

# Material Safety Data Sheets

## 1. IDENTIFICATION

Product Name	Phenolphthalein
Other Names	Phthalimetten; (3,3-Bis(4-hydroxyphenyl)-1(3H)-isobenzofuranone; 3,3-Bis(p- hydroxyphenyl)phthalide)
Uses	No Data Available
Chemical Family	No Data Available
Chemical Formula	C <sub>20</sub> H <sub>14</sub> O <sub>4</sub>
Chemical Name	No Data Available
Product Description	No Data Available
Company	Arman sina.co
Contact Information	<a href="mailto:info@armansina.com">info@armansina.com</a> <a href="http://www.armansina.com">www.armansina.com</a>

## 2. HAZARD IDENTIFICATION

Hazard Categories	Skin irritation, (Category 2)	H315: Causes skin irritation.
	Germ cell mutagenicity, (Category 2)	H341: Suspected of causing genetic defects.
	Carcinogenicity, (Category 1B)	H350: May cause cancer.
	Reproductive toxicity, (Category 2)	H361f: Suspected of damaging fertility.
Signal Word	Danger	
Hazard Statements	H315	Causes skin irritation.
	H341	Suspected of causing genetic defects.
	H350	May cause cancer.
	H361f	Suspected of damaging fertility.
Precautionary Statements	P202	Do not handle until all safety precautions have been read and understood.
	P264	Wash skin thoroughly after handling.
	P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
	P302 + P352	IF ON SKIN: Wash with plenty of water.
	P308 + P313	IF exposed or concerned: Get medical advice/ attention.
	P332 + P313	If skin irritation occurs: Get medical advice/ attention.

## Symbol



### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Phenolphthalein	C <sub>20</sub> H <sub>14</sub> O <sub>4</sub>	77-09-8	<= 100 %

### 4. FIRST AID MEASURES

Swallowed	After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.
Eye	After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.
Skin	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.
Inhaled	After inhalation: fresh air. Call in physician.
Advice to Doctor	Consult a doctor in case of discomfort showing the SDS for the product.

### 5. FIRE FIGHTING MEASURES

General Measures	Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.
Flammability Conditions	No Data Available
Extinguishing Media	Suitable extinguishing media Water Foam Carbon dioxide (CO <sub>2</sub> ) Dry powder
Fire and Explosion Hazard	Fire may cause evolution of Sulfur oxides Development of hazardous combustion gases or vapours possible in the event of fire.
Hazardous Products of Combustion	Carbon oxides Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.
Special Fire Fighting Instructions	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.
Personal Protective Equipment	No Data Available

## 6. ACCIDENTAL RELEASE MEASURES

<b>General Response Procedure</b>	No Data Available
<b>Clean Up Procedures</b>	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.
<b>Containment</b>	No Data Available
<b>Decontamination</b>	No Data Available
<b>Environmental Precautionary Measures</b>	Do not let product enter drains.
<b>Evacuation Criteria</b>	No Data Available
<b>Personal Precautionary Measures.</b>	Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

## 7. HANDLING AND STORAGE

<b>Handling</b>	Work under hood. Do not inhale substance/mixture.
<b>Storage</b>	Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.
<b>Container</b>	Keep containers tightly closed, Dry

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>General</b>	Wash hands before breaks and after work. Avoid contact with eyes and skin. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.
<b>Exposure Limits</b>	No Data Available
<b>Biological Limits</b>	No Data Available
<b>Engineering Measures</b>	Change contaminated clothing. Wash hands after working with substance.
<b>Personal Protection Equipment</b>	<p>Wear suitable protective clothing. When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn. Eye/face protection</p> <p>Eye glasses with side protection DIN-/EN-Norms EN 166 Recommendation: VWR 111-0432 Skin protection When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Recommended glove articles DIN-/EN-Norms EN ISO 374 In the case of wanting to use the gloves again, clean them before taking off and air them well. Material: Nitrile rubber</p> <p>Minimum layer thickness: 0,11 mm</p> <p>Break through time: 480 min</p> <p>Material tested:KCL 741 Dermatrill® L</p> <p>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: <a href="http://www.kcl.de">www.kcl.de</a>).</p> <p>Splash contact</p> <p>Material: Nitrile rubber</p> <p>Minimum layer thickness: 0,11 mm</p> <p>Break through time: 480 min</p> <p>Material tested:KCL 741 Dermatrill® L</p> <p>Respiratory protection</p> <p>Respiratory protection necessary at: aerosol or mist formation Suitable respiratory protection apparatus: Full-/half-/quarter-face masks (EN 136/140) Recommendation: Suitable material: ABEK2P3</p>
<b>Special Hazards Precautions</b>	No Data Available
<b>Work Hygienic Practices</b>	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	solid
<b>Appearance</b>	solid
<b>Odour</b>	odorless
<b>Colour</b>	white
<b>pH</b>	No Data Available
<b>Vapour Pressure</b>	No Data Available
<b>Relative Vapour Density</b>	No Data Available
<b>Boiling Point</b>	> 450 °C at 1.013 hPa
<b>Melting Point</b>	263.7 °C
<b>Freezing Point</b>	No Data Available
<b>Solubility</b>	Water solubility:3.36 mg/l
<b>Specific Gravity</b>	No Data Available
<b>Flash Point</b>	No Data Available
<b>Auto Ignition Temp</b>	397 °C
<b>Evaporation Rate</b>	No Data Available
<b>Bulk Density</b>	350 - 450 kg/m3
<b>Corrosion Rate</b>	No Data Available
<b>Decomposition Temperature</b>	No Data Available
<b>Density</b>	1,29 at 20,6 °C
<b>Specific Heat</b>	No Data Available
<b>Molecular Weight</b>	318.3 g/mol
<b>Net Propellant Weight</b>	No Data Available
<b>Octanol Water Coefficient</b>	No Data Available
<b>Particle Size</b>	No Data Available
<b>Partition Coefficient</b>	No Data Available
<b>Saturated Vapour Concentration</b>	No Data Available
<b>Vapour Temperature</b>	No Data Available
<b>Viscosity</b>	No Data Available
<b>Volatile Percent</b>	No Data Available
<b>VOC Volume</b>	No Data Available
<b>Additional Characteristics</b>	No information available.
<b>Potential for Dust Explosion</b>	No Data Available
<b>Fast or Intensely Burning Characteristics</b>	No information available.
<b>Flame Propagation or Burning Rate of Solid Materials</b>	No information available.
<b>Non-Flammables That Could Contribute Unusual Hazards to a Fire</b>	No information available.
<b>Properties That May Initiate or Contribute to Fire Intensity</b>	No information available.
<b>Reactions That Release Gases or Vapours</b>	No information available.
<b>Release of Invisible Flammable Vapours and Gases</b>	No information available. No information available.

## 10. STABILITY AND REACTIVITY

<b>General Information</b>	The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.
<b>Chemical Stability</b>	The product is chemically stable under standard ambient conditions (room temperature) .
<b>Conditions to Avoid</b>	No Data Available
<b>Materials to Avoid</b>	Strong oxidizing agents
<b>Hazardous Decomposition Products</b>	No Data Available
<b>Hazardous Polymerisation</b>	No Data Available

## 11. TOXICOLOGICAL INFORMATION

<b>General Information</b>	No Data Available
<b>Acute</b>	<b>Acute toxicity</b> Oral: No data available Inhalation: No data available Dermal: No data available  <b>Skin corrosion/irritation</b> Skin - reconstructed human epidermis (RhE) Result: irritating - 42 min (OECD Test Guideline 439)  <b>Serious eye damage/eye irritation</b> Eyes - In vitro study Result: non-corrosive - 4 h (OECD Test Guideline 437)  <b>Respiratory or skin sensitization</b> Local lymph node assay (LLNA) - Mouse Result: Not a skin sensitizer. (OECD Test Guideline 429)  <b>Germ cell mutagenicity</b> Suspected of causing genetic defects. Test Type: Ames test Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative <b>Carcinogenicity</b> Presumed to have carcinogenic potential for humans  <b>Reproductive toxicity</b> Suspected of damaging fertility.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Toxicity

Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h
Toxicity to algae	static test ErC50 - Desmodesmus subspicatus (green algae) - > 3,33 mg/l - 72 h  static test NOEC - Desmodesmus subspicatus (green algae) - 0,57 mg/l - 72 h

**Persistence/Degradability**

Biodegradability

aerobic - Exposure time 28 d

Result: 76 % - Readily biodegradable.

Remarks: The 10 day time window criterion is not fulfilled.

**Mobility**

No Data Available

**Environmental Fate**

No Data Available

**Bioaccumulation Potential**

No Data Available

**Environmental Impact**

No Data Available

**13. DISPOSAL CONSIDERATIONS****General Information**

No Data Available

**Special Precautions for Land Fill**

No Data Available

**14. TRANSPORT INFORMATION****Land Transport**

Proper Shipping Name	Phenolphthalein
Class	No Data Available
Subsidiary Risk(s)	No Data Available
EPG	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

**Sea Transport**

Proper Shipping Name	Phenolphthalein
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available

Marine Pollutant	No Data Available
------------------	-------------------

**Air Transport**

Proper Shipping Name	Phenolphthalein
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

## 15. OTHER INFORMATION

Revision	2
Key/Legend	<p>&lt; Less Than &gt; Greater Than</p> <p>atm Atmosphere CAS Chemical Abstracts Service (Registry Number) cm<sup>2</sup> Square Centimetres CO<sub>2</sub> Carbon Dioxide COD Chemical Oxygen Demand deg C (° C) Degrees Celcius deg F (° F) Degrees Farenheit g Grams g/cm<sup>3</sup> Grams per Cubic Centimetre g/l Grams per Litre HSNO Hazardous Substance and New Organism IDLH Immediately Dangerous to Life and Health immiscible Liquids are insoluable in each other. inHg Inch of Mercury inH<sub>2</sub>O Inch of Water K Kelvin kg Kilogram kg/m<sup>3</sup> Kilograms per Cubic Metre lb Pound LC<sub>50</sub> LC stands for lethal concentration. LC<sub>50</sub> is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours. LD<sub>50</sub> LD stands for Lethal Dose. LD<sub>50</sub> is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals. ltr or L Litre m<sup>3</sup> Cubic Metre mbar Millibar mg Milligram mg/24H Milligrams per 24 Hours mg/kg Milligrams per Kilogram mg/m<sup>3</sup> Milligrams per Cubic Metre</p> <p>Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present. mm Millimetre mmH<sub>2</sub>O Millimetres of Water mPa.s Millipascals per Second N/A Not Applicable NIOSH National Institute for Occupational Safety and Health NOHSC National Occupational Heath and Safety Commission OECD Organisation for Economic Co-operation and Development Oz Ounce PEL Permissible Exposure Limit Pa Pascal ppb Parts per Billion ppm Parts per Million ppm/2h Parts per Million per 2 Hours ppm/6h Parts per Million per 6 Hours psi Pounds per Square Inch R Rankine RCP Reciprocal Calculation Procedure STEL Short Term Exposure Limit TLV Threshold Limit Value tne Tonne TWA Time Weighted Average ug/24H Micrograms per 24 Hours UN United Nations wt Weight</p>