

#### SAFETY DATA SHEET

#### 1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT CODE A0003

**PRODUCT NAME** ALLYL CAPROATE (ALLYL HEXANOATE)

**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:

#### Classification of the substance or mixture



GHS06 Skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed

Acute Tox. 3 H311 Toxic in contact with skin

Acute Tox. 3 H331 Toxic if inhaled

H227 Combustible liquid

## Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Toxic

Toxic by inhalation



Harmful

Harmful in contact with skin and if swallowed

Dangerous for the environment

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

# Information concerning particular hazards for human and environment

Not applicable

#### Label elements

#### **GHS** label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS)

## **Hazard pictograms**



### Signal word

Danger

## Hazard-determining components of labeling

allyl caproate

## **Hazard statements**

Combustible liquid

Toxic if swallowed, in contact with skin or if inhaled

## **Precautionary statements**

Keep away from flames and hot surfaces. – No smoking

Avoid breathing dust/fume/gas/mist/vapors/spray

If swallowed: Immediately call a poison center/doctor

Specific treatment (see on this label)

Store locked up

Dispose of contents/container in accordance with local/regional/national/international regulations

### **Classification system:**

NFPA ratings (scale 0 - 4)



Health = 2

Fire = 2

Reactivity = 0

#### HMIS-ratings (scale 0 - 4)



Health = 2

Fire = 2

Reactivity = 0

## Other hazards Results of PBT and vPvB assessment PBT

Not applicable

#### **vPvB**

Not applicable

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS:

## **Chemical characterization: Substances**

## **CAS No Description**

123-68-2 allyl caproate

## **Identification number(s)**

EC number

204-642-4

#### 4. FIRST-AID GUIDE:

## **Description of first aid measures**

## **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident

#### After inhalation

In case of unconsciousness place patient stably in side position for transportation

#### After skin contact

Immediately wash with water and soap and rinse thoroughly

### After eye contact

Rinse opened eye for several minutes under running water

#### After swallowing

Immediately call a doctor

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

No further relevant information available

#### Indication of any immediate medical attention and special treatment needed

No further relevant information available

#### 5. FIRE-FIGHTING GUIDE:

#### **Extinguishing media**

## Suitable extinguishing agents

CO2 or extinguishing powder

Fight larger fires with alcohol resistant foam

## Special hazards arising from the substance or mixture

No further relevant information available

#### **Advice for firefighters**

**Protective equipment** 

No special measures required

#### **Additional information**

Cool endangered receptacles with water spray

Collect contaminated fire fighting water separately. It must not enter the sewage system

#### 6. ACCIDENTAL RELEASE GUIDE:

## Personal precautions, protective equipment and emergency procedures

Not required

#### **Environmental precautions**

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

## Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust)

Dispose contaminated material as waste according to item 13

#### Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment

See Section 13 for disposal information

#### 7. HANDLING AND STORAGE:

#### **Precautions for safe handling**

No special precautions are necessary if used correctly

#### Information about protection against explosions and fires

No special measures required

# Conditions for safe storage, including any incompatibilities

Storage

## Requirements to be met by storerooms and receptacles

No special requirements

## Information about storage in one common storage facility

Not required

#### **Further information about storage conditions**

None

## Specific end use(s)

No further relevant information available

#### 8. EXPOSURE AND PERSONAL PROTECTION:

## Additional information about design of technical systems:

No further data; see item 7

## **Control parameters**

## Components with limit values that require monitoring at the workplace

Not required.

#### **Additional information**

The lists that were valid during the creation were used as a basis

## **Exposure controls**

## Personal protective equipment

# General protective and hygienic measures

Keep away from foodstuffs, beverages and feed Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work Avoid contact with the skin

Avoid contact with the eyes and skin

## **Breathing equipment**

Not required

#### **Protection of hands**



The glove material has to be impermeable and resistant to the product/ the substance/ the preparation

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture

Selection of the glove material should be based on consideration of the penetration times, rates of diffusion and the degradation

#### **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer

#### Penetration time of glove material

The exact break through time has to be determined by the manufacturer of the protective gloves and has to be observed

#### **Eye protection**

Goggles recommended during refilling

# 9. PHYSICAL AND CHEMICAL PROPERTIES:

Information on basic physic	cal and chemical properties
General Information	cui una chemical properties
Appearance	
Form	Liquid
Color	Colorless to pale yellow
Odor	Fruity, Pineapple
Odor threshold	Not determined
pH-value	Not determined
Change in condition	
Melting point/Melting rang	e Undetermined
Boiling point/Boiling range	
Flash point	66 °C (151 °F)
Flammability (solid, gaseou	s) Not applicable
Ignition temperature	
<b>Decomposition temperature</b>	e Not determined
Auto igniting	Not determined
Danger of explosion	Not determined
<b>Explosion limits</b>	
Lower	Not determined
Upper	Not determined
Vapor pressure	Not determined
Density at 20 °C (68 °F)	0.893 g/cm³ (7.452 lbs/gal)
Relative density	Not determined
Vapor density	Not determined
<b>Evaporation rate</b>	Not determined
Solubility in / Miscibility wi	ith
Water	Not miscible or difficult to mix
Partition coefficient (n-octanol/water) Not determined	
Viscosity	
Dynamic	Not determined
Kinematic	Not determined
Organic solvents	0.0 %
Other information	No further relevant information available

## 10. STABILITY AND REACTIVITY:

Reactivity

**Chemical stability** 

Thermal decomposition / conditions to be avoided

No decomposition if used according to specifications

Possibility of hazardous reactions

No dangerous reactions known

#### Conditions to avoid

No further relevant information available

#### **Incompatible materials**

No further relevant information available

### **Hazardous decomposition products**

No dangerous decomposition products known

#### 11. TOXICOLOGICAL INFORMATION:

## **Information on toxicological effects**

## **Acute toxicity**

LD/LC50 values that are relevant for classification		
123-68-2	123-68-2 allyl caproate	
Oral	LD50	218 mg/kg (rat)
Dermal	LD50	300 mg/kg (rabbit)

#### **Primary irritant effect**

On the skin Irritant to skin and mucous membranes

On the eye No irritating effect

#### Sensitization

No sensitizing effects known

## Additional toxicological information

## Carcinogenic categories

0 0	
IARC (International Agency for Research on Cancer)	
Substance is not listed	
NTP (National Toxicology Program)	
Substance is not listed	
OSHA-Ca (Occupational Safety & Health Administration)	
Substance is not listed	

## 12. ECOLOGICAL INFORMATION:

## **Toxicity**

Aquatic toxicity		c toxicity
	123-68-	2 allyl caproate
	EC50	2 mg/kg (daphnia)

Persistence and degradabilityNo further relevant information availableBioaccumulative potentialNo further relevant information availableMobility in soilNo further relevant information available

#### **Ecotoxical effects**

**Remark** Very toxic for fish

## Additional ecological information

#### **General notes**

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground

Also poisonous for fish and plankton in water bodies

Very toxic for aquatic organisms

# Results of PBT and vPvB assessment PBT

Not applicable

#### **vPvB**

Not applicable

#### Other adverse effects

No further relevant information available

#### 13. DISPOSAL RECOMMENDATIONS:

#### Waste treatment methods

#### Recommendation

Must not be disposed of together with household garbage Do not allow product to reach sewage system

# **Uncleaned packaging**

## Recommendation

Disposal must be made according to official regulations

#### 14. TRANSPORTATION INFORMATION:

UN-Number	
DOT, ADR, IMDG, IATA	UN2810
UN proper shipping name	
DOT	Toxic, liquids, organic, n.o.s. (allyl caproate)
ADR	2810 Toxic, liquids, organic, n.o.s. (Allyl caproate),
	ENVIRONMENTALLY HAZARDOUS
	2810 GI FTI GER ORGANI SCHER FLÜSSI GER
	STOFF, N.A.G. (Allyl hexanoat),
	UMWELTGEFÄHRDEND
IMDG	TOXIC LIQUID, ORGANIC, N.O.S. (Allyl caproate),
	MARINE POLLUTANT
IATA	TOXIC LIQUID, ORGANIC, N.O.S. (Allyl caproate)

Transport hazard class(es)	
DOT	
<b>9</b>	
Class	6.1 Toxic substances
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Class	6.1 Toxic substances
Label	6.1 Toxic substances 6.1
Label Packing group	6.1
Label Packing group DOT, ADR, IMDG, IATA	
Label Packing group DOT, ADR, IMDG, IATA Environmental hazards	6.1
Label Packing group DOT, ADR, IMDG, IATA	6.1 III Yes
Label Packing group DOT, ADR, IMDG, IATA Environmental hazards Marine pollutant	6.1  III  Yes Symbol (fish and tree)
Packing group DOT, ADR, IMDG, IATA Environmental hazards Marine pollutant Special marking (ADR)	6.1  III  Yes  Symbol (fish and tree)  Symbol (fish and tree)
Label Packing group DOT, ADR, IMDG, IATA Environmental hazards Marine pollutant  Special marking (ADR) Special precautions for user	6.1  Yes Symbol (fish and tree) Symbol (fish and tree) Warning: Toxic substances
Packing group DOT, ADR, IMDG, IATA Environmental hazards Marine pollutant  Special marking (ADR) Special precautions for user Danger code (Kemler)	6.1  Yes Symbol (fish and tree) Symbol (fish and tree) Warning: Toxic substances 60
Packing group DOT, ADR, IMDG, IATA Environmental hazards Marine pollutant  Special marking (ADR) Special precautions for user Danger code (Kemler) EMS Number	6.1  III  Yes Symbol (fish and tree) Symbol (fish and tree) Warning: Toxic substances 60 F-A,S-A
Packing group DOT, ADR, IMDG, IATA Environmental hazards Marine pollutant  Special marking (ADR) Special precautions for user Danger code (Kemler) EMS Number Transport in bulk according to An	6.1  III  Yes Symbol (fish and tree) Symbol (fish and tree) Warning: Toxic substances 60 F-A,S-A  INNEX II of
Packing group DOT, ADR, IMDG, IATA Environmental hazards Marine pollutant  Special marking (ADR) Special precautions for user Danger code (Kemler) EMS Number Transport in bulk according to An MARPOL73/78 and the IBC Code	6.1  Yes Symbol (fish and tree) Symbol (fish and tree) Warning: Toxic substances 60 F-A,S-A  Anex II of Not applicable
Packing group DOT, ADR, IMDG, IATA Environmental hazards Marine pollutant  Special marking (ADR) Special precautions for user Danger code (Kemler) EMS Number Transport in bulk according to An MARPOL73/78 and the IBC Code Transport/Additional information	6.1  Yes Symbol (fish and tree) Symbol (fish and tree) Warning: Toxic substances 60 F-A,S-A  Anex II of Not applicable
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Packing group DOT, ADR, IMDG, IATA Environmental hazards Marine pollutant  Special marking (ADR) Special precautions for user Danger code (Kemler) EMS Number Transport in bulk according to An MARPOL73/78 and the IBC Code Transport/Additional information DOT Quantity limitations	6.1  Yes Symbol (fish and tree) Symbol (fish and tree) Warning: Toxic substances 60 F-A,S-A  Anex II of Not applicable  Con passenger aircraft/rail: 60 L
Packing group DOT, ADR, IMDG, IATA Environmental hazards Marine pollutant  Special marking (ADR) Special precautions for user Danger code (Kemler) EMS Number Transport in bulk according to An MARPOL73/78 and the IBC Code Transport/Additional information DOT Quantity limitations  ADR	6.1  III  Yes Symbol (fish and tree) Symbol (fish and tree) Warning: Toxic substances 60 F-A,S-A  INTERIM OF Not applicable  Con passenger aircraft/rail: 60 L On cargo aircraft only: 220 L
Packing group DOT, ADR, IMDG, IATA Environmental hazards Marine pollutant  Special marking (ADR) Special precautions for user Danger code (Kemler) EMS Number Transport in bulk according to An MARPOL73/78 and the IBC Code Transport/Additional information DOT Quantity limitations	Yes Symbol (fish and tree) Symbol (fish and tree) Warning: Toxic substances 60 F-A,S-A  MEX II of Not applicable  :  On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L  Code: E1
Packing group DOT, ADR, IMDG, IATA Environmental hazards Marine pollutant  Special marking (ADR) Special precautions for user Danger code (Kemler) EMS Number Transport in bulk according to An MARPOL73/78 and the IBC Code Transport/Additional information DOT Quantity limitations  ADR	6.1  III  Yes Symbol (fish and tree) Symbol (fish and tree) Warning: Toxic substances 60 F-A,S-A  INTERIM OF Not applicable  Con passenger aircraft/rail: 60 L On cargo aircraft only: 220 L

IMDG		
Limited quantities (LQ)	5L	
Excepted quantities (EQ)	CQ) Code: E1	
	Maximum net quantity per inner packaging: 30 ml	
	Maximum net quantity per outer packaging: 1000 ml	
UN "Model Regulation"	N "Model Regulation" UN2810, Toxic, liquids, organic, n.o.s. (Allyl caproate)	
	ENVIRONMENTALLY HAZARDOUS, 6.1, III	

#### **15. REGULATORY INFORMATION:**

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

Sara

**Section 355 (extremely hazardous substances)** 

Substance is not listed

Section 313 (Specific toxic chemical listings)

Substance is not listed

**TSCA (Toxic Substances Control Act)** 

Substance is listed

Proposition 65 Chemicals known to cause cancer Substance is not listed

Chemicals known to cause reproductive toxicity for females

Substance is not listed

Chemicals known to cause reproductive toxicity for males

Substance is not listed

Chemicals known to cause developmental toxicity

Substance is not listed

**Carcinogenic categories** 

**EPA (Environmental Protection Agency)** 

Substance is not listed

**TLV** (Threshold Limit Value established by ACGIH)

Substance is not listed

NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed

**GHS** label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS)

## **Hazard pictograms**



GHS06

#### Signal word

Danger

## Hazard-determining components of labeling

allyl caproate

#### **Hazard statements**

Combustible liquid Toxic if swallowed, in contact with skin or if inhaled

#### **Precautionary statements**

Keep away from flames and hot surfaces. – No smoking.

Avoid breathing dust/fume/gas/mist/vapors/spray

If swallowed: Immediately call a poison center/doctor

Specific treatment (see on this label)

Store locked up

Dispose of contents/container in accordance with local/regional/national/international regulations

#### **Chemical safety assessment:**

A Chemical Safety Assessment has not been carried out

#### **16. OTHER INFORMATION:**

The information in this SDS 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 SDS. 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 SDS. The user should review these regulations to ensure full compliance.

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