



Shanghai M&U Int'l Trade Co.,Ltd.

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT CODE	A0001
PRODUCT NAME	ACETOIN
SUPPLIER	Shanghai M & U International Trade Co., Ltd. Room 908, Building #5, No. 898 Xiuwen Road 201199 Shanghai, China +86-21-32515501 32515502 sales@mu-intel.com

2. HAZARD IDENTIFICATION:

Classification of the substance or mixture



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor

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

R10: Flammable

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



GHS02

Signal word

Warning

Hazard statements

Flammable liquid and vapor

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Use explosion-proof electrical/ventilating/lighting/equipment

Wear protective gloves/eye protection/face protection

Ground/bond container and receiving equipment

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

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

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

Health = 0

Fire = 2

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 0

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
513-86-0	acetoin liquid

Identification number(s)**EC number**

208-174-1

4. FIRST-AID GUIDE:**Description of first aid measures**

After inhalation

Supply fresh air; consult doctor in case of complaints

After skin contact

Generally the product does not irritate the skin

After eye contact

Rinse opened eye for several minutes under running water

After swallowing

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

For safety reasons unsuitable extinguishing agents

Water with full jet

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

Environmental precautions

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)

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**

No special precautions are necessary if used correctly

Information about protection against explosions and fires

Keep ignition sources away - Do not smoke

Protect against electrostatic charges

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

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**

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**

Wash hands before breaks and at the end of work

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



Tightly sealed goggles

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance	
Form	LIQUID
Colour	COLORLESS TO PALE YELLOW
Safety data	
pH	no data available
Melting point (°C)	no data available
Boiling point (°C)	148
Flash point (°F) Closed cup	123
Ignition temperature	no data available
Auto ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure (mm Hg@20 °C)	no data available
Density @25 °C	1.000
Water solubility	MISCIBLE
Partition coefficient (n-octanol/water)	no data available
Relative vapour density	no data available
Odor	PLEASANT, BUTTER-LIKE

Odour Threshold	no data available
Evaporation rate	no data 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		
513-86-0 acetoin liquid		
Oral	LD50	>50000 mg/kg (rat)
Dermal	LD50	>50000 mg/kg (rabbit)

Primary irritant effect

On the skin

No irritant effect

On the eye

No 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

No further relevant information available

Persistence and degradability

No further relevant information available

Behavior in environmental systems

Bioaccumulative potential

No further relevant information available

Mobility in soil

No further relevant information available

Additional ecological information

General notes

Water hazard class 1 (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system

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

Un cleaned packaging

Recommendation

Disposal must be made according to official regulations

14. TRANSPORTATION INFORMATION:

UN-Number	UN2621
DOT, ADR, IMDG, IATA	
UN proper shipping name	Acetyl methyl carbinol
DOT	2621 Acetyl methyl carbinol
ADR	ACETYL METHYL CARBINOL
MDG, IATA	
Transport hazard class (es)	
DOT	
	
Class	3 Flammable liquids
Label	3
ADR	
	
Class	3 (F1) Flammable liquids
Label	3
MDG, IATA	
	
Class	3 Flammable liquids
Label	3
Packing group	III
DOT, ADR, IMDG, IATA	
Environmental hazards	No
Marine pollutant	No
Special precautions for user	Warning: Flammable liquids
Danger code (Kemler)	30
EMS Number	F-A,S-G
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable
Transport/Additional information:	
DOT	
Quantity limitations	On passenger aircraft/rail: 60 L

On cargo aircraft only: 220 L	
ADR Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
IMDG Limited quantities (LQ) Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation"	UN2621, Acetyl methyl carbinol, 3, 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

Sara 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

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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: Shanghai M & U International Trade Co., Ltd.

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