

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT CODE

A0398

MYRCENYL ACETATE

PRODUCT NAME

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:

Emergency Overview

OSHA Hazards

Combustible Liquid 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	(2-methyl-6-methylideneoct-7-en-2-yl) acetate		
Molecular Formula	C12 H20 O2		
Molecular Weight	196.27		
CAS-No	EC-No		
1118-39-4	214-262-0		

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:

Flammable properties

Flash point 180.00 °F (82.22 °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 vapours. 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:

Components with workplace control parameters

Engineering measures

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

Eye protection

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

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. If engineering controls and safe work practices are not sufficient, an approved, properly fitted respirator with organic vapor cartridges or canisters and particulate filters should be used:

- a) while engineering controls and appropriate safe work practices and/or procedures are being implemented; or
- b) during short term maintenance procedures when engineering controls are not in normal operation or are not sufficient; or
- c) if normal operational workplace vapor concentration in the air is increased due to heat ;
- d) during emergencies; or
- e) if engineering controls and operational practices are not sufficient to reduce airborne concentrations below an established occupational exposure limit

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

Protective measures

In December 2003, the National Institute for Occupational Safety and Health ("NIOSH") published an Alert on preventing lung disease in workers who use or make flavorings [NIOSH Publication Number 2004-110]. In August 2004, the United States Flavor and Extract Manufacturers Association (FEMA) issued a report entitled "Respiratory Safety in the Flavor Manufacturing Workplace". Both of these reports provide recommendations for reducing

employee exposure and for medical surveillance in the workplace. The recommendations in these reports are generally applicable to the use of any chemical in the workplace and you are strongly urged to review both of these reports. The report published by FEMA also contains a list of "high priority" chemicals. If any of these chemicals are present in this product at a concentration \geq 1.0% due to an intentional addition by M & U International, the chemical(s) will be identified in this safety data sheet

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance

Physical state Colour Odour **Safety data** Flash point Vapour pressure Note Relative density (20 °C) liquid colorless Conforms to Standard 180.00 °F (82.22 °C) 0.06 hPa (0.050 mmHg)

Calculated

0.9020 - 0.9130

10. STABILITY AND REACTIVITY:

Chemical stability

Remarks: 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: 1118-39-4 LD50 rat Dose: 6,300 mg/kg **Remarks: RIFM** Acute dermal toxicity LD50 rabbit Dose: > 5,000 mg/kgAcute dermal toxicity (Component) Component: 1118-39-4 LD50 rabbit Dose: > 5,000 mg/kg **Skin irritation (Component)** Component: 1118-39-4 human Result: No skin irritation Method: closed patch test Exposure time: 48 h rabbit

Result: Skin irritation Exposure time: 24 h Sensitization (Component) Component: 1118-39-4 Test substance: 0.0% Maximization study human Result: Did not cause sensitization on laboratory animals. Test substance: 4.0% in petrolatum Repeated dose toxicity (Component) Component: 1118-39-4

12. DISPOSAL RECOMMENDATIONS:

Contaminated packaging

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

13. TRANSPORTATION INFORMATION:

DOT			
Proper shipping name		Combustible liquid, n.o.s.	
UN-Number		1993	
Class		CBL	
Packing group		III	
Emergency Response Guidebook Number		128	
DOT NON-BULK	Not dangerous goods		
IATA	Not dangerous goods		
IMDG	Not dangerous goods		
14. REGULATORY INFORM	ATION:		
OSHA Hazards			
Combustible Liquid, Mild sk	in irritant		
SARA 311/312 Hazards			
Fire Hazard Acute, Health H	lazard		
HMIS Classification			
Health Hazard	1		
Flammability	2		

15. OTHER INFORMATION:

Physical and chemical hazards

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.

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