

Section 1. Identification

CAS number : Not applicable.
UN number : Not regulated.
EC number : Mixture.
GHS product identifier : ALTIS SH 2

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

Identified uses

Use of lubricants and greases in open systems - Professional
Formulation additives, lubricants and greases - Industrial
General use of lubricants and greases in vehicles or machinery - Industrial
General use of lubricants and greases in vehicles or machinery - Professional
Use of lubricants and greases in open systems - Industrial
Lubricating grease

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Section 2. Hazard identification

Classification of the substance or mixture : Not classified.

GHS 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.

Additional information : The product is made from synthetic base oils

**Section 3. Composition/information on ingredients**

Substance/mixture : Mixture
Other means of identification : Not available.

Ingredient name	CAS number	% (w/w)
A mixture of: 3,3'-dicyclohexyl-1,1'-methylenebis(4,1-phenylene)diurea; 3-cyclohexyl-1-(4-(4-(3-octadecylureido)benzyl)phenyl)urea; 3,3'- dioctadecyl-1,1'-methylenebis(4,1-phenylene)diurea 4,4'-methylene bis(dibutyldithiocarbamate)	- 10254-57-6	≤10 ≤3
O,O,O-tris(2(or 4)-C9-10-isoalkylphenyl) phosphorothioate	126019-82-7	≤2.2
4-nonylphenol, branched	84852-15-3	≤0.022

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.

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

Section 4. First aid measures**Description of necessary 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

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** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

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

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.



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

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : No specific fire or explosion hazard.

Hazardous thermal decomposition products : carbon oxides (CO, CO₂)
phosphorus oxides
Hydrogen sulfide
sulfur oxides
Mercaptans
nitrogen oxides

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.

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.

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".

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 : Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill : Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.



Section 7. Handling and storage

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.

- 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- 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.
- Advisory OEL** : No known significant effects or critical hazards.

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** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: 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
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.



- 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.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Respirator with combination filter for vapor/particulate Type A/P1 Warning ! filters have a limited use duration The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses None under normal use conditions

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

Appearance

- Physical state** : Solid.
- Color** : light yellow
- Odor** : Characteristic.
- Odor threshold** : Not available.
- pH** : Not applicable.
- Melting point/freezing point** : Not applicable.
- Boiling point** : Not available.
- Flash point** : Open cup: Not applicable.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not applicable.
- Vapor pressure** : Not available.
- Vapor density** : Not applicable.
- Relative density** : 0.9
- Density** : 0.9 g/cm³ [20°C]
- Solubility** : Insoluble in the following materials: cold water and hot water.
- Miscible with water** : No.
- Solubility in water** : Not available.
- Partition coefficient: n-octanol/water** : Not applicable.
- Auto-ignition temperature** : Not applicable.
- Decomposition temperature** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): Not applicable.
- Flow time (ISO 2431)** : Not available.
- Particle characteristics**
- Median particle size** : Not available.

**Section 10. Stability and reactivity**

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Incompatible materials	: Strong oxidizing agents
Hazardous decomposition products	: carbon oxides (CO, CO ₂) phosphorus oxides Hydrogen sulfide sulfur oxides Mercaptans nitrogen oxides

Section 11. Toxicological information**Information on toxicological effects****Acute toxicity**

Product/substance	Result	Species	Dose	Exposure	Test
A mixture of: 3,3'-dicyclohexyl-1,1'-methylenebis(4,1-phenylene) diurea; 3-cyclohexyl-1-(4-(4-(3-octadecylureido)benzyl)phenyl)urea; 3,3'-dioctadecyl-1,1'-methylenebis(4,1-phenylene) diurea	LC50 Inhalation Dusts and mists	Rat	5.1 mg/l	4 hours	-
	LC50 Inhalation Vapor	Rat	80.4 mg/l	1 hours	-
4,4'-methylene bis (dibutylthiocarbamate)	LC50 Inhalation Vapor	Rat	20.1 mg/l	4 hours	-
	LD50 Dermal	Rabbit	2000 mg/kg	-	-
O,O,O-tris(2(or 4)-C9-10-isoalkylphenyl) phosphorothioate	LD50 Oral	Rat	16000 mg/kg	-	-
	LC50 Inhalation Dusts and mists	Rat	5.1 mg/l	4 hours	-
4-nonylphenol, branched	LC50 Inhalation Vapor	Rat	80.4 mg/l	1 hours	-
	LC50 Inhalation Vapor	Rat	20.1 mg/l	4 hours	-
	LD50 Dermal	Rat	>2000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>2000 mg/kg	-	OECD 401
	LD50 Oral	Rat	1300 mg/kg	-	-

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

Irritation/Corrosion

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

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

Mutagenicity

- 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

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

Teratogenicity

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

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

- 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** : No known significant effects or critical hazards.
- 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** : No specific data.
- 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

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.

Numerical measures of toxicity

Acute toxicity estimates

Product/substance	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
A mixture of: 3,3'-dicyclohexyl-1,1'-methylenebis(4,1-phenylene)diurea; 3-cyclohexyl-1-(4-(4-(3-octadecylureido)benzyl)phenyl)urea; 3,3'-dioctadecyl-1,1'-methylenebis(4,1-phenylene)diurea	N/A	N/A	N/A	20.1	5.1
4,4'-methylene bis(dibutyldithiocarbamate)	16000	N/A	N/A	N/A	N/A
O,O,O-tris(2(or 4)-C9-10-isoalkylphenyl)phosphorothioate	N/A	N/A	N/A	20.1	5.1
4-nonylphenol, branched	1300	N/A	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Product/substance	Result	Species	Exposure	Test	
A mixture of: 3,3'-dicyclohexyl-1,1'-methylenebis(4,1-phenylene)diurea; 3-cyclohexyl-1-(4-(4-(3-octadecylureido)benzyl)phenyl)urea; 3,3'-dioctadecyl-1,1'-methylenebis(4,1-phenylene)diurea 4,4'-methylene bis(dibutyldithiocarbamate) O,O,O-tris(2(or 4)-C9-10-isoalkylphenyl)phosphorothioate	Acute EC50 100 mg/l	Micro-organism	3 hours	-	
	Acute EC50 1000 mg/l	Micro-organism	3 hours	-	
	Acute EC50 >100 mg/l	Algae	72 hours	OECD 201	
	Acute EC50 >100 mg/l	Micro-organism	3 hours	OECD 209	
	Acute LC50 >25 mg/l	Fish	96 hours	-	
	Chronic NOEC ≥10 mg/l	Daphnia - Daphnia magna	21 days	OECD 202	
	4-nonylphenol, branched	Acute EC50 0.03 mg/l Marine water	Algae - Skeletonema costatum	72 hours	-
		Acute EC50 0.027 mg/l Marine water	Algae - Skeletonema costatum	96 hours	-
		Acute EC50 137 µg/l Marine water	Crustaceans - Eohaustorius estuarius - Adult	48 hours	-
		Acute LC50 17 µg/l Marine water	Fish - Pleuronectes americanus - Larvae	96 hours	-
4-nonylphenol, branched	Chronic EC10 0.012 mg/l Marine water	Algae - Skeletonema costatum	96 hours	-	
	Chronic NOEC 5 µg/l Fresh water	Crustaceans - Gammarus fossarum - Adult	21 days	-	
	Chronic NOEC 7.4 µg/l Fresh water	Fish - Pimephales promelas - Embryo	33 days	-	

**Persistence and degradability**

Product/substance	Aquatic half-life	Photolysis	Biodegradability
A mixture of: 3,3'-dicyclohexyl-1,1'-methylenebis(4,1-phenylene)diurea; 3-cyclohexyl-1-(4-(4-(3-octadecylureido)benzyl)phenyl)urea; 3,3'-dioctadecyl-1,1'-methylenebis(4,1-phenylene)diurea	-	-	Not readily
O,O,O-tris(2(or 4)-C9-10-isoalkylphenyl)phosphorothioate	-	-	Not readily

Bioaccumulative potential

Product/substance	LogK _{ow}	BCF	Potential
4,4'-methylene bis(dibutylthiocarbamate)	8.42	10.86	low
O,O,O-tris(2(or 4)-C9-10-isoalkylphenyl)phosphorothioate	20	48	low
4-nonylphenol, branched	5.4	740	high

Mobility in soil

Soil/water partition coefficient (K_{oc})

: Not available.

Mobility in soil

: Given its physical and chemical characteristics, the product has no soil mobility. The product is insoluble and floats on water. Loss by evaporation is limited.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations**Disposal methods**

: 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. 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	IMDG	ICAO/IATA
UN/ID No	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.

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.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

[Circular no. 05/1999/TT-BYT](#)

Ingredient name	Category	Notes
diphenylamine	Category 2	

Toxic classification (TCVN : 4 3164-79)

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 (AIIIC) : Not determined.
- Canada inventory (DSL/NDL) : Not determined.
- China inventory (IECSC) : Not determined.
- Europe inventory (EINECS/ELINCS/NLP) : All components are listed or exempted.



Japan inventory	: Japan inventory (CSCL): At least one component is not listed. Japan inventory (ISHL): Not determined.
New Zealand Inventory of Chemicals (NZIoC)	: Not determined.
Philippines inventory (PICCS)	: At least one component is not listed.
Korea inventory (KECI)	: Not determined.
Taiwan Chemical Substances Inventory (TCSI)	: Not determined.
Thailand inventory	: Not determined.
Turkey inventory	: Not determined.
United States inventory (TSCA 8b)	: Not determined.
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.

Section 16. Other information

Ratings of danger according to

NFPA



HMIS

Health	/	0
Flammability		0
Physical hazards		0

History

Date of revision	: 2022/01/04
Date of previous revision	: No previous validation
Version	: 1

Key to abbreviations

: ATE = Acute Toxicity Estimate
: BCF = Bioconcentration Factor
: GHS = Globally Harmonized System of Classification and Labelling of Chemicals
: HMIS = Hazardous Material Information System (U.S.A.)
: IATA = International Air Transport Association
: IBC = Intermediate Bulk Container
: IMDG = International Maritime Dangerous Goods
: LogPow = logarithm of the octanol/water partition coefficient
: MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
: N/A = Not available
: NFPA = National Fire Protection Association (U.S.A.)
: SGG = Segregation Group
: UN = United Nations

Procedure used to derive the classification

Classification	Justification
Not classified.	

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader



TotalEnergies

ALTIS SH 2

SDS # : 30400

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.