



TotalEnergies

SAFETY DATA SHEET

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

ALTIS EM 2

SDS # : 30558

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

1.1 Product identifier

Product name : ALTIS EM 2

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

Identified uses
Lubricating grease

1.3 Details of the supplier of the safety data sheet

TotalEnergies Lubrifiants
562 Avenue du Parc de L'île
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 Austria GmbH
Modecenterstraße 17/ Objekt 1/ OG 2
1110 WIEN
Tel: + 43(0)1 616 46 11 – 0
Fax: + 43(0)1 616 46 11 – 24
hseq_at@totalenergies.com

Contact

H.S.E

1.4 Emergency telephone number

National advisory body/Poison Center

Telephone number : Poison Information Center: +43 1 406 43 43

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	: <input checked="" type="checkbox"/> Contains Reaction mass of 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl- and 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl- and N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine and 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl- and N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine. 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.

Not available.

2.3 Other hazards

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

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 : None known.

SECTION 3: Composition/information on ingredients**3.2 Mixtures** : Mixture

Product/substance	Identifiers	% (w/w)	Classification	Specific Conc. Limits, M-factors and ATEs	Type
<input checked="" type="checkbox"/> 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	REACH #: 01-0000015606-69 EC: 406-530-2	≤ 10	Aquatic Chronic 4, H413	-	[1]
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	REACH #: 01-2119491299-23 EC: 270-128-1 CAS: 68411-46-1	≤ 1	Repr. 2, H361f	-	[1]
reaction mass of: triphenylthiophosphate and	REACH #: 01-2119480426-35	< 1	Repr. 2, H361d Aquatic Chronic 4,	-	[1]



tertiary butylated phenyl derivatives	CAS: 192268-65-8		H413		
Reaction mass of 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl- and 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl- and N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine and 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl- and N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine	REACH #: 01-2119982395-25 EC: 939-700-4	≤0.3	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Acute 1, H400 Aquatic Chronic 2, H411	M [Acute] = 1	[1]
			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

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

Substance classified with a health or environmental hazard

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. 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.
- 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, CO₂, 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 : No specific fire or explosion hazard.

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** : 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.

- 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

No exposure limit value known.

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.

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. 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
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives	DNEL	Long term Oral	0.04 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.04 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.08 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.14 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	0.6 mg/m ³	Workers	Systemic
	DNEL	Long term Oral	0.08 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.08 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.17 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1.76 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	0.43 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	0.3 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	1.2 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	1.3 mg/m ³	Workers	Systemic
	Reaction mass of 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl- and 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl- and N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine and 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl- and N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine	DNEL	Long term Dermal	0.4 mg/kg bw/day	Workers
	DNEL	Long term Inhalation	0.3 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	0.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	0.2 mg/kg bw/day	General population	Systemic

PNECs



Product/ingredient name	Compartment Detail	Name	Method Detail	
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	Fresh water	0.001 mg/l	-	
	Marine water	0.0001 mg/l	-	
	Fresh water sediment	2.8 mg/kg dwt	-	
	Marine water sediment	0.28 mg/kg dwt	-	
	Soil	0.56 mg/kg dwt	-	
	Sewage Treatment Plant	1 mg/l	-	
	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Fresh water	33.8 µg/l	-
		Marine water	3.38 µg/l	-
		Fresh water sediment	446 µg/kg dwt	-
		Marine water sediment	44.6 µg/kg dwt	-
reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives	Soil	1.76 mg/kg dwt	-	
	Fresh water	0.00044 mg/l	-	
	Marine water	0.000044 mg/l	-	
	Fresh water sediment	8.99 to 2250 mg/kg dwt	-	
	Marine water sediment	0.899 to 225 mg/kg dwt	-	
	Soil	1.79 mg/kg dwt	-	
	Sewage Treatment Plant	32 mg/l	-	
Reaction mass of 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl- and 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl- and N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine and 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl- and N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine	Fresh water	0.000976 mg/l	-	
	Marine water	0.0000976 mg/l	-	
	Sewage Treatment Plant	0.69 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 : 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 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.
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	: <input checked="" type="checkbox"/> 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	: Solid.	
Color	: Green.	
Odor	: Characteristic.	
Odor threshold	: Not available.	
pH	: Not applicable.	<input checked="" type="checkbox"/> Product is non-soluble (in water).
Melting point/freezing point	: <input checked="" type="checkbox"/> 260°C [EN ISO 3016]	
Initial boiling point and boiling range	: <input checked="" type="checkbox"/> Not applicable.	
Flash point	: Not applicable.	
Evaporation rate	: Not available.	
Flammability	: <input checked="" type="checkbox"/> Yes.	
Lower and upper explosion limit	: Not applicable.	
Vapor pressure	: <input checked="" type="checkbox"/> Not applicable.	
Vapor density	: Not applicable.	
Relative density	: <input checked="" type="checkbox"/> 0.9 [ASTM D 4052]	
Density	: <input checked="" type="checkbox"/> 0.9 g/cm ³ [20°C] [ASTM D 4052]	
Solubility(ies)	:	



Media	Result
Water	Not soluble

- Solubility in water : 851 g/l
- Miscible with water : No.
- Partition coefficient: n-octanol/ water : 3.5
- Auto-ignition temperature : Not applicable.
- Decomposition temperature : 260°C
- Viscosity : Kinematic (40°C): Not applicable.
- Particle characteristics**
- Median particle size : Not available.

9.2 Other information

No other relevant physical and chemical parameters for the safe use of the product

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 : No specific data.
- 10.5 Incompatible materials : No specific data.
- 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
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 Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives Reaction mass of 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl- and 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl- and N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine and 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl- and N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine	LC50 Inhalation Dusts and mists	Rat	5.1 mg/l	4 hours	-
	LC50 Inhalation Vapor	Rat	80.4 mg/l	1 hours	-
	LC50 Inhalation Vapor	Rat	20.1 mg/l	4 hours	-
	LD50 Oral	Rat	>5000 mg/kg	-	-
	LD50 Dermal	Rat - Male, Female	>2000 mg/kg	-	OECD 402
	LD50 Oral	Rat - Male, Female	>2000 mg/kg	-	EU B.1 Acute Toxicity (Oral) OECD 402
	LD50 Dermal	Rat - Male, Female	>2000 mg/kg	-	OECD 402
	LD50 Oral	Rat - Male, Female	3313 mg/kg	-	OECD 401

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

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
Reaction mass of 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl- and 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl- and N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine and 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl- and N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine	3313	N/A	N/A	N/A	N/A



(2-ethylhexyl)-4-methyl- and N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine				
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Irritation/Corrosion

Product/substance	Result	Species	Score	Exposure	Test
Reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives	Eyes - Iris lesion	Rabbit	0	-	EU EU Method B.5
	Skin - Edema	Rabbit	0	4 hours	EU B.4 Acute Toxicity: Dermal Irritation/ corrosion OECD 405
Reaction mass of 1H- Benzotriazole- 1-methanamine, N,N-bis (2-ethylhexyl)-6-methyl- and 2H-Benzotriazole- 2-methanamine, N,N-bis (2-ethylhexyl)-5-methyl- and N,N-bis(2-ethylhexyl) -4-methyl-1H-benzotriazole- 1-methylamine and 2H- Benzotriazole- 2-methanamine, N,N-bis (2-ethylhexyl)-4-methyl- and N,N-bis(2-ethylhexyl) -5-methyl-1H-benzotriazole- 1-methylamine	Eyes - Cornea opacity	Rabbit	0	-	
	Skin - Edema	Rabbit	5.3	24 hours	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
Reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives Reaction mass of 1H- Benzotriazole- 1-methanamine, N,N-bis (2-ethylhexyl)-6-methyl- and 2H-Benzotriazole- 2-methanamine, N,N-bis (2-ethylhexyl)-5-methyl- and N,N-bis(2-ethylhexyl) -4-methyl-1H-benzotriazole- 1-methylamine and 2H- Benzotriazole- 2-methanamine, N,N-bis (2-ethylhexyl)-4-methyl- and N,N-bis(2-ethylhexyl) -5-methyl-1H-benzotriazole-	skin	Guinea pig	Not sensitizing
	skin	Guinea pig	Sensitizing



1-methylamine

Conclusion/Summary**Skin**

: Based on available data, the classification criteria are not met. Contains Sensitizer. May produce an allergic reaction.

Respiratory

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

Mutagenicity

Product/substance	Test	Experiment	Result
Reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives	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**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)**Conclusion/Summary**

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

Specific target organ toxicity (repeated exposure)**Conclusion/Summary**

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

Aspiration hazard**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
Reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives	Sub-chronic NOAEL Oral	Rat - Male, Female	50 mg/kg	13 weeks; 7 days per week

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**SECTION 12: Ecological information****12.1 Toxicity**

Product/substance	Result	Species	Exposure	Test
Reaction mass 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	Acute EC50 100 mg/l	Micro-organism	3 hours	-
Reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives	Acute EC50 >100 mg/l	Algae - Scenedesmus subspicatu	72 hours	OECD 201
Reaction mass of 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl- and 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl- and N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine and 2H-Benzotriazole-2-methanamine, N,N-bis	Acute EC50 >100 mg/l Chronic NOEC 5.5 mg/l Acute EC10 0.658 mg/l	Daphnia - Daphnia magna Daphnia - Daphnia magna Algae - Desmodesmus subspicatus	48 hours 21 days 72 hours	OECD 202 OECD 211 201



(2-ethylhexyl)-4-methyl- and N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine	Acute EC10 1.92 mg/l	Daphnia - Daphnia Magna	48 hours	202
	Acute EC50 0.976 mg/l	Algae - Desmodesmus subspicatus	72 hours	201
	Acute EC50 2.05 mg/l	Daphnia - Daphnia Magna	48 hours	202
	Acute LC50 1.3 mg/l	Fish - Brachydanio rerio	96 hours	203

12.2 Persistence and degradability

Conclusion/Summary : Not available.

Product/substance	Aquatic half-life	Photolysis	Biodegradability
<input checked="" type="checkbox"/> 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 Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene Reaction mass of 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-6-methyl- and 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-5-methyl- and N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1-methylamine and 2H-Benzotriazole-2-methanamine, N,N-bis(2-ethylhexyl)-4-methyl- and N,N-bis(2-ethylhexyl)-5-methyl-1H-benzotriazole-1-methylamine	-	-	Not readily
	-	-	Not readily
	-	-	Inherent

12.3 Bioaccumulative potential

Product/substance	LogK _{ow}	BCF	Potential
<input checked="" type="checkbox"/> ALTIS EM 2 Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives	>3.5 5.1	- 1730	low high
	4.8 to 8.8	842 to 2194	high

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 has no 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 $\geq 0,1$ %.

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: 12 01 12*

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 : Not applicable.

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

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

VbF class : Not regulated.

Limitation of the use of organic solvents : Permitted.

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 (AIC)	: At least one component is not listed.
Canada inventory (DSL/NDSL)	: At least one component is not listed.
China inventory (IECSC)	: All components are listed, exempted, or notified.
Europe inventory (EC)	: <input checked="" type="checkbox"/> 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)	: At least one component is not listed.
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.



15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

Abbreviations and acronyms : Abbreviations and acronyms

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

✔ H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H361d	Suspected of damaging the unborn child.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Full text of classifications [CLP/GHS]

✔ Aquatic Acute 1	AQUATIC HAZARD (ACUTE) - Category 1
Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2
Aquatic Chronic 4	AQUATIC HAZARD (LONG-TERM) - Category 4
Repr. 2	TOXIC TO REPRODUCTION - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1B	SKIN SENSITIZATION - Category 1B

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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.