MATERIAL SAFETY DATA SHEET

Phenolphthalein indicator

SECTION 1: Identification of the substance/mixture and of the company/undertaking			
1.1	**Product identifiers**		
	Product name	:	Phenolphthalein indicator
	Brand	:	LABORT
	CAS-No.	:	77-09-8
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**		
	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 Germ cell mutagenicity (Category 2), H341 Carcinogenicity (Category 1B), H350 Reproductive toxicity (Category 2), H361f		
2.2	**Label elements**		
	Labelling according Regulation (EC) No 1272/2008		
	Pictogram	:	
	Signal word	:	Danger
	Hazard statement(s)		
	H341 Suspected of causing genetic defects. H350 May cause cancer. H361f Suspected of damaging fertility.		
	Precautionary statement(s)		

	P201 Obtain special instructions before use. P308 + P313 IF exposed or concerned: Get medical advice/ attention.			
	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				
3.2	**Mixtures**			
	Synonyms	**:**	3,3-Bis(4-hydroxyphenyl)-1(3H)-isobenzofuranone	
	Formula	**:**	$C_{20}H_{14}O_4$	
	Molecular weight	**:**	318.32 g/mole	
	Component		**Classification**	**Concentration**
	Phenolphthalein Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)		Muta. 2; Carc. 1B; Repr. 2; H341, H350, H361f Concentration limits: >= 1 %: Carc. 1B, H350;	<= 100 %
SECTION 4: First aid measures				
4.1	**Description of first aid measures**			
	General advice Consult a physician. Show this material 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** Flush eyes with water as a precaution. **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	**Indication of any immediate medical attention and special treatment needed** No data available			
SECTION 5: Firefighting measures				
5.1	**Extinguishing media** **Suitable extinguishing media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. **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 Not combustible.			
5.3	**Advice for firefighters** Wear self-contained breathing apparatus for firefighting if necessary.			
5.4	**Further information** No data available			

SECTION 6: Accidental release measures	
6.1	**Personal precautions, protective equipment and emergency procedures** Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see section 8.
6.2	**Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
6.3	**Methods and materials for containment and cleaning up** Pick up and arrange disposal without creating dust. Sweep up and shovel. Do not flush with water. Keep in suitable, closed containers for disposal.
6.4	**Reference to other sections** For disposal see section 13.
SECTION 7: Handling and storage	
7.1	**Precautions for safe handling** Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.
7.2	**Conditions for safe storage, including any incompatibilities** Keep container tightly closed in a dry and well-ventilated place. Store in cool place. Recommended storage temperature: Below 30°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	**Exposure control**
	Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. **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. Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min

	Body Protection Impervious clothing, 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 particle respirator type N100 (US) or type P3 (EN 143) 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. Discharge into the environment must be avoided.	
SECTION 9: Physical and chemical properties		
9.1	**Information on basic physical and chemical properties**	
	Appearance Form	Form: crystalline Colour: white
	Odour	Odourless
	Odour Threshold	No data available
	pH	No data available
	Melting point/freezing point	261-263°C
	Initial boiling point and boiling range	> 450 °C at 1.013 hPa - OECD Test Guideline 103
	Flash point	No data available
	Evaporation rate	No data available
	Flammability (solid, gas)	The product is not flammable.
	Upper/lower flammability or explosive limits	No data available
	Vapour pressure	< 0,1 hPa at 50 °C - OECD Test Guideline 104
	Vapour density	No data available
	Relative density	1,27 g/cm3 at 32°C
	Water solubility	Slightly soluble
	Partition coefficient: noctanol/water	log Pow: 0,9 at 25 °C - OECD Test Guideline 117 - Bioaccumulation is not expected.
	Auto-ignition temperature	No data available
	Decomposition temperature	No data available
	Viscosity	No data available
	Explosive properties	No data available
	Oxidizing properties	No data available
9.2	**Other safety information**	No data available
SECTION 10: Stability and reactivity		

10.1	**Reactivity** Contact with acids liberates toxic gas.
10.2	**Chemical stability** Stable under recommended storage conditions.
10.3	**Possibility of hazardous reactions** No data available
10.4	**Conditions to avoid** No data available
10.5	**Incompatible materials** Strong oxidizing agents
10.6	**Hazardous decomposition products** Hazardous decomposition products formed under fire conditions. - Carbon oxides Other decomposition products - No data available In the event of fire: see section 5
SECTION 11: Toxicological information	
11.1	**Acute toxicity** No data available **Skin corrosion/irritation** Skin - reconstructed human epidermis (RhE) Result: non-corrosive - 42 min (OECD Test Guideline 431) **Serious eye damage/eye irritation** Eyes - In vitro study Result: non-corrosive - 4 h (OECD Test Guideline 437) **Respiratory or skin sensitisation** Local lymph node assay (LLNA) - Mouse Result: negative (OECD Test Guideline 429) **Germ cell mutagenicity** Suspected of causing genetic defects. Ames test Salmonella typhimurium Result: negative **Carcinogenicity** Presumed to have carcinogenic potential for humans IARC: 2B - Group 2B: Possibly carcinogenic to humans (Phenolphthalein) **Reproductive toxicity** Suspected of damaging fertility. **Specific target organ toxicity - single exposure** No data available **Specific target organ toxicity - repeated exposure** No data available **Aspiration hazard** No data available **Additional Information** RTECS: SM8380000 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. After uptake of large quantities: Nausea, Vomiting, Gastrointestinal disturbance, Fever, cardiovascular disorders, CNS disorders The substance has a laxative effect. Other dangerous properties cannot be excluded. This substance should be handled with particular care.
SECTION 12: Ecological information	
12.1	**Toxicity**

	Toxicity to fish	static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (OECD Test Guideline 202)
	Toxicity to algae	static test ErC50 - Desmodesmus subspicatus (green algae) - 8,9 mg/l - 72 h (OECD Test Guideline 201)

12.2	**Persistence and degradability**
	Biodegradability aerobic - Exposure time 28 d Result: 76 % - Readily biodegradable. (OECD Test Guideline 301F) Remarks: The 10 day time window criterion is not fulfilled.
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** Toxic to aquatic life. Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1	**Waste treatment methods**
	Product Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. 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: -	IMDG: -	IATA: -
14.2	**UN proper shipping name**		
	ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods		
14.3	**Transport hazard class(es)**		
	ADR/RID: -	IMDG: -	IATA: -
14.4	**Packaging group**		
	ADR/RID: -	IMDG: -	IATA: -
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. **Authorisations and/or restrictions on use** REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). Phenolphthalein REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) Phenolphthalein
15.2	**Chemical Safety Assessment** For this product a chemical safety assessment was not carried out
SECTION 16: Other information	
	Further information 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. Revised on: 24/02/21 Revision: 01