

SAFETY DATA SHEET

LIPASE

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Compilation date: 14/06/2019

Revision No: 1

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

1.1. Product identifier

Product name: LIPASE

CAS number: 9001-62-1

EINECS number: 232-619-9

Product code: A01831

Synonyms: TRIACYLGLYCEROL

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

Use of substance / mixture: PC21: Laboratory chemicals.

1.3. Details of the supplier of the safety data sheet

Company name: Atom Scientific Ltd

2b East Tame Business Park

Hyde

Manchester

SK14 4GX

Tel: 0161 366 5123

Fax: 01704 337167

Email: technical@atomscientific.com

1.4. Emergency telephone number

Emergency tel: 07833453806

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Resp. Sens. 1: H334

Most important adverse effects: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

2.2. Label elements

Label elements under CLP:

Hazard statements: H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Signal words: Danger

Hazard pictograms: GHS08: Health hazard



Precautionary statements: P261: Avoid breathing.

P285: In case of inadequate ventilation wear respiratory protection.

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P304+341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P342+311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

P501: Dispose of to.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: LIPASE

CAS number: 9001-62-1

EINECS number: 232-619-9

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Take off all contaminated clothing. Rinse skin with plenty of water. If irritation develops and persists, get medical attention. Contaminated clothing should be washed before reuse.

Eye contact: Bathe the eye with running water for 15 minutes. If eye irritation persists, get medical attention

Ingestion: Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Never give anything by mouth to an unconscious person. If symptoms develop, seek medical attention

Inhalation: Move to fresh air in case of accidental inhalation of vapours. If experiencing respiratory symptoms, obtain immediate medical attention

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

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely. The vision may become blurred.

Ingestion: May be harmful if swallowed. There may be difficulty swallowing. There may be vomiting. Nausea and stomach pain may occur.

Inhalation: May cause allergy or asthma symptoms or breathing difficulties.

Delayed / immediate effects: Inhalation may cause allergy or asthma symptoms or breathing difficulties if inhaled. Shortness of breath, wheezing and coughing. The effect of inhalation may be delayed. Skin contact may cause slight irritation. Eye contact may cause slight irritation

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

Immediate / special treatment: No data available.

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Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Water spray. Alcohol resistant foam. Dry chemical powder. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Containers exposed to fire may burst due to a build-up of pressure. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Combustion may emit toxic fumes: carbon monoxide, carbon dioxide, nitrogen oxides, sulphur oxides

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see section 8.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Ensure there is sufficient ventilation of the area. Avoid the formation or spread of dust in the air. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Recommended storage temperature 2 - 8 °C. Keep away from direct sunlight.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): No data available.

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Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

8.1. DNEL/PNEC Values

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Type	Exposure	Value	Population	Effect
DNEL	Inhalation	0.00006 mg/m ³	Workers	Local
DNEL	Inhalation	0.00006 mg/m ³	Workers	Systemic
PNEC	Fresh water	0.018/ mg/L	-	-
PNEC	Marine water	0.0018 mg/L	-	-
PNEC	intermittent releases (water)	0.18 mg/L	-	-
PNEC	Sewage Treatmenty plants	65 mg/L	-	-
PNEC	Fresh water sediments	Exposure not expecte	-	-
PNEC	Marine sediments	Exposure not expecte	-	-
PNEC	Oral	No Bioaccumulation	-	-

8.2. Exposure controls

Engineering measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Respiratory protection: Incase of ionsufficient ventilation wear a respirator (EN 140) with a P3 particle filter or better (EN 143)

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection: Safety glasses with side-shields. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Protective clothing.

Environmental: Do not let product enter drains.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Powder

Odour: Characteristic odour

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9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Reacts with oxidising agents

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

10.4. Conditions to avoid

Conditions to avoid: Direct sunlight. Extremes of temperatures

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents.

10.6. Hazardous decomposition products

Haz. decomp. products: Combustion may liberate toxic fumes: carbon monoxide, carbon dioxide, nitrogen oxides, sulphur oxides

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

Route	Species	Test	Value	Units
ORAL	RAT	LD0	>2700	mg/kg

Relevant hazards for substance:

Hazard	Route	Basis
Respiratory/skin sensitisation	INH	Based on test data

Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely. The vision may become blurred.

Ingestion: May be harmful if swallowed. There may be difficulty swallowing. There may be vomiting. Nausea and stomach pain may occur.

Inhalation: May cause allergy or asthma symptoms or breathing difficulties.

Delayed / immediate effects: Inhalation may cause allergy or asthma symptoms or breathing difficulties if inhaled. Shortness of breath, wheezing and coughing. The effect of inhalation may be delayed. Skin contact may cause slight irritation. Eye contact may cause slight irritation

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Other information: Not applicable.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

Species	Test	Value	Units
RAINBOW TROUT (<i>Oncorhynchus mykiss</i>)	96H LC50	>68.3	mg/l
Daphnia magna	48H EC50	>37.4	mg/l
Scenedesmus Subspicatus	72H ErC50	18	mg/l

12.2. Persistence and degradability

Persistence and degradability: Readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: No data available.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Should not be released into the environment. Waste is classified as hazardous.

Dispose of in accordance with the European Directives on waste and hazardous waste.

Dispose of in accordance with local regulations.

Recovery operations: Not applicable.

Disposal of packaging: Dispose of as unused product.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

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

Specific regulations: This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and 3: H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.