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Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH) Classifications according to Regulation (EC) No 1272/2008. Printdate 08 May 2023

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

1.1. Product name:

Phenol-d6

1.1. Catalog No.:

1136-1X1G

1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical uses: R&D

1.3. Uses advised against:

HPC Standards GmbH Permoserstrasse 15

04318 Leipzig Germany

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2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 Acute toxicity, Oral (Category 3), H301 Acute toxicity, Inhalation (Category 3), H331 Acute toxicity, Dermal (Category 3), H311 Skin corrosion (Sub-category 1B), H314 Serious eye damage (Category 1), H318 Germ cell mutagenicity (Category 2), H341 Specific target organ toxicity - repeated exposure (Category 2), Nervous system, Kidney, Liver, Skin, H373 Long-term (chronic) aquatic hazard (Category 2), H411

2.2. Label elements

2.2.1. Pictogram









2.2.2.

2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Signal word Danger

Signal word Danger
Hazard statement(s) H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled. H314 Causes severe skin burns and eye damage. H341 Suspected of causing genetic defects. H373 May cause damage to organs (Nervous system, Kidney, Liver, Skin) through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects. Precautionary statement(s) P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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Supplemental Hazard Statements none 2.3 Other hazards the either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. Vesicant., Rapidly absorbed through skin.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Synonyms: Hexadeuterophenol

Formula: C6D6O Molecular weight: 100,09 g/mol CAS-No.: 13127-88-3 EC-No.: 236-063-8

Component: Phenol-D6

Classification: Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Muta. 2; STOT RE 2; Aquatic Chronic 2; H301, H331, Concentration: <= 100 %

3.1.1. Formula

C6D6O

3.1.2. Molecular Weight (g/mol)

100.15

3.1.3. CAS-No.

13127-88-3

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. Consult a physician. In case of skin contact Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician. In case of eye contact Rinse thoroughly with plenty of

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water for at least 15 minutes and consult a physician. If wallowed by Well of Mot induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult with water 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 4.3 Indication of any 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 Carbon oxides Combustible. 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 Wear respiratory protection. 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 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. 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. 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. Store in cool place. 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 8.2 Exposure controls Appropriate engineering controls Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Personal protective equipment

Eye/face protection Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves 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.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact

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the supplier of the CE approved gloves. This recommendation satisfies the supplier of the CE approved gloves. This recommendation is a supplied that and safety officer familiar with the specific situation of a supplier of the construed as offering an approval for any specific use scenario.

Body 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 Where risk assessment shows air-purifying respirators are appropriate use a fullface particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Control of environmental exposure Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties a) Appearance Form: solid b) Odour No data available c) Odour Threshold No data available d) pH No data available e) Melting point/freezing point Melting point/range: 40 - 42 °C - lit. f) Initial boiling point and boiling range 182 °C - lit. g) Flash point 81 °C - c.c. h) Evaporation rate No data available i) Flammability (solid, No data available gas) j) Upper/lower flammability or explosive limits Upper explosion limit: 9,5 %(V) Lower explosion limit: 1,3 %(V) k) Vapour pressure No data available l) Vapour density No data available m) Relative density 1,14 g/mL at 25 °C n) Water solubility No data available o) Partition coefficient: n-octanol/water log Pow: 1,47 at 30 °C - Bioaccumulation is not expected., The value is given in analogy to the following substances: p) Auto-ignition temperature No data available 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 No data available 10.6 Hazardous decomposition products Hazardous decomposition products formed under fire conditions. - Carbon oxides Other decomposition products - No data available In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects Acute toxicity LD50 Dermal - Rat - female - 660 mg/kg (OECD Test Guideline 402) Skin corrosion/irritation Skin - In vitro study Result: Causes burns. (OECD Test Guideline 431) Serious eye damage/eye irritation Eyes - Rabbit Result: Corrosive (OECD Test Guideline 405) Causes serious eye damage. Risk of blindness! Respiratory or skin sensitisation Sensitisation test: - Guinea pig Result: negative Remarks: (IUCLID) Germ cell mutagenicity Suspected of causing genetic defects. Mutagenicity (mammal cell test): chromosome aberration. Chinese hamster ovary cells Result: positive Mutagenicity (mammal cell test): micronucleus. Chinese hamster ovary cells Result: positive Carcinogenicity 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: 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. Reproductive toxicity No data available Specific target organ toxicity - single exposure Specific target organ toxicity - repeated exposure May cause damage to organs through prolonged or repeated exposure. - Nervous system, Kidney, Liver, Skin Aspiration hazard Additional Information RTECS: Not available

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Circulatory collapse,

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tachypnea, paralysis, Convulsions, Coma., necrosis of Mail info@armer.europa.de Jaundice, respiratory failure, cardiac arrest

12. ECOLOGICAL INFORMATION

12.1 Toxicity
Toxicity to fish flow-through test LC50 - Onchorhynchus clarki - 8,9 mg/l - 96 h (US-EPA) Toxicitý to daphnia and other aquatic invertebratés static test EC50 - Čeriodaphnia dubiá (water flea) - 3,1 mg/l - 48 h

(US-EPA)
Toxicity to algae static test EC50 - Pseudokirchneriella subcapitata (algae) - 61,1 mg/l - 96 h (US-EPA)
Toxicity to bacteria static test IC50 - microorganisms - 21 mg/l - 24 h Remarks: (ECHA) 12.2 Persistence and degradability Biodegradability aerobic - Exposure time 100 h Result: 62 % - Readily biodegradable. (OECD Test Guideline 301C) 12.3 Bioaccumulative potential Bioaccumulation Danio rerio (zebra fish) - 5 h at 25 °C - 2 mg/l(Phenol-D6)

Bioconcentration factor (BCF): 17,5 (OECD Test Guideline 305)

Remarks: Does not bioaccumulate.

12.4 Mobility in soil 12.5 Results of PBT and vPvB assessment This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. 12.6 Other adverse effects Toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods Product Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. Contaminated packaging Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number ADR/RID: 1671 IMDG: 1671 IATA: 1671 14.2 UN proper shipping name ADR/RID: PHENOL, SOLID IMDG: PHENOL, SOLID IATA: Phenol, solid 14.3 Transport hazard class(es) ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1 14.4 Packaging group ADR/RID: II IMDG: II IATA: II 14.5 Environmental hazards ADR/RID: yes IMDG Marine pollutant: yes IATA: no 14.6 Special precautions for user No data available

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture. This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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15.2 Chemical safety assessment For this product a chemical safety assessment was not carried out

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. For lab use only!