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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	m-Xylene
Product number	D050836
Brand	3ASenrise
CAS number	108-38-3

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: 0556-5500208

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 3), H226
Acute toxicity, Oral (Category 5), H303
Acute toxicity, Inhalation (Category 4), H332
Acute toxicity, Dermal (Category 4), H312
Skin corrosion/irritation (Category 2), H315
Serious eye damage/eye irritation (Category 2A), H319
Specific target organ toxicity - single exposure (Category 3), respiratory tract irritation, H335
Aspiration hazard (Category 1), H304 Short-term (acute) aquatic hazard (Category 2), H401
Long-term (chronic) aquatic hazard (Category 3), H412

2.2 GHS label elements, including precautionary statements

Pictogram

Signal word: Danger

Hazard statement(s)

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H226 Flammable liquid and vapour.
H335 May cause respiratory irritation.
H304 May be fatal if swallowed and enters airways.
H303 May be harmful if swallowed.
H401 Toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.
H312+H332 Harmful in contact with skin or if inhaled.

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.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P264 Wash hands thoroughly after handling.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P273 Avoid release to the environment.
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.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P332+P313 IF SKIN irritation occurs: Get medical advice/attention.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 IF eye irritation persists: Get medical advice/attention.
P331 Do NOT induce vomiting.
P370+P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P304+P340+P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.

Storage

P405 Store locked up.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.

Disposal

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

2.3 Physical and chemical hazards

H226 Flammable liquid and vapour.

2.4 Health hazards

H315 Causes skin irritation.
H319 Causes serious eye irritation.

H312 Harmful in contact with skin.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H304 May be fatal if swallowed and enters airways.
H303 May be harmful if swallowed.

2.5 Environmental hazards Code

H401 Toxic to aquatic life.
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	m-Xylene
Formula	C8H10
Molecular Weight	106.17
CAS	108-38-3
Concentration	99%

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

Carbon dioxide (CO2) Foam Dry powder

5.2 Special hazards arising from the substance or mixture

Carbon oxides Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air at elevated temperatures. Development of hazardous combustion gases or vapours possible in the event of fire.

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: RT

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 liquid
b) Odor	No data available
c) pH	No data available
d) Melting point/freezing point	-48.0 ° C at 1,013 hPa
e) Initial boiling point and boiling range	139.1 ° C at 1,013 hPa
f) Upper/lower flammability or explosive	Upper explosion limit: 7 %(V) Lower explosion

limits	limit: 1.1 %(V)
g) Flash point	27 ° C - closed cup
h) Evaporation rate	No data available
i) Vapor pressure	13.78 hPa at 29.4 ° C
j) Vapor density	No data available
k) Density	0.86 g/cm3 at 25 ° C
l) Water solubility	146 g/l at 25 ° C - partly soluble
m) Partition coefficient: n-octanol/water	No data available
n) Autoignition temperature	528.0 ° C at 1,013 hPa
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

rubber, various plastics

10.4 Hazardous decomposition products

In the event of fire: see section 5.

11 TOXICOLOGICAL INFORMATION

11.1 Acute toxicity

LD50 Oral

- Rat - male - 3,523 mg/kg

LC50 Inhalation

- Rat - male and female - 4 h - 27.12 mg/l - vapor

LD50 Dermal

- Rabbit - male - 12,126 mg/kg

11.2 Skin corrosion/irritation

Skin - Rabbit Result: Moderate skin irritation - 4 h Remarks: Drying-out effect resulting in rough and chapped skin. After long-term exposure to the chemical: Dermatitis

11.3 Serious eye damage/eye irritation

Eyes - Rabbit Result: Severe eye irritation - 24 h

11.4 Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse Result: negative

11.5 Germ cell mutagenicity

Test Type: sister chromatid exchange assay Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Method: Regulation (EC) No. 440/2008, Annex, B.19 Result: negative Test Type: Ames test Test system: Salmonella

11.6 Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

11.7 Reproductive toxicity

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

11.8 Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

11.9 Specific target organ toxicity - repeated exposure

No data available

11.10 Aspiration hazard

no data available.

11.11 Additional Information

Repeated dose toxicity - Rat - male and female - Oral - 90 Days - NOAEL (No observed adverse effect level) - 200 mg/kg RTECS: ZE2275000 Liver injury may occur. Kidney injury may occur. Blood disorders, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, narcosis, Lung irritation, chest pain, pulmonary edema, Central nervous system depression, Dermatitis, Gastrointestinal disturbance To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Kidney -

12 ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish:
static test LC50 - Oncorhynchus mykiss (rainbow trout) - 2.60 mg/l - 96 h
Toxicity to daphnia and other aquatic:
No data available
Toxicity to algae:
static test EC50 - Pseudokirchneriella subcapitata - 4.36 mg/l - 73 h
Toxicity to bacteria:
No data available

12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d Result: 98 % - Readily biodegradable. Chemical Oxygen Demand \(COD\) 2.62 g/g Theoretical oxygen 3.17 g/g demand Ratio BOD/ThBOD 80 %

12.3 Bioaccumulative potential

Bioaccumulation Oncorhynchus mykiss (rainbow trout) - 56 d at 10 °C - 1.3 mg/l(m-xylene) Bioconcentration factor (BCF): 7.4 - 18.5 Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

12.4 Mobility in soil

No data available

12.5 Other adverse effects

No data available

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: 1307 IMDG: 1307 IATA: 1307

14.2 UN proper shipping name

ADR/RID: M-XYLENE
IMDG: M-XYLENE

IATA-DGR: m-Xylene

14.3 Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

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

Regulations on the Control over Safety of Dangerous Chemicals.

This product is included in the list of dangerous chemicals.

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.

Tel： +86 -400-005-6266 Fax： +86 -0556-5555368 E-mail：Service@3asenrise.com

Add：No.88 Weisan Road, High-Tech Industrial Development Zone, Anqing, Anhui