Product: Cyclohexanecarbonyl chloride,

Page 1 of 4 Ref.: MSDS/FP/C018 Date of issue: 18/04/2018 **Revision Number 007**

Syntor Fine Chemicals Ltd

Material Safety Data Sheet

IDENTIFICATION OF THE SUBSTANCE PREPARATION AND COMPANY

1.1 Product identifier: Cyclohexanecarbonyl chloride,

Synonyms: Cyclohexanoic acid

Intermediate in chemical manufacture Recommended uses:

No information available Uses advised against

Syntor Fine Chemicals Ltd 1.3 Detail of supplier:

11 Boleyn Court Manor Park Runcorn WA7 1SR

1.4 Emergency Telephone:

+44 (0) 7720 149 777 Fax: +44 (0) 1928 579 734 e-mail: mr@syntor.co.uk www.syntor.co.uk

HAZARDS IDENTIFICATION

2.1 Classification of the substance: Classification of substance according

to CLP, 1272/2008/EC:

H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage

2.2 Label element:

Signal word: Danger

Hazard / Precautionary Statements: H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage P260 Do not breathe dust/fume/gas/mist/vapours/spray

P303+361+353: IF ON SKIN (or hair): Remove / Take off immediately all contaminated

clothing. Rinse skin with water/shower

P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove

contact lenses if present and easy to do - continue rinsing

P510 Dispose of contents/container in accordance with

local/regional/national/international regulations

P301+330 + P331: IF SWALLOWED: Rinse mouth do not induce vomiting

P405 Store locked up

2.3 Other Hazards:

Results of PBT and vPvB assessment

PBT: Not applicable vPvB: Not applicable

COMPOSITION / INFORMATION ON INGREDIENTS 3.

3.1 Substances:

Ingredient	CAS Number	EC Number	Concentration (% w/w)	Classification according to (EC) No 1272/2008 (CLP)
Cyclohexanecarbonyl chloride	2719-27-9	220-322-7	~ 100 %	Acute Tox. 4: H302 Harmful if swallowed Skin Corr. 1B: H314 Causes severe skin burns and eye damage

Molecular formula: C7H11CIO Molecular weight: 146.62

FIRST AID MEASURES 4.

4.1 Description of first aid measures:

General information: Instantly remove any clothing soiled by the product.

Remove breathing apparatus only after soiled clothing has been completely removed.

Inhalation: Supply fresh air. If required, provide artificial respiration. Do not use mouth-to-mouth

resuscitation if victim ingested or inhaled the substance. Keep patient warm.

Consult doctor if symptoms persist. Skin contact:

Instantly wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

Eye contact: Rinse opened eye for several minutes under running water. Then consult doctor. Swallowing: Do not induce vomiting. Never give anything by mouth to an unconscious person.

Seek immediate medical advice.

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

No further relevant information available.

4.3 Indication of immediate medical

No further relevant information available.

Product: Cyclohexanecarbonyl chloride,

Page 2 of 4 Ref.: MSDS/FP/C018 Date of issue: 18/04/2018 **Revision Number 007**

attention and special treatment needed:

FIRE-FIGHTING MEASURES

5.1 Extinguishing Media: Suitable extinguishing agents: For safety reasons unsuitable

CO2, extinguishing powder or sand. Do not use water

extinguishing media:

5.2 Special hazards caused by the material, its products of combustion or Water

flue gases:

Can be released in case of fire. Carbon monoxide and carbon dioxide.

Hydrogen Chloride (HCI)

5.3 Precautions for fire fighters

Wear self-contained breathing apparatus. Wear full protective suit.

5.4 Further information: Use water spray to cool un opened containers

ACCIDENTAL RELEASE MEASURES 6.

6.1 Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

6.2 Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided. Do not allow material to be released to

the environment without proper governmental permits

6.3 Methods and materials for containment and cleaning up:

6.4 Reference to other sections:

Keep away from ignition sources. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in

container for disposal according to local / national regulations (see section13). Dispose of contaminated material according to local / national regulations.

See section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling Avoid exposure - obtain special instructions before use. Keep containers tightly sealed.

Store in cool, dry place in tightly closed containers. Ensure good ventilation/exhaustion at

the workplace.

Open and handle container with care.

7.2 Conditions for safe storage,

Keep ignition sources away - Do not smoke. including any incompatibilities:

This product is moisture sensitive. Keep container tightly sealed.

Store under dry inert gas.

Store in cool location. Store away from oxidizing agents.

Keep container tightly sealed. Protect from humidity. Keep away from water.

No further relevant information available.

EXPOSURE CONTROLS / PERSONAL PROTECTION 8.

8.1 Control parameters:

7.3 Specific use(s)

Derived No Effect Level(DNEL): No information available

Predicted No Effect Concentration

(PNEL):

No information available

8.2 Exposure controls:

Additional information about design of

technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an

average face velocity of at least 100 feet per minute.

Personal protective equipment: General protective and hygienic

measures:

The usual precautionary measures should be adhered to in handling the chemicals. Keep away from foodstuffs, beverages and food. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work.

Avoid contact with the eyes and skin.

Breathing equipment: Use breathing protection with high concentrations.

Protective gloves Protection of hands:

Eye protection: Tightly sealed safety glasses / full face protection

Protective work clothing. **Body protection:**

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form: Colourless to light-yellow liquid b) Odour: No information available No information available c) Odour Threshold: d) pH No information available

Product: Cyclohexanecarbonyl chloride, Page 3 of 4 Ref.: MSDS/FP/C018 Date of issue: 18/04/2018 **Revision Number 007**

e) Melting point/range: No information available

f) Boiling range: 183 - 185°C g) Flash point: 67°C

h) Flammability: j) Upper/lower flammability or

No information available

explosive limits: No information available k) Vapour pressure: No information available I) Vapour density: No information available

m) Relative density: 1.109 g/cm³ n) Water solubility: Reacts with water o) Partition coefficient: No information available p) Autoignition temperature: No information available q) Decomposition temperature: No information available r) Viscosity: No information available s) Explosive properties: No information available t) Oxidizing properties: No information available

9.2 Other information Hydrolyses in water to liberate hydrogen chloride

10. STABILITY AND REACTIVITY

10.1 Reactivity: Reacts with water to release acidic gas

10.2 Chemical stability: Stable under recommended storage conditions.

10.3 Possibility of hazardous

reactions:

No dangerous reactions known

10.4 Conditions to avoid: Protect from humidity. Store away from water.

Water, Oxidizing agent 10.5 Incompatible materials:

10.6 Hazardous decomposition Carbon dioxide, carbon monoxide,

products: Hydrogen Chloride (HCI)

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

Primary irritant effect:

Classification data not available

Effect on the skin: Causes severe burns . Caustic effect on skin and mucous membranes.

Effect on the eye: Strong caustic effect. Causes severe burns / eye damage

If swallowed: Swallowing will lead to a strong caustic effect on throat and to the danger of perforation of

oesophagus and stomach

Sensitisation: No sensitising effect known.

To the best of our knowledge the acute and chronic toxicity of this substance is not fully Additional toxicological information

known. No classification data or carcinogenic properties of this material is available

12. **ECOLOGICAL INFORMATION**

12.1 Toxicity

Aquatic toxicity: No further relevant information available No further relevant information available 12.2 Persistence and degradability: 12.3 Bioaccumulative potential: No further relevant information available No further relevant information available 12.4 Mobility in soil:

12.5 Results of PBT and vPvB

assessment:

No further relevant information available

12.6 Other adverse effects

Additional ecological information:

General notes:

No further relevant information available

Water hazard. Reacts with water to liberate acidic gas. Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system. Do not allow material to be released to the environment without proper governmental permits.

13. **DISPOSAL CONSIDERATIONS**

13.1 Waste treatment method

Handover to disposers of hazardous waste. Substance disposal:

Must be specially treated under adherence to official regulations. Consult state, local or national regulations for proper disposal. Arrange disposal as special waste, by licensed disposal company.

Waste packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

Product: Cyclohexanecarbonyl chloride, Page 4 of 4 Date of issue: 18/04/2018 Ref.: MSDS/FP/C018 **Revision Number 007**

Land transport ADR/RID e GGVS/GGVE (cross-border/domestic)



ADR/RID-GGVS/E Class: 8 (C3) Corrosive substances.

Kemler Number: 80 UN No: 3265 Ш Packaging group: Label:

3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Cyclohexanecarbonyl **Designation of goods:**

chloride)

Maritime transport IMDG/GGVSea:



8 IMDG/GGVSea Class: 3265 UN No: 8 Label: Packaging group: Ш

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Cyclohexanecarbonyl chloride) Correct technical name:

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 8 UN/ID No: 3265 Label: 8 Packaging group: Ш

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Cyclohexanecarbonyl chloride) Designation of goods:

15. **REGULATORY INFORMATION**

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

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

No data available

A Chemical Safety Assessment has not been carried out for this substance. 15.2 Chemical Safety Assessment:

Additional information: For use only by technically qualified individuals

OTHER INFORMATION 16.

Revision Summary:

The issue replaces revision 006. This MSDS has been revised to reflect the classification and labelling in accordance with the REACH registration of the substance. There is no significant change to the

The above Information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Syntor Fine Chemicals Ltd, shall not be held liable for any damage resulting from handling or from contact with the above product.

Disclaimer: For R&D use only. Not for drug, household or other uses.

We welcome any additional information about our products that customers have obtained by personal experience.