

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT CODE

PRODUCT NAME

SUPPLIER

CIS 3 HEXENYL 2 METHYL BUTYRATE Shanghai M & U International Trade Co., Ltd.

Rm 1717, No 598 North NuJiang Road 200333 Shanghai, China +86-21-32515501 32515502 sales@mu-intel.com

FOR EMERGENCIES CALL CHEMTREC:

800-424-9300 (24-HOURS)

2. HAZARD IDENTIFICATION:

Classification of the substance or mixture GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Flammable liquids (Category 4), H227 Acute aquatic toxicity (Category 2), H401 Chronic aquatic toxicity (Category 2), H411 For the full text of the H-Statements mentioned in this Section, see Section 16

A0409

GHS Label elements, including precautionary statements

Pictogram

Signal word

Warning

Hazard statement(s)

H227	Combustible liquid
H411	Toxic to aquatic life with long lasting effects

Precautionary statement(s)

P210	Keep away from heat/sparks/open flames/hot surfaces No smoking
P273	Avoid release to the environment
P280	Wear protective gloves/ protective clothing/ eye protection/ face
	protection
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for
	extinction
P391	Collect spillage
P403 + P235	Store in a well-ventilated place, Keep cool

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

Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION AND INFORMATION ON INGREDIENTS:

Formula	C11 H20 O2
Molecular Weight	184.28 g/mol
CAS-No	53398-85-9
EC-No	258-517-4

4. FIRST-AID GUIDE:

Description of first aid measures General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area

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

Flush eyes with water as a precaution

If swallowed

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

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed No data available

5. FIRE-FIGHTING GUIDE:

Extinguishing media Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Special hazards arising from the substance or mixture

Carbon oxides

Advice for firefighters

Wear self contained breathing apparatus for firefighting if necessary

Further information

Use water spray to cool unopened containers

6. ACCIDENTAL RELEASE GUIDE:

Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8

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

Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wetbrushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal

Reference to other sections

For disposal see section 13

7. HANDLING AND STORAGE:

Precautions for safe handling

Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge. For precautions see section 2

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage

Specific end use(s)

No other specific uses are stipulated

8. EXPOSURE AND PERSONAL PROTECTION:

Control parameters Components with workplace control parameters

Contains no substances with occupational exposure limit values

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

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. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands

Body Protection

Impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance

Form Color Odor Odor Threshold pH Melting point/freezing point Initial boiling point and boiling range

Flash point Evaporation rate Flammability (solid, gas) Upper/lower flammability or explosive limits liquid colorless no data available no data available no data available no data available 192 - 193 °C (378 - 379 °F) at 1,013 hPa (760 mmHg) 83 °C (181 °F) - closed cup no data available no data available no data available Vapor pressure Vapor density Relative density Water solubility Partition coefficient: n-octanol/water Auto-ignition temperature Decomposition temperature Viscosity Explosive properties Oxidizing properties

Other safety information No data available

10. STABILITY AND REACTIVITY:

Reactivity No data available

Chemical stability Stable under recommended storage conditions

Possibility of hazardous reactions No data available

Conditions to avoid Heat, flames and sparks

Incompatible materials Strong oxidizing agents Strong oxidizing agents

Hazardous decomposition products Other decomposition products - no data available In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION:

Acute toxicity LD50 Oral - rat - > 5,000 mg/kg

Inhalation: no data available LD50 Dermal - rabbit - > 5,000 mg/kg

No data available

Skin corrosion/irritation

0.14 hPa (0.11 mmHg) at 25 °C (77 °F) no data available 0.878 g/mL at 25 °C (77 °F) insoluble log Pow: 3.83 no data available No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC

No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC

ACGIH

No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH

NTP

No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP

OSHA

No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

Additional Information RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

12. ECOLOGICAL INFORMATION:

Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 1.2 mg/l - 96 h

Persistence and degradability No data available

Bioaccumulative potential No data available

Mobility in soil No data available

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal Toxic to aquatic life with long lasting effects

No data available

13. DISPOSAL RECOMMENDATIONS:

Product

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company

Contaminated packaging

Dispose of as unused product

14. TRANSPORTATION INFORMATION:

DOT (US)

NA-Number: 1993 Class: CBL Packing group: III Proper shipping name: Combustible liquid, n.o.s. Marine pollutant: No Poison Inhalation Hazard: No

IMDG

UN number: 3082 Class: 9 Packing group: III EMS-No: F-A, S-F Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((Z)-Hex-3-enyl 2methylbutyrate) Marine pollutant: No

IATA

UN number: 3082 Class: 9 Packing group: III Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. ((Z)-Hex-3-enyl 2methylbutyrate)

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packaging and combination packaging containing, inner packaging with Dangerous Goods > 5L for liquids or > 5kg for solids

15. REGULATORY INFORMATION:

REACH No

A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313

SARA 311/312 Hazards

Fire Hazard

Massachusetts Right to Know Components

No components are subject to the Massachusetts Right to Know Act

Pennsylvania Right to Know Components

(Z)-Hex-3-enyl 2-methylbutyrate	CAS-No 53398-85-9
New Jersey Right to Know Components	
(Z)-Hex-3-envl 2-methylbutyrate	CAS-No

CAS-No 53398-85-9

California Prop 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm

16. OTHER INFORMATION:

Full text of H-Statements referred to under sections 2

Aquatic Acute Acute aquatic toxicity Aquatic Chronic Chronic aquatic toxicity Flam. Liq. Flammable liquids

H227	Combustible liquid
H401	Toxic to aquatic life

HMIS Rating

Health hazard	0
Chronic Health Hazard	
Flammability	2
Physical Hazard	0
NFPA Rating	
Health hazard	0
Fire Hazard	2
Reactivity Hazard	0

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