SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878

TRAXIUM AXLE 9 FE 75W-140

SDS # : 090676

previous revision date : 2022/07/22

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

1.1 Product identifier

Product name : TRAXIUM AXLE 9 FE 75W-140

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

Identified uses
Transmission fluids

1.3 Details of the supplier of the safety data sheet

TotalEnergies Lubrifiants
562 Avenue du Parc de L'ile
92029 Nanterre Cedex FRANCE
Tél: +33 (0)1 41 35 40 00
Fax: +33 (0)1 41 35 84 71
rm.msds-lubs@totalenergies.com

TotalEnergies Marketing Finland Oy
Teknobulevardi 3-5A
FI - 01530 Vantaa
Finland
Puh : (+358) 931 582 418
sm.nordic-reach@totalenergies.com

Contact

H.S.E

1.4 Emergency telephone number

National advisory body/Poison Center

Telephone number : Poison Information Center: +358 9 471 977

Supplier

Telephone number : Emergency phone: +44 1235 239670

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Supplemental label elements : Contains Amines, C10-14-tert-alkyl. May produce an allergic reaction. Safety data sheet available on request.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB in a concentration >= 0,1 %. This product does not contain any substance present at a concentration equal to or greater than 0.1% by mass, included in the list drawn up in accordance with article 59, paragraph 1 of the REACh Regulation, due to its endocrine disrupting properties, or a substance known to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation 2018/605.

Other hazards which do not result in classification : Hazard of slipping on spilled product.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/substance	Identifiers	% (w/w)	Classification	Specific Conc. Limits, M-factors and ATEs	Type
Dec-1-ene, dimers, hydrogenated	REACH #: 01-2119537268-33 EC: 500-228-5 CAS: 68649-11-6	≥10 - ≤25	Acute Tox. 4, H332 Asp. Tox. 1, H304	ATE [Inhalation (dusts and mists)] = 1.5 mg/l	[1] [2]
Amines, C10-14-tert-alkyl	REACH #: 01-2119456798-18 EC: 701-175-2	≤0.3	Acute Tox. 4, H302 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 612 mg/kg ATE [Dermal] = 251 mg/kg ATE [Inhalation (vapours)] = 1.19 mg/l M [Acute] = 1 M [Chronic] = 1	[1]
C16-18-(even numbered, saturated and unsaturated)-alkylamines	REACH #: 01-2119473797-19 EC: 627-034-4 CAS: 1213789-63-9	≤0.3	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1,	ATE [Oral] = 1689 mg/kg M [Acute] = 10 M [Chronic] = 10	[1]

			H410 **See Section 16 for the full text of the H statements declared above.**		

Additional information : 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, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
dryness
cracking

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion products : carbon monoxide
carbon dioxide
nitrogen oxides
phosphorus oxides
sulfur oxides
Hydrogen sulfide
Mercaptans

5.3 Advice for firefighters

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.

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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 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.

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 non-emergency personnel".

6.2 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).

6.3 Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. 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. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational 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.

7.2 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. 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. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/substance	Exposure limit values
Dec-1-ene, dimers, hydrogenated	**Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021). [oil mist]** TWA: 5 mg/m³ 8 hours. Form: Mist

Reportable hazardous constituent(s) contained in UVCB and/or multi-constituent substance(s) complying with the classification criteria and/or with an exposure limit (OEL)

No exposure limit value known.

Biological Limit Values (BLV)

No exposure indices known.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

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)

DNELs/DMELs

Product/substance	Type	Exposure	Value	Population	Effects
Amines, C10-14-tert-alkyl	DNEL	Long term Inhalation	12.5 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	2.5 mg/m³	General population	Systemic
	DNEL	Long term Oral	0.35 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	1.2 mg/m³	General population	Local
	DNEL	Long term Inhalation	12.1 mg/m³	Workers	Local
C16-18-(even numbered, saturated and unsaturated)-alkylamines	DNEL	Long term Inhalation	0.035 mg/m³	General population	Systemic
	DNEL	Short term Inhalation	1 mg/m³	Workers	Local
	DNEL	Long term Inhalation	1 mg/m³	Workers	Local
	DNEL	Long term Oral	40 µg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.38 mg/m³	Workers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Name	Method Detail
Amines, C10-14-tert-alkyl	Fresh water	0.001 mg/l	-
	Marine water	0.0001 mg/l	-
	Fresh water sediment	2.14 mg/kg dwt	-
	Marine water sediment	0.214 mg/kg dwt	-
	Soil	0.428 mg/kg dwt	-
	Sewage Treatment Plant	0.635 mg/l	-
C16-18-(even numbered, saturated and unsaturated)-alkylamines	Marine water	0.000026 mg/l	-
	Fresh water sediment	3.76 mg/kg dwt	-
	Marine water sediment	0.376 mg/kg dwt	-
	Soil	10 mg/kg	-
	Sewage Treatment Plant	0.55 mg/l	-

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

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.

Eye/face protection : In case of contact through splashing: safety glasses with side-shields, EN 166.

Skin protection

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.

Hydrocarbon-proof gloves
nitrile rubber
Fluorinated 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

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Non-skid safety shoes or boots

Respiratory protection : None under normal use conditions. If these are not sufficient to maintain exposure below the OEL, suitable respiratory protection must be worn (Type A/P1).

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

The conditions of measurement of all properties are at standard temperature (20°C / 68°F) and pressure (1013 hPa) unless otherwise indicated

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. [limpid]

Color : Yellow.

Odor : Characteristic.

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

Melting point/freezing point : Technically not possible to measure

Initial boiling point and boiling range : >300°C

Flash point : Open cup: 180°C [Cleveland Open Cup (COC)]

Flammability : Not applicable.

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

Vapor pressure : <0.013 kPa [room temperature]
Not applicable. [50°C]

Vapor density : >2 [Air = 1]

Relative density : 0.88

Density : 0.88 g/cm³ [15°C] [ISO 3675]

Solubility(ies) :

Media	Result
water	Not soluble

Solubility in water : 0.89 g/l

Miscible with water	:	No.
Partition coefficient: n-octanol/ water	:	Not applicable.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not applicable.
Viscosity	:	Kinematic (40°C): 180 mm^2/s [ISO 3104]
Particle characteristics		
Median particle size	:	Not applicable.

9.2 Other information

Pour point	:	-54°C (-65.2°F)

SECTION 10: Stability and reactivity

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

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

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

10.4 Conditions to avoid : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5 Incompatible materials : Strong oxidizing agents

10.6 Hazardous decomposition products : carbon monoxide
carbon dioxide
nitrogen oxides
phosphorus oxides
sulfur oxides
Hydrogen sulfide
Mercaptans

SECTION 11: Toxicological information

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

Acute toxicity

Product/substance	Result	Species	Dose	Exposure	Test
Dec-1-ene, dimers, hydrogenated	LD50 Dermal	Rat	>2000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 423 Acute Oral toxicity - Acute Toxic Class Method
Amines, C10-14-tert-alkyl	LC50 Inhalation Vapor	Rat	1.19 mg/l	4 hours	OECD 403
	LC50 Inhalation Vapor	Rat	157 to 231 ppm	4 hours	-
	LD50 Dermal	Rabbit	251 mg/kg	-	OECD 402
	LD50 Oral	Rat	612 mg/kg	-	OECD 401
C16-18-(even numbered,	LC50 Inhalation Dusts	Rat - Male	>0.099 mg/l	1 hours	OECD

saturated and unsaturated)-alkylamines	and mists				
	LD50 Dermal	Rabbit - Male, Female	>2000 mg/kg	-	OECD 402
	LD50 Oral	Rat - Male, Female	1689 mg/kg	-	OECD 401

Acute toxicity estimates

Product/substance	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
TRAXIUM AXLE 9 FE 75W-140	N/A	N/A	N/A	N/A	8.3
Dec-1-ene, dimers, hydrogenated	N/A	N/A	N/A	N/A	1.5
Amines, C10-14-tert-alkyl	612	251	N/A	1.19	N/A
C16-18-(even numbered, saturated and unsaturated)-alkylamines	1689	N/A	N/A	N/A	N/A

Conclusion/Summary : Based on available data, the classification criteria are not met.

Irritation/Corrosion

Product/substance	Result	Species	Score	Exposure	Test
C16-18-(even numbered, saturated and unsaturated)-alkylamines	Eyes - Severe irritant	Rabbit	-	-	OECD 405
	Skin - Visible necrosis	Rabbit	-	-	OECD 404

Conclusion/Summary

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

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

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

Sensitization

Product/substance	Route of exposure	Species	Result
Amines, C10-14-tert-alkyl	skin	Guinea pig	Sensitizing
C16-18-(even numbered, saturated and unsaturated)-alkylamines	skin	Guinea pig	Not sensitizing

Conclusion/Summary

Skin : Based on available data, the classification criteria are not met. The supplier of one or more of the components contained within this formulation has indicated that he has data on the components and/or similar mixtures, which confirms that at the concentration used, classification is not required Contains Sensitizer. May produce an allergic reaction.

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

Mutagenicity

Product/substance	Test	Experiment	Result
C16-18-(even numbered, saturated and unsaturated)-alkylamines	OECD 471	Experiment: In vitro Subject: Bacteria	Negative

Conclusion/Summary : Based on available data, the classification criteria are not met.

Carcinogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Reproductive toxicity

Product/substance	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
C16-18-(even numbered, saturated and unsaturated)-alkylamines	Negative	Negative	Negative	Rat - Male, Female	Oral	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Teratogenicity

Product/substance	Result	Species	Dose	Exposure
C16-18-(even numbered, saturated and unsaturated)-alkylamines	Negative - Oral	Rabbit - Male, Female	>30 mg/kg NOAEL	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Product/substance	Category	Route of exposure	Target organs
C16-18-(even numbered, saturated and unsaturated)-alkylamines	Category 3	-	Respiratory tract irritation

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure)

Product/substance	Category	Route of exposure	Target organs
C16-18-(even numbered, saturated and unsaturated)-alkylamines	Category 2	-	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Aspiration hazard

Product/substance	Result
Dec-1-ene, dimers, hydrogenated C16-18-(even numbered, saturated and unsaturated)-alkylamines	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Conclusion/Summary : Based on available data, the classification criteria are not met.

Information on the likely routes of exposure : Not available.

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.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
dryness
cracking

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Product/substance	Result	Species	Dose	Exposure
C16-18-(even numbered, saturated and unsaturated)-alkylamines	Sub-acute LOAEL Dermal	Rat - Male, Female	12.5 mg/kg	-
	Sub-acute NOAEL Oral	Rat - Male, Female	3.25 mg/kg	-

Conclusion/Summary : Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

This product does not contain any substance present at a concentration equal to or greater than 0.1% by mass, included in the list drawn up in accordance with article 59, paragraph 1 of the REACh Regulation, due to its endocrine disrupting properties, or a substance known to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation 2018/605.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

The supplier of one or more of the components contained within this formulation has indicated that he has data on the components and/or similar mixtures, which confirms that at the concentration used, chronic aquatic toxicity classification is not required

12.1 Toxicity

Product/substance	Result	Species	Exposure	Test
Dec-1-ene, dimers, hydrogenated	Acute EL50 >1000 mg/l	Algae - *Scenedesmus capricornutum*	72 hours	OECD 201
	Acute EL50 1000 mg/l	Daphnia	48 hours	OECD 202
	Acute LL50 >1000 mg/l	Fish - *Oncorhynchus mykiss*	96 hours	OECD 203
	Chronic NOELR 125 mg/l Fresh water	Daphnia	21 days	OECD 211
Amines, C10-14-tert-alkyl	Acute EC50 0.44 mg/l Fresh water	Algae - *Selenastrum capricornutum*	72 hours	OECD 201
	Acute EC50 0.24 mg/l	Daphnia - *Daphnia magna*	48 hours	-
	Acute EC50 63.5 mg/l	Micro-organism	30 minutes	-
	Acute LC50 1.3 mg/l	Fish	96 hours	-
	Acute NOEC 0.05 mg/l	Algae - *Selenastrum*	72 hours	OECD 201

	Fresh water Chronic NOEC 0.078 mg/l	*capricornutum* Fish - *Oncorhynchus mykiss*	 96 days	 OECD 210
C16-18-(even numbered, saturated and unsaturated)-alkylamines	Acute EL50 0.04 mg/l	Algae - *Selenastrum capricornutum*	72 hours	-
	Acute EL50 0.011 mg/l	Daphnia - *Daphnia magna*	48 hours	-
	Acute EL50 222.5 mg/l	Micro-organism	3 hours	-
	Acute LL50 0.06 mg/l	Fish - *Pimephales promelas*	96 hours	-
	Chronic NOEL 0.013 mg/l	Daphnia - *Daphnia magna*	21 days	-

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Product/substance	Test	Result	Dose	Inoculum
C16-18-(even numbered, saturated and unsaturated)-alkylamines	OECD 301B Ready Biodegradability - CO_2 Evolution Test	66 % - Readily - 20 days	-	-

Conclusion/Summary : Not available.

Product/substance	Aquatic half-life	Photolysis	Biodegradability
Dec-1-ene, dimers, hydrogenated	-	-	Inherent
Amines, C10-14-tert-alkyl	-	-	Not readily
C16-18-(even numbered, saturated and unsaturated)-alkylamines	-	-	Readily

12.3 Bioaccumulative potential

Product/substance	$LogK_{ow}$	BCF	Potential
Dec-1-ene, dimers, hydrogenated	>6.5	-	High
Amines, C10-14-tert-alkyl	2.9	-	Low

12.4 Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Mobility : 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

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB in a concentration >= 0,1 %.

12.6 Endocrine disrupting properties

This product does not contain any substance present at a concentration equal to or greater than 0.1% by mass, included in the list drawn up in accordance with article 59, paragraph 1 of the REACh Regulation, due to its endocrine disrupting properties, or a substance known to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation 2018/605.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : 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.

Hazardous waste : Yes.

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific Waste codes should be assigned by the user based on the application for which the product was used. The following Waste Codes are only suggestions: 13 02 06*

Packaging

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. 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

	ADR/RID	ADN	IMDG	ICAO/IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

14.6 Special precautions for user : **Transport within user's premises:** 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.

14.7 Maritime transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Industrial emissions (integrated pollution prevention and control) - Air	:	Not listed
Industrial emissions (integrated pollution prevention and control) - Water	:	Not listed
Explosive precursors	:	Not applicable.

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

NACE	:	Not available.
UC62	:	Not available.

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.

LU - Luxembourg prohibited chemicals in the workplace

Not listed.

Inventory list

Australia inventory (AIIC)	: All components are listed or exempted.
Canada inventory (DSL/NDSL)	: All components are listed or exempted.
China inventory (IECSC)	: All components are listed or exempted.
Europe inventory (EC)	: All components are listed or exempted.
Japan inventory	: **Japan inventory (CSCL)**: All components are listed or exempted. **Japan inventory (ISHL)**: Not determined.
New Zealand Inventory of Chemicals (NZIoC)	: All components are listed or exempted.
Philippines inventory (PICCS)	: All components are listed or exempted.
Korea inventory (KECI)	: All components are listed or exempted.
Taiwan Chemical Substances Inventory (TCSI)	: All components are listed or exempted.
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.

15.2 Chemical Safety Assessment : Risk management measures and safety conditions of use are included in the relevant sections of the SDS

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ACGIH = American Conference of Governmental Industrial Hygienists
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
DMEL = Derived Minimal Effect Level
DMSO = Dimethyl Sulfoxide
EL50 = median Effective Loading
EUH statement = CLP-specific Hazard statement
HSE = Health, Safety and Environment
IC50 = Half maximal inhibitory concentration
IDHL = Immediately dangerous to life or health
LC50 = Median lethal concentration
LD50 = Median lethal dose
LL50 = median Lethal Loading
LogPow = logarithm of the octanol/water partition coefficient
N/A = Not available

NIOSH = National Institute of Occupational Safety and Health
NOAEL = No Observed Adverse Effect Level
NOEC No Observed Effect Concentration
NOEL = No Observed Effect Level
NOELR = No observed Effect Loading Rate
OECD = Organisation for Economic Co-operation and Development
OEL = Occupational Exposure Limit
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
QSAR = Quantitative Structure–Activity Relationship
REL = Recommanded Exposure Limit
STEL = Short Term Exposure Limit
TLV = Threshold Limit Value
TWA = Time Weight Average
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative
Unique Formula Identifier (UFI)
UVCB Substance of unknown or Variable composition, Complex reaction products or Biological material

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Not classified.	

Full text of abbreviated H statements

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Acute Tox. 2	ACUTE TOXICITY - Category 2
Acute Tox. 3	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	AQUATIC HAZARD (ACUTE) - Category 1
Aquatic Chronic 1	AQUATIC HAZARD (LONG-TERM) - Category 1
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
Skin Sens. 1A	SKIN SENSITIZATION - Category 1A
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3

Date of revision : 2023/12/08
previous revision date : 2022/07/22
Version : 3

Notice to reader

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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.