

# **MATERIAL SAFETY DATA SHEET**

# Dichloromethane

	ION 1: Identification of the substance/mixture and of the company/undertaking			
1.1	Product identifiers			
	Product name	:	Dichloromethane	
	Brand	:	LABORT	
	CAS-No.	:	75-09-2	
1.2	Relevant identified uses of the substance or mixture and uses advised against			
	Identified uses	:	Laboratory chemicals, Manufacture of substances	
1.3	Details of the supplier of the safety data sheet		ety 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	
SECTIO	ΓΙΟΝ 2: Hazards identification			
2.1	Classification of the substance or mixture			
	Classification according to Regulation (EC) No 1272/2008 Skin irritation (Category 2), H315 Eye irritation (Category 2), H319 Carcinogenicity (Category 2), H351 Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336			
2.2	Label elements			
	Labelling according Regulation (EC) No 1272/2008			
	Pictogram	:		
	Signal word	:	Warning	
	Hazard statement(s)	•		
H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H351 Suspected of causing cancer.			ziness.	

	Precautionary statement(s)				
	P201 Obtain special instructions before use. P302 + P352 IF ON SKIN: Wash with plenty of water. 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.				
	Supplemental Hazard state	ments	S		
	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.				
SECTIO	N 3: Composition/information	on in	gredients		
3.1	Substances				
	Synonyms	:	Methylene chloride		
	Formula	:	CH2Cl2		
	Molecular weight	:	84,93 g/mol		
	CAS-No.	:	75-09-2		
	Hazardous ingredients acc	ording	g to Regulation (EC) No 1272/2008		
	Component	Cla	assification	Concentration	
	Methylene chloride	Skin Irrit. 2; Eye Irrit. 2; Carc. 2; STOT SE 3; H315, H319, H351, H336 Concentration limits: 20 %: STOT SE 3, H336;		<= 100 %	
SECTIO	N 4: First aid measures	120	70. 0101 02 0, 11000,		
4.1	Description of first aid mea	sures	<b>.</b>		
	General advice Consult a physician. Show this safety data sheet to the doctor in attendance.  If inhaled If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of skin contact Wash off with soap and plenty of water. Consult a physician. In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If swallowed Never give anything by mouth to an unconscious person. Rinse mouth with water. 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	No data available	e med	lical attention and special treatment n	eeded	
SECTIO	N 5: Firefighting measures				
	Extinguishing media				

5.2	Special hazards arising from the substance or mixture				
	Carbon oxides, Hydrogen chloride gas				
5.3	Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.				
5.4	Further information No data available				
SECTIO	N 6: Accidental releas	e measures			
6.1	Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.				
6.2	Environmental pred Prevent further leaka		do so. Do not let product enter drair	ns.	
6.3	Methods and mater	ials for containment and sorbent material and dis			
6.4	Reference to other For disposal see sec	sections			
SECTIO	N 7: Handling and sto	rage			
7.1	Precautions for safe Avoid contact with sk For precautions see	in and eyes. Avoid inhal	ation of vapour or mist.		
7.2	Conditions for safe storage, including any incompatibilities  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. Store in cool place. Heat sensitive. Store under inert gas.				
7.3	Specific end use(s)		no other specific uses are stipulate	ed	
SECTIO	N 8: Exposure control	s/personal protection			
8.1	Control parameters				
	Components with w Derived No Effect L	orkplace control parar evel (DNEL)	neters		
	Application Area	Exposure routes	Health effect	Value	
	Workers	Inhalation	Acute systemic effects	706 mg/m3	
	Workers	Inhalation	Long-term systemic effects	353 mg/m3	
	Workers	Skin contact	Long-term systemic effects	4750mg/kg BW/d	
	Consumers	Ingestion	Long-term systemic effects	0,06mg/kg BW/d	
	Consumers Inhalation L Consumers Skin contact L		Long-term systemic effects	88,3 mg/m3	
			Long-term systemic effects	2395mg/kg BW/d	
			Acute systemic effects 353 mg/m3		
	<b>Predicted No Effect</b>	Concentration (PNEC)			
	Compartment		Value		
	Soil Marine water Fresh water		0,583 mg/kg	0,583 mg/kg 0,194 mg/l 0,54 mg/l	
	Marine sediment		1,61 mg/kg	. 9	
	Fresh water sedime	ent			
	Onsite sewage trea	tment plant	26 mg/l		
	Aquatic intermittent	release	0,27 mg/l		
8.2	Exposure control				
	Appropriate engine Handle in accordance end of workday.		giene and safety practice. Wash ha	ands before breaks and at the	

### Personal protective equipment

### Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

#### Splash contact

Material: Fluorinated rubber Minimum layer thickness: 0,7 mm Break through time: 148 min

### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

# Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multipurpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

# Control of environmental exposure

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

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

SECTIO	SECTION 9. Physical and chemical properties			
9.1	Information on basic physical and chemical properties			
	Appearance Form	Form: liquid Colour: colourless		
	Odour	ether-like		
	Odour Threshold	No data available		
	рН	No data available		
	Melting point/freezing point	Melting point/range: -97 °C		
	Initial boiling point and boiling range	39,8 - 40 °C		
	Flash point	- closed cup does not flash		
	Evaporation rate	0,71		
	Flammability (solid, gas)	No data available		
	Upper/lower flammability or explosive limits	Upper explosion limit: 22 %(V) Lower explosion limit: 13 %(V)		
	Vapour pressure	584 hPa at 25 °C		
	Vapour density	2,93		
	Relative density	1,325 g/mL at 25 °C		
	Water solubility	13,2 g/l at 25 °C		

Partition coefficient: log Pow: 1,25 at 20 °C - Bioaccumulation is n				
noctano/water	ot expected.			
hilb "l	•			
I // Ito-ignition temperature				
	at 1.013 hPa - DIN 51794			
Decomposition temperature No data available				
Viscosity No data available				
Explosive properties No data available				
Oxidizing properties No data available				
9.2 Other safety information				
Vapour density 2,93				
SECTION 10: Stability and reactivity				
10.1 Reactivity				
No data available				
10.2 Chemical stability				
Stable under recommended storage conditions.				
10.3 Possibility of hazardous reactions				
No data available Conditions to avoid				
10.4   Conditions to avoid   No data available				
Incompatible materials				
various plastics, Rubber, Light metals, Metals, Mild steel, Strong oxidizing agents	S			
Hazardous decomposition products	5			
	Hazardous decomposition products Hazardous decomposition products formed under fire conditions Carbon oxides, Hydrogen			
	chloride gas			
Other decomposition products - No data available				
In the event of fire: see section 5				
SECTION 11: Toxicological information				
Information on toxicological effects				
	Acute toxicity  LD50 Oral - Pat - male and female - > 2 000 mg/kg			
	LD50 Oral - Rat - male and female - > 2.000 mg/kg (OECD Test Guideline 401)			
	LC50 Inhalation - Mouse - 4 h - 86 mg/l			
	Remarks: (ECHA)			
	LD50 Dermal - Rat - male and female - > 2.000 mg/kg			
	(OECD Test Guideline 402)			
Skin corrosion/irritation				
Skin - Rabbit				
Result: Irritations - 4 h				
	(OECD Test Guideline 404)			
Repeated or prolonged exposure may cause skin irritation and dermatitis, due to	degreasing properties of the			
product.	product.			
	Serious eye damage/eye irritation			
Lyes - Raddit	Eyes - Rabbit Regult: Eve irritation			
Result: Eye irritation				
Result: Eye irritation Remarks: (ECHA)				
Result: Eye irritation Remarks: (ECHA) Risk of corneal clouding.				
Result: Eye irritation Remarks: (ECHA) Risk of corneal clouding. Respiratory or skin sensitisation				
Result: Eye irritation Remarks: (ECHA) Risk of corneal clouding. Respiratory or skin sensitisation Local lymph node assay (LLNA) - Mouse				
Result: Eye irritation Remarks: (ECHA) Risk of corneal clouding. Respiratory or skin sensitisation Local lymph node assay (LLNA) - Mouse Result: negative				
Result: Eye irritation Remarks: (ECHA) Risk of corneal clouding. Respiratory or skin sensitisation Local lymph node assay (LLNA) - Mouse				
Result: Eye irritation Remarks: (ECHA) Risk of corneal clouding. Respiratory or skin sensitisation Local lymph node assay (LLNA) - Mouse Result: negative (OECD Test Guideline 429)				

Result: positive Ames test

Salmonella typhimurium

Result: positive

OECD Test Guideline 474

Mouse - male and female - Bone marrow

Result: negative Carcinogenicity

Limited evidence of carcinogenicity in animal studies

Suspected human carcinogens

IARC: 2A - Group 2A: Probably carcinogenic to humans (Methylene chloride)

# Reproductive toxicity

No data available

# Specific target organ toxicity - single exposure

Inhalation - May cause drowsiness or dizziness. - Central nervous system

Acute oral toxicity - Nausea, Vomiting, Risk of aspiration upon vomiting., Aspiration may cause pulmonary oedema and pneumonitis.

Acute inhalation toxicity - Possible damages:, mucosal irritations

## Specific target organ toxicity - repeated exposure

No data available

# **Aspiration hazard**

No data available

### **Additional Information**

Repeated dose toxicity - Rat - male and female - Oral - 104 Weeks - No observed adverse effect level - 6 mg/kg

Repeated dose toxicity - Rat - male and female - Inhalation - 104 Weeks

RTECS: PA8050000

Dizziness, Nausea, Vomiting, narcosis, Cough, irritant effects, Unconsciousness, Shortness of breath, respiratory paralysis, somnolence, depressed respiration, CNS disorders, inebriation

Risk of corneal clouding.

The following applies to aliphatic halogenated hydrocarbons in general: systemic effect: narcosis, cardiovascular disorders. Toxic effect on liver, kidneys.

Dichloromethane is metabolized in the body producing carbon monoxide which increases and sustains carboxyhemoglobin levels in the blood, reducing the oxygen-carrying capacity of the blood.

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

### **SECTION 12: Ecological information**

	-			
12.1	1 Toxicity			
	Toxicity to fish	flow-through test LC50 - Pimephales promelas (fathead minnow) - 193,00 mg/l - 96 h Remarks: (ECHA)		
	Toxicity to daphnia and other aquatic invertebrates	static test LC50 - Daphnia magna (Water flea) - 27 mg/l - 48 h (US-EPA)		
	Toxicity to bacteria	static test EC50 - activated sludge - 2.590 mg/l - 40 min (OECD Test Guideline 209)		
12.2	Persistence and degradability			
	Biodegradability	aerobic - Exposure time 28 d Result: 68 % - Readily biodegradable. (OECD Test Guideline 301D)		
12.3	Bioaccumulative potential			
	Bioaccumulation	Cyprinus carpio (Carp) - 6 Weeks - 250 µg/l(Methylene chloride)		
	Dioaccumulation	Bioconcentration factor (BCF): 2 - 5,4 (OECD Test Guideline 305)		

		Cyprinus carpio (Carp) - 25 µg/l(Methylene chl		
		Bioconcentration factor (OECD Test Guideline		
12.4	Mobility in soil No data available	(OLOB Tool Guidoinio	<del>500</del> 7	
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	and very bloadeannalative (vi	VB) at levels of 0.176 of higher.	
SECTION	N 13: Disposal considerations			
13.1	Waste treatment methods			
	Product Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.  Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.  Contaminated packaging Dispose of as unused product.			
SECTION	14: Transport information			
14.1	UN number			
	ADR/RID: 1593	IMDG: 1593	IATA: 1593	
14.2	UN proper shipping name			
	ADR/RID: DICHLOROMETHANE IMDG: DICHLOROMETHANE IATA: DICHLOROMETHANE			
14.3	Transport hazard class(es)			
	ADR/RID: 6.1	IMDG: 6.1	IATA: 6.1	
14.4	Packaging group			
	ADR/RID: III	IMDG: III	IATA: III	
14.5	Environmental hazards			
	ADR/RID: no	IMDG Marine pollutant: no	IATA: no	
14.6	Special precautions for user No data available			
SECTION	1 15: Regulatory information			
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture  This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.  Authorisations and/or restrictions on use  REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII): Methylene chloride  REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII): Methylene chloride			
15.2	Chemical safety assessment A Chemical Safety Assessment has been carried out for this substance			

### **SECTION 16: Other information**

### **Further information**

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