

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Reference number: 00016
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# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Substance Product form

Trade name **ACETONITRILE AR IUPAC** name Ethanenitrile

EC Index-No. 608-001-00-3 EC-No. 200-835-2 CAS-No. 75-05-8 Product code 00016 Type of product Solvents C2H3N Formula

Chemical structure

Synonyms : Methyl cyanide

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial

For professional use only

Use of the substance/mixture : Solvents

> Laboratory chemicals Manufacture of substances

#### 1.2.2. Uses advised against

No additional information available

# 1.3. Details of the supplier of the safety data sheet

LOBA CHEMIE PVT.LTD.

107 Wode House Road, Jehangir Villa, Colaba

400005 Mumbai

INDIA

T +91 22 6663 6663 - F +91 22 6663 6699

info@lobachemie.com - www.lobachemie.com

# 1.4. Emergency telephone number

Emergency number : + 91 22 6663 6663 (9:00am - 6:00 pm)

# **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

# Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 2 H225 Acute toxicity (oral), Category 4 H302 Acute toxicity (dermal), Category 4 H312 Acute toxicity (inhal.), Category 4 H332 Serious eye damage/eye irritation, Category 2 H319 Full text of H- and EUH-statements: see section 16

# Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. Harmful in contact with skin. Harmful if inhaled. Harmful if swallowed. Causes serious eye irritation.

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#### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)





GHS02

: Danger

GHS07

Signal word (CLP)

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.

H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled.

H319 - Causes serious eye irritation.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P280 - Wear protective clothing, eye protection, face protection, protective gloves.

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

#### 2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

# **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

 Mono-constituent Substance type : ACETONITRILE Name CAS-No. 75-05-8 EC-No. 200-835-2 EC Index-No. 608-001-00-3

# 3.2. Mixtures

Not applicable

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial

respiration if necessary. If you feel unwell, seek medical advice. Call a poison center or a

doctor if you feel unwell.

First-aid measures after skin contact Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Rinse skin with water/shower. Take off immediately all contaminated

clothing. Wash skin with plenty of water.

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with

water for several minutes. If eye irritation persists: Get medical advice/attention.

Rinse mouth out with water. If you feel unwell, seek medical advice. Rinse mouth. Call a First-aid measures after ingestion

poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation : Harmful if inhaled.

Symptoms/effects after skin contact : Harmful in contact with skin.

Symptoms/effects after eye contact Causes serious eye irritation. Eye irritation.

Symptoms/effects after ingestion : Harmful if swallowed.

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

Treat symptomatically.

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#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2). Water spray. Dry

powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.

Explosion hazard : May form flammable/explosive vapour-air mixture.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

# **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames.

No smoking.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. No open flames, no sparks, and

no smoking. Avoid contact with skin, eyes and clothing. Avoid breathing dust, fume, gas,

mist, spray, vapours.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Use personal protective

equipment as required. For further information refer to section 8: "Exposure

controls/personal protection".

Emergency procedures : Stop release.

#### 6.2. Environmental precautions

Avoid release to the environment

# 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Collect spillage. On land, sweep or shovel into

suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

Additional hazards when processed Precautions for safe handling

: Handle empty containers with care because residual vapours are flammable.

: Ensure good ventilation of the work station. No open flames. No smoking. Use only non-sparking tools. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area. Avoid breathing dust,

fume, gas, mist, spray, vapours.

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Hygiene measures

: Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling. Wash contaminated clothing before reuse. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures

: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical, lighting, ventilating equipment.

Storage conditions

: Keep in fireproof place. Keep container tightly closed. Store in a well-ventilated place. Keep

cool.

Incompatible materials

: Heat sources.

#### 7.3. Specific end use(s)

No additional information available

# SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

# 8.1.1 National occupational exposure and biological limit values

No additional information available

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

#### Personal protective equipment symbol(s):







#### 8.2.2.1. Eye and face protection

#### Eye protection:

Chemical goggles or safety glasses

# 8.2.2.2. Skin protection

# Skin and body protection:

Wear suitable protective clothing

#### Hand protection:

Protective gloves

#### 8.2.2.3. Respiratory protection

No additional information available

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#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

#### **Environmental exposure controls:**

Avoid release to the environment.

# **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Clear liquid.
Molecular mass : 41.05 g/mol
Colour : Colourless.
Odour : faint odour.
Odour threshold : No data available

pH :  $\approx 7$  pH solution concentration : 5% Relative evaporation rate (butylacetate=1) : 5.79

Decomposition temperature : No data available Flammability (solid, gas) : Flammable

Highly flammable liquid and vapour, Not applicable

Vapour pressure : 98.64 hPa at 20°C

Relative vapour density at 20 °C : 1.4

Relative density : No data available Density : 0.78 – 0.79 g/cm³

Relative gas density : 1.4

Solubility : Water: Completely miscible

Partition coefficient n-octanol/water (Log Pow) : -0.54 at 25°C - Bioaccumulation is not expected

Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

#### 9.2. Other information

No additional information available

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Highly flammable liquid and vapour.

# 10.2. Chemical stability

Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

# 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Open flame. Direct sunlight. Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

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# 10.5. Incompatible materials

No additional information available

# 10.6. Hazardous decomposition products

May release flammable gases.

# **SECTION 11: Toxicological information**

# 11.1 Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.

Acute toxicity (dermal) : Harmful in contact with skin.

Acute toxicity (inhalation) : Harmful if inhaled.
Skin corrosion/irritation : Not classified

pH: ≈ 7

Serious eye damage/irritation : Causes serious eye irritation.

pH: ≈ 7

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

Potential adverse human health effects and : Harmful if swallowed, Harmful in contact with skin.

symptoms

# **SECTION 12: Ecological information**

## 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse

effects in the environment.

Hazardous to the aquatic environment, short-term

(acute

Hazardous to the aquatic environment, long-term

(chronic)

Not classified

: Not classified

# 12.2. Persistence and degradability

No additional information available

# 12.3. Bioaccumulative potential

# **ACETONITRILE AR (75-05-8)**

Partition coefficient n-octanol/water (Log Pow) -0.54 at 25°C - Bioaccumulation is not expected

# 12.4. Mobility in soil

No additional information available

# 12.5. Results of PBT and vPvB assessment

No additional information available

# 12.6. Other adverse effects

No additional information available

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#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste treatment methods

Product/Packaging disposal recommendations

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Dispose of contents/container to a licensed hazardous-waste disposal contractor or

collection site except for empty clean containers which can be disposed of as non-

hazardous waste.

Additional information : Handle empty containers with care because residual vapours are flammable. Flammable

vapours may accumulate in the container.

# **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

#### 14.1 UN number

 UN-No. (ADR)
 : UN 1648

 UN-No. (IMDG)
 : UN 1648

 UN-No. (IATA)
 : UN 1648

 UN-No. (ADN)
 : UN 1648

 UN-No. (RID)
 : UN 1648

# 14.2. UN proper shipping name

Proper Shipping Name (ADR) : ACETONITRILE
Proper Shipping Name (IMDG) : ACETONITRILE
Proper Shipping Name (IATA) : Acetonitrile
Proper Shipping Name (ADN) : ACETONITRILE
Proper Shipping Name (RID) : ACETONITRILE

Transport document description (ADR) : UN 1648 ACETONITRILE, 3, II, (D/E)
Transport document description (IMDG) : UN 1648 ACETONITRILE, 3, II (2°C c.c.)

Transport document description (IATA) : UN 1648 Acetonitrile, 3, II
Transport document description (ADN) : UN 1648 ACETONITRILE, 3, II
Transport document description (RID) : UN 1648 ACETONITRILE, 3, II

# 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : 3
Danger labels (ADR) : 3



#### **IMDG**

Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3



#### IATA

Transport hazard class(es) (IATA) : 3
Danger labels (IATA) : 3



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#### ADN

Transport hazard class(es) (ADN) : 3 3 Danger labels (ADN)



**RID** 

Transport hazard class(es) (RID)

Danger labels (RID)



# 14.4. Packing group

: 11 Packing group (ADR) : II Packing group (IMDG) Packing group (IATA) : II Packing group (ADN) : 11 Packing group (RID) : 11

#### 14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

# 14.6. Special precautions for user

#### **Overland transport**

Classification code (ADR) : F1 Limited quantities (ADR) : 11 Excepted quantities (ADR) : E2

: P001, IBC02, R001 Packing instructions (ADR)

Mixed packing provisions (ADR) : MP19 Portable tank and bulk container instructions (ADR) : T7 : TP2 Portable tank and bulk container special provisions

(ADR)

Tank code (ADR) : LGBF Vehicle for tank carriage : FL Transport category (ADR) : 2 Special provisions for carriage - Operation (ADR) S2, S20 :

Hazard identification number (Kemler No.) : 33

Orange plates

33 1648

Tunnel restriction code (ADR) : D/E EAC code : •2YE

# Transport by sea

Limited quantities (IMDG) : 1L Excepted quantities (IMDG) : E2 Packing instructions (IMDG) : P001 IBC packing instructions (IMDG) : IBC02 Tank instructions (IMDG) : T7 Tank special provisions (IMDG) : TP2 EmS-No. (Fire) : F-E

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EmS-No. (Spillage): S-DStowage category (IMDG): BStowage and handling (IMDG): SW2Flash point (IMDG): 2°C c.c.

Properties and observations (IMDG) : Colourless, volatile liquid. Flashpoint: 2°C c.c. Explosive limits: 3% to 16% Miscible with

water. When involved in a fire, evolves toxic cyanide fumes. Harmful if swallowed, by skin

contact or by inhalation.

MFAG-No : 127

Air transport

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) : Y341 PCA limited quantity max net quantity (IATA) : 1L PCA packing instructions (IATA) 353 PCA max net quantity (IATA) 5L CAO packing instructions (IATA) 364 CAO max net quantity (IATA) 60L ERG code (IATA) : 3L

Inland waterway transport

Classification code (ADN) : F1
Limited quantities (ADN) : 1 L

Excepted quantities (ADN) : E2
Carriage permitted (ADN) : T

Equipment required (ADN) : PP, EX, A

Ventilation (ADN) : VE01

Number of blue cones/lights (ADN) : 1

Rail transport

Classification code (RID) : F1
Limited quantities (RID) : 1L
Excepted quantities (RID) : E2

Packing instructions (RID) : P001, IBC02, R001

Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T7
Portable tank and bulk container special provisions : TP2

(RID)

Tank codes for RID tanks (RID) : LGBF
Transport category (RID) : 2
Colis express (express parcels) (RID) : CE7
Hazard identification number (RID) : 33

# 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

# **SECTION 15: Regulatory information**

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

#### 15.1.1. EU-Regulations

# **REACH Annex XVII (Restriction List)**

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3(a)	ACETONITRILE AR
3(b)	ACETONITRILE AR
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#### **REACH Annex XIV (Authorisation List)**

ACETONITRILE AR is not on the REACH Annex XIV List

# **REACH Candidate List (SVHC)**

ACETONITRILE AR is not on the REACH Candidate List

#### **PIC Regulation (Prior Informed Consent)**

ACETONITRILE AR is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

#### **POP Regulation (Persistent Organic Pollutants)**

ACETONITRILE AR is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

#### Ozone Regulation (1005/2009)

ACETONITRILE is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

# **Explosives Precursors Regulation (2019/1148)**

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

#### **Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

#### 15.1.2. National regulations

#### France

Occupational diseases		
Code	Description	
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide	

#### Germany

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV; ID No. 8).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed SZW-lijst van mutagene stoffen : The substance is not listed SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed SZW-lijst van reprotoxische stoffen – : The substance is not listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

Denmark

Class for fire hazard : Class I-1 Store unit : 1 liter

Classification remarks : F <Flam. Liq. 2>; Emergency management guidelines for the storage of flammable liquids

must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with

the product

Switzerland

Storage class (LK) : LK 3 - Flammable liquids

# 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

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# **SECTION 16: Other information**

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4

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Full text of H- and EUH-statements:		
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 2	Flammable liquids, Category 2	
H225	Highly flammable liquid and vapour.	
H302	Harmful if swallowed.	
H312	Harmful in contact with skin.	
H319	Causes serious eye irritation.	
H332	Harmful if inhaled.	

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.