

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT CODE A0437

PRODUCT NAME TRIMOFIX O

SUPPLIER 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:

OSHA Hazards

Mild skin irritant

Carcinogenicity

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

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

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

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

3. COMPOSITION AND INFORMATION ON INGREDIENTS:

Synonym AMBER DECATRIENE

METHYL-2,6,10-TRIMETHYL-2,5,9-CYCLODODECATRIENE-1-YL

KETONE

Formula Not Specified Molecular Weight Not Specified

CAS-No EC-No

144020-22-4 Not Specified

4. FIRST-AID GUIDE:

First aid procedures

Inhalation

Remove from exposure site to fresh air and keep at rest. Obtain medical advice

Skin contact

Remove contaminated clothes. Wash thoroughly with water (and soap). Contact physician if symptoms persist

Eye contact

Flush immediately with water for at least 15 minutes. Contact physician if symptoms persist

Ingestion

Rinse mouth with water and obtain medical advice

5. FIRE-FIGHTING GUIDE:

Flash point

201.20 °F (94.00 °C)

Fire fighting

Suitable extinguishing media

Use water spray, dry chemical, carbon dioxide or appropriate foam

Protective equipment and precautions for firefighters

Special protective equipment for fire-fighters

Wear NIOSH approved self-contained breathing apparatus and full protective clothing when fighting fires involving chemicals. Use water spray to cool containers exposed to fire

6. ACCIDENTAL RELEASE GUIDE:

Personal precautions

Avoid inhalation and contact with skin and eyes. A self contained breathing apparatus is recommended in case of a major spill

Environmental precautions

Keep away from drains, surface- and groundwater and soil

Methods for containment /Methods for cleaning up

Clean up spillage promptly. Remove ignition sources. Provide adequate ventilation. Avoid excessive inhalation of vapors. Gross spillages should be contained by use of sand or inert powder and disposed of according to the local regulations

7. HANDLING AND STORAGE:

Handling

Avoid excessive inhalation of concentrated vapors. Follow good manufacturing practices for housekeeping and personal hygiene. Wash any exposed skin immediately after any chemical contact, before breaks and meals, and at the end of each work period. Contaminated clothing and shoes should be thoroughly cleaned before re-use. If appropriate, procedures used during the handling of this material should also be used when cleaning equipment or removing residual chemicals from tanks or other containers, especially when steam or hot water is used, as this may increase vapor concentrations in the workplace air. Where chemicals are openly handled, access should be restricted to properly trained employees. Keep all heated processes at the lowest necessary temperature in order to minimize emissions of volatile chemicals into the air

Advice on protection against fire and explosion

Keep away from ignition sources and naked flame

Requirements for storage areas and containers

Store in a cool, dry, ventilated area away from heat sources. Keep containers upright and tightly closed when not in use

8. EXPOSURE AND PERSONAL PROTECTION:

Engineering measures

Where feasible, isolate mixing rooms and other areas where this material is used or openly handled. Maintain these areas under negative air pressure relative to the rest of the plant. Where feasible, use closed systems to transfer and process this material

Personal protective equipment

Eve protection

Use tight-fitting goggles, face shield or safety glasses with side shields if eye contact might occur

Hand protection

Avoid skin contact. Use chemically resistant gloves

Respiratory protection

Use local exhaust ventilation around open tanks and other open sources of potential exposures in order to avoid excessive inhalation, including places where this material is openly weighed or measured. In addition, use general dilution ventilation of the work area to eliminate or reduce possible worker exposures. No respiratory protection is required during normal operations in a workplace where engineering controls such as adequate ventilation, etc. are sufficient

Hygiene measures

To the extent deemed appropriate, implement pre-placement and regularly scheduled ascertainment of symptoms and spirometry testing of lung function for workers who are regularly exposed to this material, To the extent deemed appropriate, use an experienced air sampling expert to identify and measure volatile chemicals that could be present in the workplace air to determine potential exposures and to ensure the continuing effectiveness of engineering controls and operational practices to minimize exposure

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance

Physical state liquid

Color colorless to pale yellow Odor conforms to standard

Safety data

Flash point 201.20 °F (94.00 °C) Vapor pressure < .01 hPa (< 0.01 mmHg)

Note: Calculated

Relative density (20 °C) 0.9820 - 0.9920

10. STABILITY AND REACTIVITY:

Conditions to avoid

Direct sources of heat

Chemical stability

Presents no significant reactivity hazard, by itself or in contact with water. Avoid contact with strong acids, alkali or oxidizing agents

Hazardous decomposition products

Note: Carbon monoxide and unidentified organic compounds may be formed during combustion

11. TOXICOLOGICAL INFORMATION:

Acute oral toxicity (Component)

Component: 144020-22-4

LD50 rat

Dose: > 5,000 mg/kg

Remarks: IFF

Skin irritation (Component)

Component: 144020-22-4

Human

Result: No skin irritation

Method: repeated insult patch test

Sensitization (Component)

Component: 144020-22-4

Human

Result: Did not cause sensitization on laboratory animals.

Test substance: 5.0% in ethanol

Repeated dose toxicity (Component)

Component: 144020-22-4

12. ECOLOGICAL INFORMATION:

Component

144020-22-4 TRIMOFIX Toxicity to fish

LC50 Species

Dose: 4.23 mg/l Exposure time: 96 h

13. DISPOSAL RECOMMENDATIONS:

Contaminated packaging

Place material into sealed containers and dispose of in accordance with local, state and federal regulations

14. TRANSPORTATION INFORMATION:

DOT

Not dangerous goods

IATA

UN number

3082

Description of the goods

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Acetic acid, anhydride, reaction products with trimethylcyclododecatriene)

Class

9

Packing group

TTT

ICAO-Labels

9

IMDG

UN number

3082

Description of the goods

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Acetic acid, anhydride, reaction products with trimethylcyclododecatriene)

Class

a

Packing group

Ш

ICAO-Labels

a

15. REGULATORY INFORMATION:

OSHA Hazards

Mild skin irritant

SARA 311/312 Hazards

Acute Health Hazard

HMIS Classification

Health hazard 1
Flammability 1
Physical and chemical hazards 0

16. OTHER INFORMATION:

The information in this MSDS was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond M&U's control, it is the responsibility of the user both to determine safe conditions for use of this product and to assume liability for loss, damage, or expense arising out of the products improper use. No warranty expressed or implied regarding the product described herein will be created by or inferred from any statement or omission in the MSDS. Various federal, state, or provincial agencies may have specific regulations concerning the transportation, handling, storage, use, or disposal of this product which may not be reflected in the MSDS. The user should review these regulations to ensure full compliance.