



SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name: **RESORCINOL**

CAS-No.: **108-46-3**

Product Number: **A66151**

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

Company : Philip Harris Ltd., 2 Gregory Street, Hyde, Cheshire, SK14 4HR,
UNITED KINGDOM

Telephone: +44 (0)845 1200 506 Fax: +44 (0)161 367 2140

Email: enquiries@philipharris.co.uk

1.4 Emergency telephone number

Emergency Phone #: **+44 (0)845 1200 506**

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

According to Regulation (EC) No1272/2008: Acute toxicity, Oral (Category 4); Skin irritation (Category 2); Serious eye damage (Category 1); Acute aquatic toxicity (Category 1)

According to European Directive 67/548/EEC as amended.: Very toxic to aquatic organisms. Irritating to eyes and skin. Harmful if swallowed.

2.2 Label elements

Pictogram

Signal word Danger

Hazard statement(s)

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H400 Very toxic to aquatic life.

Precautionary statement(s)

P273 Avoid release to the environment.

P280 Wear protective gloves/eye protection/face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Hazard symbol(s)

Xn Harmful

N Dangerous for the environment

R-phrase(s)

R22 Harmful if swallowed.

R36/38 Irritating to eyes and skin.

R50 Very toxic to aquatic organisms.

S-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

2.3 Other hazards – none.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

RESORCINOL (*Synonyms : 1,3-Benzenediol*)

| | |
|-------------------|---|
| Formula: | C₆H₄(OH)₂ |
| Molecular Weight: | 110.11g/mol |
| CAS-No.: | 108-46-3 |
| EC-No.: | 203-585-2 |
| Index-No.: | 604-010-00-1 |

4. FIRST AID MEASURES

4.1 Description of first aid measures

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.

In case of skin contact:

Wash off with soap and plenty of water.

In case of eye contact:

Rinse thoroughly with plenty of water for at least 15 minutes.

If swallowed:

Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of immediate medical attention and special treatment needed

no data available

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

no data available

5.3 Precautions for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

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. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

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. Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Air and light sensitive.

7.3 Specific end uses

no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

| Component | CAS No. | Value | Control Parameters | Update |
|-----------------|----------|-------|---------------------------|------------|
| 1,3-Benzenediol | 108-46-3 | STEL | 20ppm 92mg/m ³ | 2007-08-01 |
| 1,3-Benzenediol | 108-46-3 | TWA | 10ppm 46mg/m ³ | 2007-08-01 |
| 1,3-Benzenediol | 108-46-3 | TWA | 10ppm 45mg/m ³ | 2006-02-09 |

UK. EH40 Occupational Exposure Limits Remarks Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.

Europe. Indicative occupational exposure limit values. Identifies the possibility of significant uptake through the skin Indicative.

8.2 Exposure controls

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

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves.

Body Protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- a) Appearance: **Form:** Solid **Colour:** no data available
- b) Odour: no data available
- c) Odour Threshold: no data available
- d) pH: 4.4 at 50 g/L at 20 °C
- e) Melting/freezing point: Melting point/range: 109 - 112 °C
- f) Initial boiling point and boiling range: 178 °C at 21 hPa
- g) Flash point: 127 °C - closed cup
- h) Evaporation rate: no data available
- i) Flammability (solid, gas): no data available
- j) Upper/lower flammability or explosive limits: Lower: 1.4%(V)
- k) Vapour pressure: 1 hPa at 21.1 °C
- l) Vapour density: no data available
- m) Relative density: 1.272 g/cm³
- n) Water solubility: Soluble
- o) Partition coefficient: n-octanol/water: 0.8
- p) Autoignition temperature: 608 °C
- q) Decomposition temperature: no data available
- r) Viscosity: no data available
- s) Explosive properties: no data available
- t) Oxidizing properties: no data available

9.2 Other safety information

no data available

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

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Oxidizing agents, Iron and iron salts.

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - rat - 301 mg/kg: Remarks: Behavioural: Convulsions or effect on seizure threshold. Gastrointestinal: Changes in structure or function of salivary glands. Lungs, Thorax, or Respiration: Dyspnoea.

LD50 Dermal - rabbit - 3,360 mg/kg: Remarks: Skin irritation Nutritional and Gross Metabolic: Weight loss or decreased weight gain.

Skin corrosion/irritation

Skin - rabbit - Skin irritation - 24 h

Serious eye damage/eye irritation

Eyes - rabbit - Severe eye irritation

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

Genotoxicity in vitro - rat – Liver: DNA damage

Genotoxicity in vitro - Human – lymphocyte: Cytogenetic analysis

Carcinogenicity

Carcinogenicity - mouse – Skin: Tumourigenic: Equivocal tumourigenic agent by RTECS criteria. Skin and Appendages: Other: Tumours.

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (1,3-Benzenediol)

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion Harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes Causes eye irritation.

Signs and Symptoms of Exposure

no data available

Additional Information

RTECS: VG9625000

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to daphnia and other aquatic invertebrates.

EC50 - *Daphnia magna* (Water flea) - 0.25 mg/L - 96 h

Toxicity to algae EC50 - *Chlorella pyrenoidosa* - 1.1 - 72 mg/L - 72 h

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

Very toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN-Number

ADR/RID: 2876 IMDG: 2876 IATA: 2876

14.2 UN proper shipping name

ADR/RID: RESORCINOL

IMDG: RESORCINOL

IATA: RESORCINOL

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 users

EMS-No: F-A, S-A

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available

15.2 Chemical Safety Assessment

no data available

16. OTHER INFORMATION

Acute Tox. Acute toxicity

Aquatic Acute Acute aquatic toxicity

Eye Dam. Serious eye damage

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H400 Very toxic to aquatic life.

Skin Irrit. Skin irritation

N Dangerous for the environment

Xn Harmful

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