

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT CODE A0001

PRODUCT NAME ACETOIN

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



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



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)



HMIS-ratings (scale 0 - 4)



Health = 0Fire = 2

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 acetoin liquid 513-86-0

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	
рН	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)	

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:

DOT, ADR, IMDG, IATA	UN2621
UN proper shipping name	
DOT	Acetyl methyl carbinol
ADR	2621 Acetyl methyl carbinol
MDG, IATA	ACETYL METHYL CARBINOL
Transport hazard class (es) DOT	
Class	3 Flammable liquids
Label	3
Class	3 (F1) Flammable liquids
Label	3 (F1) Flammable liquids
MDG, IATA	
Closs	3 Flammable liquids
Class Label	3 Flammable liquids
Label	3 Flammable liquids 3
Class Label Packing group DOT, ADR, IMDG, IATA	
Label Packing group	3
Label Packing group DOT, ADR, IMDG, IATA Environmental hazards Marine pollutant	3 III No
Label Packing group DOT, ADR, IMDG, IATA Environmental hazards Marine pollutant Special precautions for user	3 III No Warning: Flammable liquids
Label Packing group DOT, ADR, IMDG, IATA Environmental hazards Marine pollutant Special precautions for user Danger code (Kemler)	3 III No Warning: Flammable liquids 30
Label Packing group DOT, ADR, IMDG, IATA Environmental hazards Marine pollutant Special precautions for user Danger code (Kemler) EMS Number	3 III No Warning: Flammable liquids
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Label Packing group DOT, ADR, IMDG, IATA Environmental hazards Marine pollutant Special precautions for user Danger code (Kemler) EMS Number Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	3 III No Warning: Flammable liquids 30
Label Packing group DOT, ADR, IMDG, IATA Environmental hazards Marine pollutant Special precautions for user Danger code (Kemler) EMS Number Transport in bulk according to Annex II of	3 III No Warning: Flammable liquids 30 F-A,S-G

	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)	5L	
Excepted quantities (EQ)	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

GHS label elements

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Hazard pictograms



Signal word Warning

Hazard statements

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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

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

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