

**1. PRODUCT AND COMPANY IDENTIFICATION:**

**PRODUCT CODE** A0334  
**PRODUCT NAME** ALLYL METHYL DISULFIDE  
**SUPPLIER** Shanghai M & U International Trade Co., Ltd.  
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**FOR EMERGENCIES CALL CHEMTREC: 800-424-9300 (24-HOURS)**

**2. HAZARD IDENTIFICATION:**

**Classification of the substance or mixture:**



Flam. Liq. 3	H226 Flammable liquid and vapor.
Acute Tox. 4	H301 Harmful if swallowed
Skin Irrit. 2	H315 Causes skin irritation
Eye Irrit. 2 A	H319 Causes serious eye irritation.
STOT SE 3	H336 may cause drowsiness or dizziness

**Label elements**

Harmful in contact with skin and vapor.

**GHS label elements**

Pictograms on label shall be in the shape of a square set at a point and shall include a black hazard symbol on a white background with a red frame sufficiently wide to be clearly visible. The substance is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms**



**Signal word**

Warning

**Hazard statements**

H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

**Precautionary statements**

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/ventilation/lighting equipment.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapor/spray.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in well ventilated area.
P280	Wear protective gloves/clothing/eye and face protection.
P301+P310	If swallowed: immediately call a poison center/doctor.
P303+P361	In on skin: Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	If inhaled: Remove victim to fresh air and keep at rest in a position comfortable.
P305+P351	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so.
P312	Call a POISON CENTER if you feel unwell.
P403+P235	Store in a well-ventilated place. Keep cool and keep container tightly closed.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

**Classification system:****NFPA ratings (scale 0 - 4)**

Health = 2  
Fire = 3  
Reactivity = 1

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

Health = 2  
Fire = 3  
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.:** 2179-58-0

**Description:** allyl methyl sulfide

**Identification number(s)**

**EC No.:** 218-549-1

**4. FIRST-AID GUIDE:**

**Description of first aid measures**

**After inhalation:**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**After skin contact:**

Wash with plenty of soap and water.

**After eye contact:**

Remove contact lenses if present and easy to do so. Rinse opened eye for several minutes under running water. Consult a doctor.

**After swallowing:**

Call a control center or doctor immediately. If swallowed rinse mouth with water (only if person is conscious). If symptoms persist consult doctor.

**Information for 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 firefighting water separately. It must not enter the sewage system.

**6. ACCIDENTAL RELEASE GUIDE:****Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away. Avoid contact with skin or inhalation of spillage, dust or vapor. Do not touch damaged containers or spilled material. Beware of vapors accumulating to form explosive concentrations.

**Environmental precautions:**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

**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:****Handling:****Precautions for safe handling**

Avoid contact with eyes, skin, and clothing. Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols. Do not handle or store near an open flame. Take precautionary measures against static charges. Avoid breathing vapor.

**Information about protection against explosions and fires:**

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.

**Conditions for safe storage, including any incompatibilities**

**Storage:**

**Requirements to be met by storerooms and receptacles:**

Keep container closed, handle containers with care.

**Information about storage in one common storage facility:**

Not required.

**Further information about storage conditions:**

Store in cool, dry location. Keep receptacle tightly sealed.

**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:**

Component	Value	Control Parameters	Basis	Remarks
n-Butanol CAS-No.: 71-36-3	TWA	20 ppm	USA ACGIH TLV	Eye and upper Respiratory tract
	C	50 ppm 300mg/m <sup>3</sup>	OSHA Table-Z limits for air contaminants	Skin notation
	TWA	100 ppm 300 mg/m <sup>3</sup>	OSHA Table-z 1 limits for contaminants	

**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 eyes and skin.

**Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

**Protection of hands:**



### Protective gloves

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:



Tightly sealed goggles.

## 9. PHYSICAL AND CHEMICAL PROPERTIES:

Information on basic physical and chemical properties

<b>General Information</b>	
<b>Appearance:</b>	
<b>Form:</b>	Liquid
<b>Color:</b>	According to product spec
<b>Odor:</b>	According to product spec
<b>Odour threshold:</b>	Not determined.
<b>pH-value:</b>	Not determined.
<b>Change in condition</b>	
<b>Melting point/Melting range:</b>	Not determined
<b>Boiling point/Boiling range:</b>	84°C
<b>Flash point:</b>	>93°C
<b>Flammability (solid, gaseous):</b>	Not applicable.
<b>Ignition temperature:</b>	Not determined
<b>Decomposition temperature:</b>	Not determined.
<b>Auto igniting:</b>	Not determined.
<b>Danger of explosion:</b>	Not determined
<b>Explosion limits:</b>	
<b>Lower:</b>	
<b>Upper:</b>	

<b>Vapor pressure:</b>	Not determined.
<b>Density at 25 °C (68 °F):</b>	0.980
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>Evaporation rate</b>	Not determined.
<b>Solubility in / Miscibility with Water:</b>	Not miscible or difficult to mix.
<b>Partition coefficient (n-octanol/water):</b>	Not determined.
<b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
<b>Organic solvents:</b>	Not determined.
<b>Other information</b>	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

Vapors may form explosive mixture with air.

#### Conditions to avoid

Heat, flames, and sparks.

#### Incompatible materials:

Strong oxidizing agents, alkali metals, bases, strong acids, halogens.

#### Hazardous decomposition products:

No dangerous decomposition products known.

## 11. TOXICOLOGICAL INFORMATION:

### Information on toxicological effects

#### Acute toxicity:

#### Primary irritant effect:

##### On the skin:

Irritant to skin and mucous membranes.

##### On the eye:

Irritating effect.

#### Sensitization:

No sensitizing effects known.

**Additional toxicological information:**

**Carcinogenic categories**

**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:**

Toxicity to fish LC50 Pimephales promelas (fathead minnow) - 1,840 mg/l - 96 h

Toxicity to daphnia EC50 - Daphnia magna (Water flea) - 1,983 mg/l - 48 h

**Persistence and degradability**

No further relevant information available.

**Behavior in environmental systems:**

**Bioaccumulative potential**

Not biodegradable.

**Mobility in soil**

No further relevant information available.

**Additional ecological information:**

**General notes:**

Water hazard class 1 (assessment by list): hazardous for water. Do not let discharge reach drains, Water courses, or onto the ground. Do not allow material to enter drains, sewers/water supplies.

**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. Empty containers should be taken to an approved waste handling site for recycling or disposal.

**Uncleaned packaging:****Recommendation:**

Disposal must be made according to official regulations.

**14. TRANSPORTATION INFORMATION:**

<b>UN-Number DOT, ADR, IMDG, IATA</b>	UN1993
<b>UN proper shipping name DOT ADR IMDG, IATA</b>	FLAMMABLE LIQUID N.O.S
<b>Transport hazard class(es) DOT, ADR, IMDG, IATA Class</b>	3
<b>Packing group DOT, ADR, IMDG, IATA</b>	III
<b>Environmental hazards: Marine pollutant:</b>	No
<b>Special precautions for user Danger code: EMS No.: Stowage Category</b>	Not applicable.
<b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
<b>Transport/Additional information: DOT Quantity limitations</b>	Not applicable.
<b>ADR Excepted quantities (EQ)</b>	Not applicable.
<b>IMDG Limited quantities (LQ) Excepted quantities (EQ)</b>	Not applicable.
<b>UN "Model Regulation":</b>	Not applicable.

**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 311/312 (hazardous chemical):** Yes

**Section 313 (Specific toxic chemical listings):**

Substance is not listed.

**TSCA (Toxic Substances Control Act):**

Substance is not 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**

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**Hazard pictograms**

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**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.

**Prepared By:** M&U International LLC

**REVISED:** 05/07/2018

