated heavy paraffinic -	NOEL	>1000 mg/l	21 d	Daphnia magna	-	Effect: Reproduction
Distillates (petroleum), hydrotreated heavy paraffinic -	NOEL	>100 mg/l	72 hr	Pseudokirchneriella subcapitata	OECD [201]	Effect: (growth rate)
mineral oil -	NOEC	>10 mg/l	21 d	Daphnia	-	-
Distillates (petroleum), hydrotreated heavy paraffinic -	NOEL	>1000 mg/l	21 d	Oncorhynchus mykiss	-	Effect: Mortality

Persistence and degradability

Product / Substance name CAS / EC no.	Duration	Result	Degradation	Method / Guideline
Distillates (petroleum), hydrotreated heavy paraffinic -	28 d	Not readily	31 %	OECD 301F
Distillates (petroleum), hydrotreated heavy paraffinic -	28 d	Not readily	31 %	OECD 301F

Product / Substance name CAS / EC no.	Duration	Result	Degradation	Method / Guideline
Distillates (petroleum), hydrotreated heavy paraffinic -	-	Not readily	-	-
mineral oil -	-	Not readily	-	-
Reaction products of diphenylamine with nonene, branched -	-	Not readily	-	-
Distillates (petroleum), hydrotreated heavy paraffinic -	-	Not readily	-	-

Bioaccumulative potential

Product / Substance name CAS / EC no.	LogKow / LogPow	Bioconcentration factor (BCF)	Result
Distillates (petroleum), hydrotreated heavy paraffinic -	LogKow: >4	-	Potential: HIgh
Reaction products of diphenylamine with nonene, branched -	-	1010	Potential: High

Mobility in soil

Mobility

Soil/water partition coefficient (KOC) : Not available.

Mobility in soil: Given its physical and chemical characteristics, the product generally shows low soil mobility The product is insoluble and floats on water. Loss by evaporation is limited.

Results of PBT and vPvB assessment

No data available

Endocrine disrupting properties

No data available

Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

Disposal methods

Disposal considerations

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

UN number

Not regulated.

UN proper shipping name

ADR / RID / ADN proper shipping name

Not regulated.

IMDG proper shipping name

Not regulated.

IATA proper shipping name

Not regulated.

Transport hazard class(es)

Label

Not regulated.

ADR / RID Class

Not regulated.

IMDG Class
Not regulated.

IATA Class
Not regulated.

ADN Class
Not regulated.

Packing group
Not regulated.

Environmental hazards
No

IMDG Marine Pollutant
No

Special precautions for user
Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments
Not available.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

National regulations

TSCA 4(a) proposed test rules: dibutyl phosphonate.
TSCA 8(a) PAIR: 2,4,6-trimethyl-2,4,6-tris(3,3,3-trifluoropropyl)cyclotrisiloxane
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
TSCA 12(b) - Chemical export notification: Not Applicable.
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed.
Clean Air Act Section 602 Class I Substances : Not listed.
Clean Air Act Section 602 Class II Substances : Not listed
DEA List I Chemicals (Precursor Chemicals) : Not listed
DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304:
Composition/information on ingredients: No products were found.
SARA 304 RQ : Not applicable.
SARA 311/312:
Classification : TOXIC TO REPRODUCTION - Category 2
Composition/information on ingredients:
Distillates (petroleum), hydrotreated heavy paraffinic: ≥60 - ≤80; ASPIRATION HAZARD - Category 1
mineral oil: ≥3 - ≤7%; ASPIRATION HAZARD - Category 1
Reaction products of diphenylamine with nonene, branched: ≥0.1 - ≤1%; TOXIC TO REPRODUCTION - Category 2

State regulations:
Massachusetts: The following components are listed: OIL MIST, MINERAL
New York : None of the components are listed.
New Jersey : None of the components are listed.
Pennsylvania : None of the components are listed.
California Prop. 65: To the best of our knowledge, this product does not contain any substances known to the State of California to cause cancer, developmental and/or reproductive harm.

Other regulations, limitations and legal regulations

International regulations:
Chemical Weapon Convention List Schedules I, II & III Chemicals: Not listed
Montreal Protocol: Not listed
Stockholm Convention on Persistent Organic Pollutants: Not listed.
Rotterdam Convention on Prior Informed Consent (PIC): Not listed.
UNECE Aarhus Protocol on POPs and Heavy Metals: Not listed

Inventory list:
Australia inventory (AIIC) : All components are listed or exempted.
Canada inventory (DSL/NDSL) : At least one component is not listed in DSL but all such components are listed in NDSL.
Chile inventory : Not determined.
China inventory (IECSC) : All components are listed, exempted, or notified.
Colombia inventory (INSQUI) : Not determined.
Europe inventory (EC): All components are listed or exempted.
Japan inventory : Japan inventory (CSCL): All components are listed, exempted, or notified. Japan inventory (ISHL): All components are listed, exempted, or notified.
New Zealand Inventory of Chemicals (NZIoC) : All components are listed or exempted.
Philippines inventory (PICCS) : At least one component is not listed.
Korea inventory (KECI) : All components are listed or exempted.
Taiwan Chemical Substances Inventory (TCSI) : All components are listed, exempted, or notified.
Thailand inventory : Not determined.
Turkey inventory : Not determined.
United States inventory (TSCA 8b) : All components are listed or exempted.
Vietnam inventory : Not determined.

The information stated in this section relates solely to the conformity of the chemical product with the countries Inventories. The information used to confirm the inventory status of this product may be based on additional data to the chemical composition shown in Section 3. Other regulations may apply for importation or marketing authorizations.

Chemical safety assessment

No data available

SECTION 16: Other information

Phrase meaning

Repr. 2 - Reproductive toxicity, hazard category 2
Asp. Tox. 1 - Aspiration hazard, hazard category 1
H304 May be fatal if swallowed and enters airways.
H361 Suspected of damaging fertility or the unborn child.

Other

Additional information

Hazardous Material Information System (U.S.A.):
Health: 1
Flammability: 1
Physical hazards: 0
Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc. The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.):
Health: 1
Flammability: 1
Instability/Reactivity: 0
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Disclaimer: To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.
This Safety Data Sheet has been updated to reflect the requirements of OSHA's Hazard Communication Standard (HCS) 2024.