

# Part of Thermo Fisher Scientific

# SAFETY DATA SHEET

Creation Date 25-Nov-2009 Revision Date 28-May-2014 Revision Number 1

### 1. Identification

Product Name Phenolphthalein

Cat No.: P79-100; P79-500

Synonyms 3,3-Bis(4-Hydoroxyphenyl)-1(3H)-Isobenzofuranone; 3,3-Bis(p-Hydroxyphenyl)Phthalide

Recommended Use Laboratory chemicals.

Uses advised against No Information available

Details of the supplier of the safety data sheet

Company Emergency Telephone Number

Fisher Scientific CHEMTREC®, Inside the USA: 800-424-9300
One Reagent Lane CHEMTREC®, Outside the USA: 001-703-527-3887

Fair Lawn, NJ 07410 Tel: (201) 796-7100

# 2. Hazard(s) identification

### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Germ Cell Mutagenicity
Carcinogenicity
Category 2
Reproductive Toxicity
Specific target organ toxicity - (repeated exposure)
Category 2
Category 2
Category 2

Target Organs - Kidney.

### Label Elements

### Signal Word

Danger

## **Hazard Statements**

Suspected of causing genetic defects Suspected of causing cancer Suspected of damaging fertility

May cause damage to organs through prolonged or repeated exposure

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## **Precautionary Statements**

### Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Do not breathe dust/fume/gas/mist/vapors/spray

### Response

IF exposed or concerned: Get medical attention/advice

### Storage

Store locked up

### **Disposal**

Dispose of contents/container to an approved waste disposal plant

### Hazards not otherwise classified (HNOC)

None identified

### Other hazards

WARNING! This product contains a chemical known in the State of California to cause cancer.

# 3. Composition / information on ingredients

| Component       | CAS-No  | Weight % |  |  |
|-----------------|---------|----------|--|--|
| Phenolphthalein | 77-09-8 | >95      |  |  |

## 4. First-aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Obtain medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth

resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a

respiratory medical device. Obtain medical attention.

Ingestion Do not induce vomiting. Call a physician or Poison Control Center immediately.

Most important symptoms/effects

**Notes to Physician** 

No information available. Treat symptomatically

### 5. Fire-fighting measures

No information available

**Suitable Extinguishing Media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable Extinguishing Media** No information available

**Flash Point** No information available Method -No information available

**Autoignition Temperature** 

**Explosion Limits** 

Upper No data available

Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

### Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

### **Hazardous Combustion Products**

Carbon monoxide (CO) Carbon dioxide (CO2)

### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

| <b>Health</b> | Flammability | <b>Instability</b> | Physical hazards |
|---------------|--------------|--------------------|------------------|
| 2 *           | 1            | 0                  | N/A              |
|               |              |                    |                  |

| 6 | Accidental | ra | Daca      | maggirag                                |
|---|------------|----|-----------|---|
|   | ACCIDENTAL |    | 1 - 1 - 1 | 111111111111111111111111111111111111111 |

Personal Precautions Ensure adequate ventilation. Use personal protective equipment. Evacuate personnel to

safe areas. Avoid dust formation.

Environmental Precautions Should not be released into the environment. See Section 12 for additional ecological

information.

**Methods for Containment and Clean** Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust **Up** formation.

|          | 7. Handling and storage   |
|----------|---|
| Handling | Use only under a chemical fume hood. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not breathe vapors/dust. Do not ingest. |
| Storage  | Keep containers tightly closed in a dry, cool and well-ventilated place.  |

8. Exposure controls / personal protection

Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits

established by the region specific regulatory bodies.

**Engineering Measures**Use only under a chemical fume hood. Ensure that eyewash stations and safety showers

are close to the workstation location.

Personal Protective Equipment

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

**Skin and body protection**Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

Physical State Solid

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AppearanceOff-whiteOdorOdorless

Odor Threshold

pH

No information available

No information available

Melting Point/Range 258 - 263 °C / 496.4 - 505.4 °F

Boiling Point/Range
No information available
Flash Point
No information available
Evaporation Rate
negligible

Flammability (solid,gas)

No information available

Flammability or explosive limits

UpperNo data availableLowerNo data availableapor Pressurenegligible

Vapor PressurenegligibleVapor DensityNo information availableRelative DensityNo information availableSolubilityInsoluble in waterPartition coefficient; n-octanol/waterNo data available

Autoignition Temperature

No information available

No information available

No information available

Viscosity No information available

Molecular FormulaC20 H14 O4Molecular Weight318.32

# 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Stable under normal conditions.

**Conditions to Avoid** Incompatible products. Excess heat. Avoid dust formation.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2)

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

## 11. Toxicological information

**Acute Toxicity** 

**Product Information** See actual entry in RTECS for complete information.

Component Information

Toxicologically Synergistic No information available

**Products** 

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation May cause eye, skin, and respiratory tract irritation

Sensitization No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component       | CAS-No  | IARC     | NTP         | ACGIH      | OSHA | Mexico     |
|-----------------|---------|----------|-------------|------------|------|------------|
| Phenolphthalein | 77-09-8 | Group 2B | Reasonably  | Not listed | X    | Not listed |
|                 |         |          | Anticipated |            |      |            |

IARC: (International Agency for Research on Cancer)

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Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

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Group 2B - Possibly Carcinogenic to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human

Carcinogen

Mutagenic Effects Mutagenic effects have occurred in humans.

**Reproductive Effects** Experiments have shown reproductive toxicity effects on laboratory animals.

**Developmental Effects** Possible risk of harm to the unborn child.

**Teratogenicity** No information available.

STOT - single exposure None known STOT - repeated exposure Kidney

Aspiration hazard No information available

Symptoms / effects, both acute and No information available

NTP: (National Toxicity Program)

delayed

**Endocrine Disruptor Information** 

| Component       | EU - Endocrine Disrupters | EU - Endocrine Disruptors - | Japan - Endocrine Disruptor |  |
|-----------------|---------------------------|-----------------------------|-----------------------------|--|
|                 | Candidate List            | Evaluated Substances        | Information                 |  |
| Phenolphthalein | Group III Chemical        | Not applicable              | Not applicable              |  |

Other Adverse Effects See actual entry in RTECS for complete information.

# 12. Ecological information

**Ecotoxicity** 

Do not empty into drains.

Persistence and Degradability
Bioaccumulation/ Accumulation

No information available
No information available.

**Mobility** No information available.

| Component       | log Pow |  |  |
|-----------------|---------|--|--|
| Phenolphthalein | 2.41    |  |  |

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|-----|-----------------------|----------------|
|     |                       |                |
|     | 13. Disposal o        | considerations |

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and

hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

| 14. Transport information |
|---------------------------|
|                           |

DOTNot regulatedTDGNot regulatedIATANot regulatedIMDG/IMONot regulated

## 15. Regulatory information

### International Inventories

| Component       | TSCA | DSL | NDSL | EINECS    | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|-----------------|------|-----|------|-----------|--------|-----|-------|------|------|-------|------|
| Phenolphthalein | Х    | Χ   | -    | 201-004-7 | -      |     | Χ     | Χ    | Χ    | Х     | Х    |

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

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N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
- Y1 Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

### U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313 Not applicable

| Component       | CAS-No  | Weight % | SARA 313 - Threshold<br>Values % |
|-----------------|---------|----------|----------------------------------|
| Phenolphthalein | 77-09-8 | >95      | 0.1                              |

### SARA 311/312 Hazardous Categorization

Acute Health Hazard No
Chronic Health Hazard Yes
Fire Hazard No
Sudden Release of Pressure Hazard No
Reactive Hazard No

Clean Water Act Not applicable

Clean Air Act Not applicable

**OSHA** Occupational Safety and Health Administration

Not applicable

### **CERCLA**

Not applicable

### **California Proposition 65**

This product contains the following Proposition 65 chemicals:

| Component           | CAS-No  | California P   | California Prop. 65 |  | Prop 65 NSRL |      | Category    |  |
|---------------------|---------|----------------|---------------------|--|--------------|------|-------------|--|
| Phenolphthalein     | 77-09-8 | Carcinog       | Carcinogen          |  | -            |      | Carcinogen  |  |
| State Right-to-Know |         |                |                     |  |              |      |             |  |
| I .                 | B4 1    | Marrie Indiana | D                   |  | 1111         | l 5. | a da latand |  |

|   | Component       | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|-----------------|---------------|------------|--------------|----------|--------------|
| I | Phenolphthalein | -             | X          | -            | X        | -            |

### **U.S. Department of Transportation**

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

### **U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

# **Other International Regulations**

Mexico - Grade No information available

### Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

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Phenolphthalein

**WHMIS Hazard Class** 

D2A Very toxic materials



## 16. Other information

Prepared By Regulatory Affairs

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

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**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS)

### **Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of SDS**