

SAFETY DATA SHEET

| Creation Date 25-Nov-2009 | Revision Date 28-May-2014 | 4 Revision Number 1 | |
|---|--|--|--|
| | 1. Identification | | |
| Product Name | Phenolphthalein | | |
| Cat No. : | AC417180000; AC417180025; AC417180026; AC417181000; AC417185000 | | |
| Synonyms | 3,3-Bis(4-Hydoroxyphenyl)-1(3H)-Isobenzofuranone; 3,3-Bis(p-Hydroxyphenyl)Phthalide | | |
| Recommended Use | Laboratory chemicals. | | |
| Uses advised against Details of the supplier of the saf | No Information available ety data sheet | | |
| Company Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100 | Entity / Business Name Acros Organics One Reagent Lane Fair Lawn, NJ 07410 | Emergency Telephone Number For information US call: 001-800-ACROS-01 / Europe call: +32 14 57 52 11 Emergency Number US:001-201-796-7100 / Europe: +32 14 57 52 99 | |

2. Hazard(s) identification

Category 2 Category 2 Category 2 Category 2 CHEMTREC Tel. No.US:001-800-424-9300 /

Europe:001-703-527-3887

Classification

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

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



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 <u>Hazards not otherwise classified (HNOC)</u> 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 | |
| Suitable Extinguishing Media | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. | |
| Unsuitable Extinguishing Media | No information available | |
| Flash Point Method - | No information available No information available | |
| Autoignition Temperature | No information available | |
| 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.

| <u>NFPA</u> | Health | Flammability | Instability | Physical hazards | |
|-------------------|---------------------|--|--|--|--|
| | 2* | 1 | 0 | N/A | |
| | | 6. Accidental rele | ease measures | | |
| Personal Pre | ecautions | • | . Use personal protective equip | oment. Evacuate personnel to | |
| Environment | tal Precautions | safe areas. Avoid dust formation. Should not be released into the environment. See Section 12 for additional ecological information. | | | |
| Methods for Up | Containment and Cle | an Sweep up or vacuum up spi formation. | llage and collect in suitable co | ntainer for disposal. Avoid dust | |
| | | 7. Handling a | ind storage | | |
| Handling | | | ume hood. Wear personal prot . Avoid dust formation. Do not l | ective equipment. Avoid contact oreathe vapors/dust. Do not | |
| Storage | | Keep containers tightly close | ed in a dry, cool and well-ventil | ated place. | |
| | 8. E | Exposure controls / | personal protection | 'n | |
| Exposure Gu | <u>uidelines</u> | This product does not conta established by the region sp | | h occupational exposure limits | |
| Engineering | Measures | Use only under a chemical f are close to the workstation | | sh stations and safety showers | |
| Personal Pro | otective Equipment | | | | |
| Eye/face | Protection | | eyeglasses or chemical safety ction regulations in 29 CFR 197 | | |
| Skin and | body protection | Wear appropriate protective | gloves and clothing to prevent | skin exposure. | |
| Respirate | ory Protection | EN 149. Use a NIOSH/MSH | regulations found in 29 CFR 1 A or European Standard EN 1 d or if irritation or other sympto | | |
| Hygiene | Measures | Handle in accordance with g | good industrial hygiene and saf | ety practice. | |
| | | 9. Physical and che | emical properties | | |
| Physical Sta | te | S | olid | | |

Phenolphthalein

Appearance Odor **Odor Threshold** рΗ Melting Point/Range **Boiling Point/Range** Flash Point **Evaporation Rate** Flammability (solid,gas) Flammability or explosive limits Upper Lower Vapor Pressure Vapor Density **Relative Density** Solubility Partition coefficient; n-octanol/water **Autoignition Temperature Decomposition Temperature** Viscosity Molecular Formula **Molecular Weight**

Off-white Odorless No information available No information available 258 - 263 °C / 496.4 - 505.4 °F No information available No information available negligible No information available No data available No data available negligible No information available No information available Insoluble in water No data available No information available No information available No information available C20 H14 O4 318.32

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 | s Carbon monoxide (CO), Carbon dioxide (CO ₂) |
| Hazardous Polymerization | Hazardous polymerization does not occur. |
| Hazardous Reactions | None under normal processing. |

11. Toxicological information

Acute Toxicity

| Product Information Component Information Toxicologically Synergistic Products | See actual entry in RTECS for complete information. No information available |
|---|--|
| Delayed and immediate effects a | s 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 | Х | Not listed |
| | | | Anticipated | | | |

IARC: (International Agency for Research on Cancer)

IARC: (International Agency for Research on Cancer) Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

| NTP: (National Toxicity Program) | Group 2B - Possibly Carcinogenic to Humans NTP: (National Toxicity Program) Known - Known Carcinogen Reasonably Anticipated - Reasonably Anticipated to be a Human |
|--|---|
| Mutagenic Effects | <i>Carcinogen</i> 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 STOT - repeated exposure | None known Kidney |
| Aspiration hazard | No information available |
| Symptoms / effects,both acute and | No information available |

delayed **Endocrine Disruptor Information**

| Component | EU - Endocrine Disrupters Candidate List | EU - Endocrine Disruptors - Evaluated Substances | Japan - Endocrine Disruptor 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 |

| | 13. Disposal 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 national hazardous waste regulations to ensure complete and accurate classification. |

| | 14. Transport information |
|--------------------|----------------------------|
| DOT | Not regulated |
| DOT TDG IATA | Not regulated |
| IATA_ | Not regulated |
| IMDG/IMO | Not regulated |
| | 15. Regulatory information |

International Inventories

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

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.

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

| SARA 313 Not applic | able | | |
|---------------------|---------|----------|----------------------------------|
| Component | CAS-No | Weight % | SARA 313 - Threshold Values % |
| Phenolphthalein | 77-09-8 | >95 | 0.1 |

No Yes No No No

SARA 311/312 Hazardous Categorization

| Acute Health Hazard Chronic Health Hazard Fire Hazard Sudden Release of Pres Reactive Hazard | sure Hazard | |
|--|----------------|--|
| 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 | | o 65 NSRL | Category | | |
|---------------------|---------------|--------------|---------------------|---------|-----------|--------------|--|--|
| Phenolphthalein | 77-09-8 | Carcino | gen | - | | Carcinogen | | |
| State Right-to-Know | | | | | · | | | |
| Component | Massachusetts | New Jersey | Penns | ylvania | Illinois | Rhode Island | | |
| Phenolphthalein | - | Х | | - | Х | - | | |

U.S. Department of Transportation

| Reportable Quantity (RQ): | Ν |
|-----------------------------|---|
| DOT Marine Pollutant | Ν |
| DOT Severe Marine Pollutant | Ν |

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

WHMIS Hazard Class



D2A Very toxic materials

16. Other information

Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com

Creation Date25-Nov-2009Revision Date28-May-2014Print Date28-May-2014Revision SummaryThis document has been replacing the current laboration of th

28-May-2014 28-May-2014 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

Prepared By

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