



MATERIAL SAFETY DATA SHEET

Acetaldehyde

SECTION 1: Identification of the substance/mixture and of the company/undertaking			
1.1	Product identifiers		
	Product name	:	Acetaldehyde
	Brand	:	LABORT
	CAS-No.	:	75-07-0
1.2	Relevant identified uses of the substance or mixture and uses advised against		
	Identified uses	:	Laboratory chemicals, Industrial
1.3	Details of the supplier of the safety data sheet		
	LABORT FINE CHEM PVT LTD. 703-704 ICON BUSINESS CENTRE, OPP. CENTRAL MALL, NR. VALENTINE CINEMA, DUMAS ROAD, SURAT - 395007, (GUJARAT), INDIA. PH: 0091-261-2725761; 2725388 FAX: 0091-261-2725388 E MAIL: info@laboratorychemical.net WEBSITE: www.laboratorychemical.net		
1.4	Emergency telephone number		
	Emergency Phone #	:	091-261-2725388
SECTION 2: Hazards identification			
2.1	Classification of the substance or mixture		
	Classification according to Regulation (EC) No 1272/2008 Flammable liquids (Category 1), H224 Eye irritation (Category 2), H319 Germ cell mutagenicity (Category 2), H341 Carcinogenicity (Category 1B), H350 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335 For the full text of the H-Statements mentioned in this Section, see Section 16.		
2.2	Label elements		
	Labelling according Regulation (EC) No 1272/2008		
	Pictogram	:	
	Signal word	:	Danger
	Hazard statement(s)		
	H224 Extremely flammable liquid and vapor. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H341 Suspected of causing genetic defects.		

	H350 May cause cancer.		
	Precautionary statement(s)		
	P201 Obtain special instructions before use. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308 + P313 IF exposed or concerned: Get medical advice/ attention. P403 + P233 Store in a well-ventilated place. Keep container tightly closed.		
	Supplemental Hazard statements		
	None		
2.3	Other hazards		
	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.		
SECTION 3: Composition/information on ingredients			
3.1	Substances		
	Synonyms	:	Ethanal
	Formula	:	C2H4O
	Molecular weight	:	44,05 g/mol
	CAS-No.	:	75-07-0
	EC-No.	:	200-836-8
	Hazardous ingredients according to Regulation (EC) No 1272/2008		
	Component	Classification	Concentration
	acetaldehyde		
	Flam. Liq. 1; Eye Irrit. 2; Muta. 2; Carc. 1B; STOT SE 3; H224, H319, H341, H350, H335		<= 100 %
SECTION 4: First aid measures			
4.1	Description of first aid measures		
	General advice Consult a physician. Show this safety data sheet to the doctor in attendance.		
	If inhaled After inhalation: fresh air. Call in physician.		
	In case of skin contact In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.		
	In case of eye contact After eye contact:rinse out with plenty of water.Call in ophthalmologist.Remove contact lenses.		
	If swallowed After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.		
4.2	Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section		

	2.2) and/or in section 11
4.3	Indication of any immediate medical attention and special treatment needed No data available
SECTION 5: Firefighting measures	
5.1	Extinguishing media Suitable extinguishing media Water Foam Carbon dioxide (CO2) Dry powder Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given.
5.2	Special hazards arising from the substance or mixture Carbon oxides Combustible. Pay attention to flashback. Vapors are heavier than air and may spread along floors. Development of hazardous combustion gases or vapours possible in the event of fire. Forms explosive mixtures with air at ambient temperatures.
5.3	Advice for fire fighters Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.
5.4	Further information Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.
SECTION 6: Accidental release measures	
6.1	Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
6.2	Environmental precautions Do not let product enter drains. Risk of explosion
6.3	Methods and materials for containment and cleaning up Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.
6.4	Reference to other sections For disposal see section 13.
SECTION 7: Handling and storage	
7.1	Precautions for safe handling Advice on safe handling Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols. Advice on protection against fire and explosion Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge. Hygiene measures Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.
7.2	Conditions for safe storage, including any incompatibilities Storage conditions Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons. Storage stability Recommended storage temperature

	2 - 8 °C
7.3	Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated
SECTION 8: Exposure controls/personal protection	
8.1	Control parameters
	Ingredients with workplace control parameters
8.2	<p>Exposure control</p> <p>Personal protective equipment</p> <p>Eye/face protection Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses Tightly fitting safety goggles</p> <p>Skin protection This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact Material: butyl-rubber Minimum layer thickness: 0,7 mm Break through time: 480 min Material tested:Butoject® (KCL 898) This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: butyl-rubber Minimum layer thickness: 0,7 mm Break through time: 480 min Material tested:Butoject® (KCL 898)</p> <p>Body Protection Flame retardant antistatic protective clothing.</p> <p>Respiratory protection required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type AX The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.</p> <p>Control of environmental exposure Do not let product enter drains. Risk of explosion.</p>
SECTION 9: Physical and chemical properties	
9.1	Information on basic physical and chemical properties

	Appearance Form	Form: clear, liquid
	Colour	Colourless
	Odour	pungent
	Odour Threshold	No data available
	pH	5 at 20 °C
	Melting point/freezing point	Melting point: -123,5 °C
	Initial boiling point and boiling range	21 °C at 1.013 hPa
	Flash point	-38,89 °C - closed cup
	Evaporation rate	No data available
	Flammability (solid, gas)	No data available
	Upper/lower flammability or explosive limits	Upper explosion limit: 57 %(V) Lower explosion limit: 4 %(V)
	Vapour pressure	1.202 hPa at 25 °C
	Vapour density	1,52 - (Air = 1.0)
	Relative density	0,78 g/cm ³ at 16 °C
	Water solubility	completely miscible
	Partition coefficient: noctanol/water	log Pow: 0,63 - Bioaccumulation is not expected.
	Auto-ignition temperature	175 °C at 1.013 hPa
	Decomposition temperature	No data available
	Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: 0,24 mPa.s at 20 °C
	Explosive properties	No data available
	Oxidizing properties	No data available
9.2	Other safety information	Relative vapor density 1,52 - (Air = 1.0)

SECTION 10: Stability and reactivity

10.1	Reactivity Vapors may form explosive mixture with air.
10.2	Chemical stability The product is chemically stable under standard ambient conditions (room temperature) . Avoid exposure to air any longer than necessary so as to prevent peroxide formation. Stable under recommended storage conditions.
10.3	Possibility of hazardous reactions No data available
10.4	Conditions to avoid Warming.
10.5	Incompatible materials rubber, various plastics
10.6	Hazardous decomposition products In the event of fire: see section 5

SECTION 11: Toxicological information

11.1

Acute toxicity:

No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation:

Skin - Rabbit

Result: No skin irritation

(OECD Test Guideline 404)

Serious eye damage/eye irritation:

Eyes - Rabbit

Result: Severe irritations

Remarks: (RTECS)

Lacrimial irritation due to vapours. Conjunctivitis

Respiratory or skin sensitisation:

No data available.

Germ cell mutagenicity:

Suspected of causing genetic defects.

Ames test

Escherichia coli/Salmonella typhimurium

Result: negative

(ECHA)

Carcinogenicity:

Presumed to have carcinogenic potential for humans

IARC: 2B - Group 2B: Possibly carcinogenic to humans (acetaldehyde)

1 - Group 1: Carcinogenic to humans (acetaldehyde)

IARC: 2B - Group 2B: Possibly carcinogenic to humans (acetaldehyde)

1 - Group 1: Carcinogenic to humans (acetaldehyde)

Reproductive toxicity

No data available.

Specific target organ toxicity - single exposure

May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available.

Aspiration hazard

No data available

Additional Information

RTECS: AB1925000

Blurred vision, Unconsciousness, Headache, Vomiting, Nausea, Pulmonary edema. Effects may be delayed., Convulsions, sneezing, Cough, Shortness of breath

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1

Toxicity

Toxicity to fish

static test LC50 - Pimephales promelas (fathead minnow) - 31 mg/l - 96 h

Remarks: (ECHA)

Toxicity to daphnia

static test EC50 - Daphnia magna (Water flea) - ca. 48,3 mg/l - 48 h

Remarks: (ECHA)

	and other aquatic invertebrates		
	Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata - > 100 mg/l - 72h (OECD Test Guideline 201) static test EC10 - Pseudokirchneriella subcapitata - > 100 mg/l – 72h (OECD Test Guideline 201)	
12.2	Persistence and degradability Biodegradability aerobic Biochemical oxygen demand - Exposure time 14 d Result: 80 % - Readily biodegradable. (OECD Test Guideline 301C)		
12.3	Bioaccumulative potential No data available		
12.4	Mobility in soil No data available		
12.5	Results of PBT and vPvB assessment This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.		
12.6	Other adverse effects No data available		
SECTION 13: Disposal considerations			
13.1	Waste treatment methods Product See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.		
SECTION 14: Transport information			
14.1	UN number		
	ADR/RID: 1089	IMDG: 1089	IATA: 1089
14.2	UN proper shipping name		
	ADR/RID: ACETALDEHYDE IMDG: ACETALDEHYDE IATA: Acetaldehyde Passenger Aircraft: Not permitted for transport		
14.3	Transport hazard class(es)		
	ADR/RID: 3	IMDG: 3	IATA: 3
14.4	Packaging group		
	ADR/RID: I	IMDG: I	IATA: I
14.5	Environmental hazards		
	ADR/RID: No	IMDG Marine pollutant: No	IATA: No
14.6	Special precautions for user No data available		
SECTION 15: Regulatory information			
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. REACH - Restrictions on the manufacture, : placing on the market and use of certain		

	<p>dangerous substances, preparations and articles (Annex XVII)</p> <p>REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)</p> <p>National legislation</p> <p>Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.</p> <p>P5a FLAMMABLE LIQUIDS</p> <p>Other regulations</p> <p>Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.</p> <p>Take note of Dir 94/33/EC on the protection of young people at work.</p>
15.2	<p>Chemical safety assessment</p> <p>For this product a chemical safety assessment was not carried out</p>
SECTION 16: Other information	
	<p>LABORT FINE CHEM PVT LTD. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. LABORT FINE CHEM PVT LTD. Makes no representations or warranties, either express or implied, including without limitation any warranties or merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, LABORT FINE CHEM PVT LTD. will not be responsible for damages resulting from use of or reliance upon this information.</p> <p>Revised on: 21/01/2021</p> <p>Revision: 01</p>