

Syntor Fine Chemicals Ltd

Material Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE PREPARATION AND COMPANY

1.1 Product identifier: Methacryloyl chloride
Synonyms: Methacrylic acid chloride

Recommended uses: Intermediate in chemical manufacture
Uses advised against: No information available

1.3 Detail of supplier: Syntor Fine Chemicals Ltd
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

2. HAZARDS IDENTIFICATION

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



2.2 Label element:

Signal word: Danger

Hazard / Precautionary Statements: H225 Highly flammable liquid and vapour
H302 Harmful if swallowed.
H330 Fatal if inhaled.
H314 Causes severe skin burns and eye damage

2.3 Other Hazards: P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P303+ 361 + 353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and safe to do so. Continue rinsing.
P320 Specific treatment is urgent (see on this label)
P405 Store locked up
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Results of PBT and vPvB assessment

PBT: Not applicable
vPvB: Not applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances:

Ingredient	CAS Number	EC Number	Concentration (% w/w)	Classification according to (EC) No 1272/2008 (CLP)
Methacryloyl chloride	920-46-7	213-058-9	~ 100 %	Flam Liq. 2: H225 Highly flammable liquid and vapour. Acute Tox 4: H302 Harmful if swallowed. Acute Tox 1: H330 Fatal if inhaled Skin Corr. 1B: H314 Causes severe skin burns and eye damage

(Stabilized with 400 ppm phenothiazine CAS Number: 92-84-2)

Molecular formula: C₄H₅ClO
Molecular weight: 104.533

4. FIRST AID MEASURES

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: For safety reasons unsuitable extinguishing media:	CO ₂ , sand or extinguishing powder. DO NOT USE WATER
5.2 Special hazards caused by the material, its products of combustion or flue gases:	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 un opened containers

6. ACCIDENTAL RELEASE MEASURES

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:	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).
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. Fumes can combine with air to form an explosive mixture. Store in cool location. Store away from oxidizing agents. Store away from strong bases. Protect from heat
7.3 Specific use(s)	Keep container tightly sealed. Protect from humidity. Keep away from water. No further relevant information available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters: Derived No Effect Level(DNEL): Predicted No Effect Concentration (PNEL):	No information available 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: Protection of hands: Eye protection: Body protection:	Use breathing protection with high concentrations. Protective gloves Tightly sealed safety glasses / full face protection Protective work clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties	
a) Appearance Form:	Colourless Liquid
b) Odour:	Acrid
c) Odour Threshold:	No information available
d) pH	No information available
e) Melting/freezing point Melting point/range:	No information available
f) Initial boiling point and boiling range	95 to 96°C
g) Flash point:	2°C
h) Flammability:	No information available
j) Upper/lower flammability or explosive limits:	No information available
k) Vapour pressure:	No information available
l) Vapour density:	No information available

m) Relative density:	1.07 g/cm ³
n) Water solubility:	Reacts, not miscible or difficult to mix
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:	Reacts with water

10. STABILITY AND REACTIVITY

10.1 Reactivity:	Reacts with water
10.2 Chemical stability:	Stable under recommended storage conditions. Danger of containers bursting upon heating
10.3 Possibility of hazardous reactions:	Danger of polymerisation Polymerisation can be caused in un-stabilised product
10.4 Conditions to avoid:	Excess heat, incompatible materials
10.5 Incompatible materials:	Water, Oxidising agents, Bases, Alcohols and Amines, Free-radical initiators, Heat, Ultraviolet radiation
10.6 Hazardous decomposition products:	Carbon dioxide, Carbon monoxide. Hydrogen chloride
10.7 Additional information:	Stabilised with 400 ppm phenothiazene. Uninhibited material may polymerise resulting in a temperature and pressure increase that may rupture the container

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Acute toxicity:

Oral:	LD50 mg/kg (rat)
Inhalation	LC50/2H 115 mg/m ³ /2H (mus) LC50/4H 60 mg/m ³ /4H (rat)

Primary irritant effect:

Effect on the skin: Caustic effect on skin and mucous membranes, irritant for skin and mucous membranes

Effect on the eye: Strong caustic effect, irritant 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: Hazardous for water. Reacts with water to liberate acid 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

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:	6.1 (TFC) Toxic substances
UN No:	3488
Packaging group:	I
Label:	6.1 + 3 + 8
Designation of goods:	3488 TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE N.O.S.

(Methacryloyl chloride)

Maritime transport IMDG/GGVSea:



IMDG/GGVSea Class: 6.1
UN No: 3488
Label: 6.1 + 3 + 8
Packaging group: I
Correct technical name: TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE N.O.S. (Methacryloyl chloride)

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 6.1
UN/ID No: 3488
Label: 6.1 + 3 + 8
Packaging group: I
Designation of goods: TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE N.O.S. (Methacryloyl 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 005. The safety data sheet has been updated to align the hazard and precautionary phrases with those assigned during REACH registration. In addition the UN number has been updated to more accurately reflect the properties of the substance. 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.



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