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## Material Safety Data Sheet

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifiers

Product name Methacryloyl chloride  
Product number W810412  
Brand 3ASenrise  
CAS number 920-46-7

#### 1.2 Details of the supplier of the safety data sheet

Company: Anhui Senrise Technology Co., Ltd.  
Address: No.88 Weisan Road, High-Tech Industrial Development Zone, Anqing, Anhui  
Post code: 246003  
Tel: 400-005-6266  
Fax: 0556-5555368  
Email: service@3asenrise.com

#### 1.3 Emergency telephone

Emergency telephone: +8653283889090

#### 1.4 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: For R&D use only. Not for pharmaceutical, household or other uses.

### 2 HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Flammable liquids (Category 2), H225  
Acute toxicity, Oral (Category 4), H302  
Skin corrosion/irritation (Category 1B), H314  
Serious eye damage/eye irritation (Category 1), H318  
Skin sensitization (Category 1), H317  
Acute toxicity, Inhalation (Category 2), H330  
Short-term (acute) aquatic hazard (Category 3), H402  
Long-term (chronic) aquatic hazard (Category 3), H412

#### 2.2 GHS label elements, including precautionary statements

##### Pictogram



Signal word: Danger

##### Hazard statement(s)

H314 Causes severe skin burns and eye damage.

H225 Highly Flammable liquid and vapour.

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H330 Fatal if inhaled.

H412 Harmful to aquatic life with long lasting effects.

### **Precautionary statement(s)**

#### **Prevention**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P240 Ground/bond container and receiving equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P270 Do not eat, drink or smoke when using this product.

P264 Wash hands thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P284 Wear respiratory protection.

P271 Use only outdoors or in a well-ventilated area.

#### **Response**

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

P304+P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P330 Rinse mouth.

P310 Immediately call a POISON CENTER or doctor/physician.

P331 Do NOT induce vomiting.

P370+P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

P362+P364 Take off contaminated clothing and wash it before reuse.

#### **Storage**

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

#### **Disposal**

P501 Dispose of contents/ container to an approved waste disposal plant.

### **2.3 Physical and chemical hazards**

H225 Highly Flammable liquid and vapour.

### **2.4 Health hazards**

H314 Causes severe skin burns and eye damage.

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H330 Fatal if inhaled.

### **2.5 Environmental hazards Code**

H412 Harmful to aquatic life with long lasting effects.

### **2.6 Other hazards**

No data available

## **3 COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance / Mixture: Substance**

### 3.1 Substance

Name	Methacryloyl chloride
Formula	C <sub>4</sub> H <sub>5</sub> ClO
Molecular Weight	104.53
CAS	920-46-7
Concentration	97%(stabilized with MEHQ)

## 4 FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

No data available.

## 5 FIREFIGHTING MEASURES

### 5.1 Extinguishing media

Water mist may be used to cool closed containers. CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam.

### 5.2 Special hazards arising from the substance or mixture

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Hydrogen chloride gas.

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

## 6 ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

### 6.2 Environmental precautions

Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

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.

### 6.4 Reference to other section

For disposal see section 13.

## 7 HANDLING AND STORAGE

### 7.1 Precautions for safe handling

#### Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

#### Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

### Hygiene measures

Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

## 7.2 Conditions for safe storage, including any incompatibilities

### Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

Long term storage: 2–8° C

## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

No data available.

### 8.2 Personal protective equipment

#### Eye/face protection

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

#### Skin 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.

#### Body protection

Flame retardant antistatic protective clothing.

#### Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

#### Control of environmental exposure

Do not let product enter drains. Risk of explosion.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a) Appearance	Colorless to yellow to red liquid
b) Odor	Acrid
c) pH	No data available
d) Melting point/freezing point	–60 ° C
e) Initial boiling point and boiling range	95 – 96 ° C at 760 mmHg
f) Upper/lower flammability or explosive limits	No data available
g) Flash point	2 ° C
h) Evaporation rate	No data available
i) Vapor pressure	10.4 kPa at 20 ° C
j) Vapor density	No data available
k) Density	1.07
l) Water solubility	Reacts with water
m) Partition coefficient: n-octanol/water	No data available
n) Autoignition temperature	No data available
o) Decomposition temperature	No data available
p) Flammability	No data available

## 10 STABILITY AND REACTIVITY

### 10.1 Chemical stability

No data available.

## **10.2 Conditions to avoid**

No data available.

## **10.3 Incompatible materials**

Bases. Water. Oxidizing agent. Alcohols. Amines.

## **10.4 Hazardous decomposition products**

In the event of fire: see section 5.

# **11 TOXICOLOGICAL INFORMATION**

## **11.1 Acute toxicity**

LD50 Oral

No data available

LC50 Inhalation

60 mg/m<sup>3</sup> ( Rat ) 4 h

LD50 Dermal

No data available

## **11.2 Skin corrosion/irritation**

No data available

## **11.3 Serious eye damage/eye irritation**

No data available

## **11.4 Respiratory or skin sensitization**

May cause sensitization by skin contact

## **11.5 Germ cell mutagenicity**

No data available

## **11.6 Carcinogenicity**

No data available

## **11.7 Reproductive toxicity**

No data available

## **11.8 Specific target organ toxicity - single exposure**

No data available

## **11.9 Specific target organ toxicity - repeated exposure**

No data available

## **11.10 Aspiration hazard**

no data available.

## **11.11 Additional Information**

No data available

# **12 ECOLOGICAL INFORMATION**

## **12.1 Toxicity**

Toxicity to fish:

Pimephales promelas: LC50=69,9 mg/L 96h

Toxicity to daphnia and other aquatic:

No data available

Toxicity to algae:

No data available

Toxicity to bacteria:

No data available

## **12.2 Persistence and degradability**

No data available

### 12.3 Bioaccumulative potential

Product does not bioaccumulate due to reaction with water

### 12.4 Mobility in soil

Reacts with water Is not likely mobile in the environment

### 12.5 Other adverse effects

Do not empty into drains.

## 13 DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Observe all federal, state and local regulations when disposing of the substance.

#### Contaminated packaging

Disposal must be made according to official regulations.

## 14 TRANSPORT INFORMATION

### 14.1 UN number

ADR/RID: 3488 IMDG: 3488 IATA: 3488

### 14.2 UN proper shipping name

ADR/RID: METHACRYLOYL CHLORIDE

IMDG: METHACRYLOYL CHLORIDE

IATA-DGR: Methacryloyl chloride

### 14.3 Transport hazard class(es)

ADR/RID: 6.1(3/8) IMDG: 6.1(3/8) IATA: 6.1(3/8)

### 14.4 Packaging group

ADR/RID: I IMDG: I IATA: I

### 14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

### 14.6 Special precautions for user

No data available

## 15. REGULATORY INFORMATION

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

Applicable regulations

Please pay attention to waste disposal and meet the requirements of local regulations.

## 16. OTHER INFORMATION

### Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Dangerous Goods

IATA: International Air Transport Association

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

CAS: Chemical Abstracts Service (division of the American Chemical Society)

### Further information

The above safety technical information is for reference only, because many physical and chemical properties are not entirely clear. Please consult information carefully before use and use after confirmation.

Anhui Senrise Technology Co., Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product. More terms of use, see invoice

information for details.

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