

# Syntor Fine Chemicals Ltd

## Material Safety Data Sheet

### 1. IDENTIFICATION OF THE SUBSTANCE PREPARATION AND COMPANY

<b>1.1 Product identifier:</b> <b>Synonyms:</b>	Butyryl chloride Butanoyl chloride	
<b>Recommended uses:</b> <b>Uses advised against</b>	Intermediate in chemical manufacture No information available	
<b>1.3 Detail of supplier:</b>	Syntor Fine Chemicals Ltd 11 Boleyn Court Manor Park Runcorn WA7 1SR	<b>1.4 Emergency Telephone:</b> +44 (0) 7720 149 777 Fax: +44 (0) 1928 579 734 e-mail: <a href="mailto:mr@syntor.co.uk">mr@syntor.co.uk</a> <a href="http://www.syntor.co.uk">www.syntor.co.uk</a>

### 2. HAZARDS IDENTIFICATION

**2.1 Classification of the substance:**  
**Classification of substance according to CLP, 1272/2008/EC:**

H 225 Highly flammable liquid and vapour  
H302 Harmful if swallowed  
H331 Toxic in inhaled  
H314 Causes severe skin burns and eye damage

**2.2 Label element:**



**Signal word:**

**Danger**

**Hazard / Precautionary Statements:**

H 225 Highly flammable liquid and vapour  
H302 Harmful if swallowed  
H331 Toxic in inhaled  
H314 Causes severe skin burns and eye damage

**2.3 Other Hazards:**

**Results of PBT and vPvB assessment**

**PBT:**

Not applicable

**vPvB:**

Not applicable

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray  
P280 Wear protective gloves/protective clothing/eye protection/face protection  
P303+ 361 + 353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove  
contact lenses, if present and easy to do so. Continue rinsing.  
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do not induce vomiting  
P304 = P340 IF INHALED: Remove victim to fresh air and keep at rest in a position  
comfortable for breathing  
P405 Store locked up  
P501 Dispose of contents/container in accordance with  
local/regional/national/international regulations

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

**3.1 Substances:**

Ingredient	CAS Number	EC Number	Concentration (% w/w)	Classification according to (EC) No 1272/2008 (CLP)
Butyryl chloride	141-75-3	205-498-5	~ 100 %	Flam Liq.2: H 225 Highly flammable liquid and vapour. Acute Tox.4: H302 Harmful if swallowed Acute Tox. 3: H331 Toxic in inhaled Skin Corr.1B: H314 Causes severe skin burns and eye damage

**Molecular formula:**

C<sub>4</sub>H<sub>7</sub>ClO

**Molecular weight:**

106.5

### 4. FIRST AID MEASURES

**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 attention and special treatment needed:** No further relevant information available.

---

## 5. FIRE-FIGHTING MEASURES

---

**5.1 Extinguishing Media:**  
**Suitable extinguishing agents:** CO2 , sand, extinguishing powder. Do not use water.  
**For safety reasons unsuitable extinguishing media:** Water

**5.2 Special hazards caused by the material, its products of combustion or flue gases:** Reacts violently with water.  
Can be released in case of fire. Carbon monoxide and carbon dioxide.  
Hydrogen chloride (HCL).

**5.3 Precautions for fire fighters:** Wear self-contained breathing apparatus.  
Wear full protective suit.

**5.4 Further information:** Use water spray to cool unopened containers

---

## 6. ACCIDENTAL RELEASE MEASURES

---

**6.1 Personal precautions, protective equipment and emergency procedures:** Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation.  
Keep away from sources of ignition

**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:** 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).

**6.4 Reference to other sections:** 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, including any incompatibilities:** Keep ignition sources away – Do not smoke. Protect against electrostatic charges.  
Fumes can combine with air to form an explosive mixture.  
Store in cool location.  
Store away from water, oxidising agents and strong bases.  
Keep container tightly sealed. Store under dry inert gas. This product is moisture sensitive. Protect from humidity and keep away from water.

**7.3 Specific use(s):** No further relevant information available.

---

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

---

**8.1 Control parameters:**  
**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.  
**Protection of hands:** Protective gloves  
**Eye protection:** Tightly sealed safety glasses / full face protection  
**Body protection:** Protective work clothing.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

---

### 9.1 Information on basic physical and chemical properties

a) Appearance Form:	Colourless to yellow liquid
b) Odour:	No information available
c) Odour Threshold:	No information available
d) pH	No information available
e) Melting/freezing point	
Melting point/range:	- 89 °C (lit)
f) Initial boiling point and boiling range	101 - 102 °C (lit)
g) Flash point:	18 °C
h) Flammability:	No information available
j) Upper/lower flammability or explosive limits:	Lower explosion limit: 2.5 %(V) Upper explosion limit: 7.3 %(V)
k) Vapour pressure:	No information available
l) Vapour density:	No information available
m) Relative density:	1.026 g/ml
n) Water solubility:	No information available
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 No relevant information available

---

## 10. STABILITY AND REACTIVITY

---

10.1 Reactivity:	No information available
10.2 Chemical stability:	Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions:	No dangerous reactions known
10.4 Conditions to avoid:	Heat, flames and sparks. Extremes of temperature and direct sunlight
10.5 Incompatible materials:	Water, Oxidizing agents, Strong bases
10.6 Hazardous decomposition products:	Carbon dioxide, carbon monoxide, Hydrogen chloride (HCL).

---

## 11. TOXICOLOGICAL INFORMATION

---

### 11.1 Information on toxicological effects

LD50/LC50 values that is relevant for classification:

No data

Primary irritant effect:

Effect on the skin:

Irritant effect on skin and mucous membranes

Effect on the eye:

Strong corrosive effect

If swallowed:

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.

Sensitisation:

No sensitising effect known.

Additional toxicological information

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

12.2 Persistence and degradability:

No further relevant information available

12.3 Bioaccumulative potential:

No further relevant information available

12.4 Mobility in soil:

No further relevant information available

12.5 Results of PBT and vPvB assessment:

No further relevant information available

12.6 Other adverse effects

No further relevant information available

Additional ecological information:

General notes:

Water hazard class 1. Slightly hazardous for water.

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

**Substance disposal:** Handover to disposers of hazardous waste.  
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

---

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



**ADR/RID-GGVS/E Class:** 3 (FC)Flammable Liquid  
**UN No:** 2353  
**Packaging group:** II  
**Label:** 3 + 8  
**Designation of goods:** 2353 BUTYRYL CHLORIDE  
**Limited quantities (LQ)** LQ4

### Maritime transport IMDG/GGVSea:



**IMDG/GGVSea Class:** 3  
**UN No:** 2353  
**Label:** 3 + 8  
**Packaging group:** II  
**Correct technical name:** BUTYRYL CHLORIDE

### Air transport ICAO-TI and IATA-DGR:



**ICAO/IATA Class:** 3  
**UN/ID No:** 2353  
**Label:** 3 + 8  
**Packaging group:** II  
**Designation of goods:** BUTYRYL CHLORIDE

---

## 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

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

**Additional information:** For use only by technically qualified individuals

---

## 16. OTHER INFORMATION

---

**Revision Summary:** The issue replaces revision 01. The safety data sheet has been updated to align the precautionary phrases with those assigned during REACH registration. There is no change to the classification of the substance.

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.



FM 90124