# 1. PRODUCT

# **1.1 Product identifiers**

Name: 4-Chlororesorcinol

CAS-No.: 95-88-5

# 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

# 2. HAZARDS IDENTIFICATION

# 2.1 Classification of the substance or mixture

# GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Inhalation (Category 4), H332

Acute toxicity, Dermal (Category 4), H312

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

# 2.2 GHS Label elements, including precautionary statements

| Pictogram                     |   |
|-------------------------------|---|
| Signal word                   | Warning   |
| Hazard<br>statement(s)        | H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled<br>H315 Causes skin irritation.<br>H319 Causes serious eye irritation.<br>H335 May cause respiratory irritation.  |
| Precautionary<br>statement(s) | <ul> <li>P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.</li> <li>P264 Wash skin thoroughly after handling.</li> <li>P270 Do not eat, drink or smoke when using this product.</li> <li>P271 Use only outdoors or in a well-ventilated area.</li> <li>P280 Wear eye protection/ face protection.</li> <li>P280 Wear protective gloves/ protective clothing.</li> <li>P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.</li> <li>P302 + P352 IF ON SKIN: Wash with plenty of soap and water.</li> <li>P302 + P352 + P312 IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/ physician if you feel unwell.</li> <li>P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.</li> <li>P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P332 + P313 If skin irritation occurs: Get medical advice/ attention.</li> <li>P337 + P313 If eye irritation persists: Get medical advice/ attention.</li> <li>P362 Take off contaminated clothing and wash before reuse.</li> <li>P403 + P233 Store in a well-ventilated place. Keep container tightly closed.</li> <li>P405 Store locked up.</li> <li>P501 Dispose of contents/ container to an approved waste disposal plant.</li> </ul> |

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

No data available

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

# 3.1 Substances

| Synonyms:         | 1,3-Dihydroxy-4-chlorobenzene |
|-------------------|-------------------------------|
| Formula:          | $C_6H_5CIO_2$                 |
| Molecular weight: | 144.56 g/mol                  |
| CAS-No.:          | 95-88-5                       |
| EC-No.:           | 202-462-0                     |
|                   |                               |

# Hazardous components

| Component          | Classification   | Concentration |
|--------------------|--|---------------|
| 4-Chlororesorcinol | ×  |               |
|                    | Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; H302<br>+ H312 + H332, H315, H319, H335 | <= 100 %      |

For the full text of the H-Statements mentioned in this Section, see Section 16.

# 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. Move out of dangerous area.

#### 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

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

# 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

# 4.2 Indication of any immediate medical attention and special treatment needed

No data available

# **5. FIREFIGHTING 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

Carbon oxides, Hydrogen chloride gas

# 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting 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 vapours, mist or gas. Ensure adequate

ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

# **6.2 Environmental precautions**

Do not let product enter drains.

# 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. 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. Further processing of solid materials may result

in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration

before additional processing occurs.

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.

Keep in a dry place.

Storage class (TRGS 510): Non Combustible Solids

# 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# 8.1 Control parameters

# Components with workplace control parameters

Contains no substances with occupational exposure limit values.

# 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<br>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<br>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.       |
| Body<br>Protection     | Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.  |
| Respiratory protection | For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. 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

| Appearance                                   | Form: powder<br>Colour: grey                            |
|--|---|
| Odour  | No data available                                       |
| Odour Threshold                              | No data available                                       |
| рН   | No data available                                       |
| Melting point/freezing point                 | Melting point/range: 106 - 108 °C (223 - 226 °F) - lit. |
| Initial boiling point and boiling range      | 147 °C (297 °F) at 24 hPa (18 mmHg) - lit.              |
| Flash point                                  | No data available                                       |
| Evaporation rate                             | No data available                                       |
| Flammability (solid, gas)                    | No data available                                       |
| Upper/lower flammability or explosive limits | No data available                                       |
| Vapour pressure                              | No data available                                       |
| Vapour density                               | No data available                                       |
| Relative density                             | No data available                                       |
| Water solubility                             | No data available                                       |
| Partition coefficient: n-octanol/water       | No data available                                       |
| 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

# **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

Acid chlorides, Acid anhydrides, Oxidizing agents

# **10.6 Hazardous decomposition products**

Other decomposition products - No data available

In the event of fire: see section 5

# 11.1 Information on toxicological effects

#### Acute toxicity

# LD50 Oral - Rat - 369 mg/kg

Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Ataxia. Skin and Appendages: Other: Hair. No data available

#### Skin corrosion/irritation

#### Serious eye damage/eye irritation

Eyes - Rabbit

#### Respiratory or skin sensitisation

No data available

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### Reproductive toxicity

No data available

No data available

#### Specific target organ toxicity -single exposure

Inhalation - May cause respiratory irritation

#### Specific target organ toxicity -repeated exposure

No data available

#### Aspiration hazard

#### No data available

#### **Additional Information**

#### RTECS: VH0450000

Depending on the intensity and duration of exposure, effects may vary from mild irritation to severe destruction of tissue., prolonged or repeated exposure can cause:, Damage to the eyes., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

# **12. ECOLOGICAL INFORMATION**

#### 12.1 Toxicity

| Toxicity to fish                                    | LC50 - Poecilia reticulata (guppy) - 1,388 mg/l - 24 h |
|---|--|
| Toxicity to daphnia and other aquatic invertebrates | LC50 - Daphnia pulex (Water flea) - 1 mg/l - 96 h      |
| Toxicity to algae                                   | No data available                                      |
| Toxicity to bacteria                                | No data available                                      |

# 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

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

# 12.6 Other adverse effects

# **13. DISPOSAL CONSIDERATIONS**

# 13.1 Waste treatment methods

# Product

Offer surplus and non-recyclable solutions to a licensed disposal company. 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**

# DOT (US)

Not dangerous goods

# IMDG

Not dangerous goods

# ΙΑΤΑ

Not dangerous goods

# **15. REGULATORY INFORMATION**

# SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

# SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De

Minimis) reporting levels established by SARA Title III, Section 313.

# SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

# Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

#### Pennsylvania Right To Know Components

| Component          | CAS-No. | Revision Date |
|--------------------|---------|---------------|
| 4-Chlororesorcinol | 95-88-5 |               |

#### New Jersey Right To Know Components

| Component          | CAS-No. | Revision Date |
|--------------------|---------|---------------|
| 4-Chlororesorcinol | 95-88-5 |               |

# California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other

reproductive harm.

# **16. OTHER INFORMATION**

# Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Acute toxicity

Eye Irrit. Eye irritation

H302 Harmful if swallowed.

H302 + H312 +H332 Harmful if swallowed, in contact with skin or if inhaled

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

# **HMIS** Rating

Health hazard: 2

Chronic Health Hazard: \*

Flammability: 0

Physical Hazard 0

# **NFPA** Rating

Health hazard: 2

Fire Hazard: 0

Reactivity Hazard: 0