

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH) Classifications according to Regulation (EC) No 1272/2008. Printdate 29 Apr 2024

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

1.1. Product name:

TBBPA

1.1. Catalog No.:

677446

1.2. Relevant identified uses of the substance or mixture Identified: Laboratory chemical uses: R&D

uses:

1.3. Uses advised against:

HPC Standards GmbH Am Wieseneck 7

04451 Cunnersdorf Deutschland

Tel. +49 34291 3372-36 Fax. +49 34291 3372-39 contact@hpc-standards.com

1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36 This number is only available during office hours.

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture 2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 Acute aquatic toxicity (Category 1), H400 Chronic aquatic toxicity (Category 1), H410 Classification according to EU Directives 67/548/EEC or 1999/45/EC N Dangerous for the environment R50/53

2.2. Label elements

2.2.1. Pictogram



2.2.2.

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



Pictogram Signal word Warning Hazard statement(s) H410 Very toxic to aquatic life with long lasting effects Precautionary statement(s) P273 Avoid release to the environment. P501 Dispose of contents/ container to an approved waste disposal plant. Supplemental Hazard Statements none 2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Formula : C15H12Br4O2 Molecular Weight : 543,87 g/mol CAS-No. : 79-94-7 EC-No. : 201-236-9 Index-No. : 604-074-00-0 Hazardous ingredients according to Regulation (EC) No 1272/2008 Component Classification Concentration 2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol CAS-No. EC-No. Index-No. 79-94-7 201-236-9 604-074-00-0 Aquatic Acute 1; Aquatic Chronic 1; H410 <= 100 % Hazardous ingredients according to Directive 1999/45/EC Component Classification Concentration 2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol CAS-No. EC-No. Index-No. 79-94-7 201-236-9 604-074-00-0 N, R50/53 <= 100 %

3.1.1. Formula

C15H12Br4O2

3.1.2. Molecular Weight (g/mol)

543.87



3.1.3. CAS-No.

79-94-7

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.

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact Flush eyes with water as a precaution.

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

4.3 Indication of any immediate medical attention and special treatment needed no data available

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media 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 bromide gas 5.3 Advice for firefighters 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

Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. 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

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

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

7.3 Specific end use(s)

A part 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 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 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 Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. 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: powder Colour: white b) Odour odourless c) Odour Threshold no data available d) pH no data available e) Melting point/freezing point Melting point/range: 180 °C f) Initial boiling point and boiling range no data available g) Flash point no data available
 h) Evapouration rate no data available i) Flammability (solid, gas) no data available Upper/lower j) Upper/lower flammability or explosive limits no data available k) Vapour pressure < 0,0000001 hPa at 20 °C - OECD Test Guideline 104
 l) Vapour density no data available



m) Relative density 2,17 g/cm3 n) Water solubility 1,1 g/l at 25 °C - OECD Test Guideline 105 - slightly soluble o) Partition coefficient: noctanol/ water log Pow: 5,903 at 25 °C 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
Strong oxidizing agents
10.6 Hazardous decomposition products
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 Oral - rat - male and female - > 5.000 mg/kg (OECD Test Guideline 401) LC50 Inhalation - rat - male and female - 8 h - >= 0,5 mg/l LD50 Dermal - rabbit - male and female - > 2.000 mg/kg (OECD Test Guideline 402) Skin corrosion/irritation Skin - rabbit Result: No skin irritation - 24 h (Draize Test) Serious eye damage/eye irritation Eyes - rabbit Result: No eye irritation Respiratory or skin sensitisation Buehler Test - guinea pig Result: Does not cause skin sensitisation. Germ cell mutagenicity Ames test S. typhimurium Result: negative 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. Reproductive toxicity



Reproductive toxicity - rat - Oral Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Musculoskeletal system. Specific target organ toxicity - single exposure no data available Specific target organ toxicity - repeated exposure no data available Additional Information Repeated dose toxicity - rat - male and female - Oral - No observed adverse effect level - 1.000 mg/kg Repeated dose toxicity - rabbit - male and female - Dermal - No observed adverse effect level - 2.500 mg/kg RTECS: SM0894500 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

12. ECOLOGICAL INFORMATION

12.1 Toxicity Toxicity to fish static test LC50 - Cyprinus carpio (Carp) - 0,71 mg/l - 96 h (OECD Test Guideline 203) Toxicity to daphnia and other aquatic invertebrates Immobilization LC50 - Daphnia magna (Water flea) - > 1,8 mg/l - 48 h (OECD Test Guideline 202) Toxicity to algae static test NOEC - Selenastrum capricornutum (green algae) - 5,6 mg/l - 96 h Toxicity to bacteria Respiration inhibition EC50 - Sludge Treatment - 5 - 30 mg/l - 3 h (OECD Test Guideline 209) 12.2 Persistence and degradability Biodegradability aerobic - Exposure time 14 d Result: 0 % - Not readily biodegradable. (OECD Test Guideline 301C) 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 Very toxic to aquatic life

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. Contaminated packaging Dispose of as unused product



14. TRANSPORT INFORMATION

14.1 UN number ADR/RID: 3077 IMDG: 3077 IATA: 3077 14.2 UN proper shipping name ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol) IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol) IATA: Environmentally hazardous substance, solid, n.o.s. (2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol) IATA: Environmentally hazardous substance, solid, n.o.s. (2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol) 14.3 Transport hazard class(es) ADR/RID: 9 IMDG: 9 IATA: 9 14.4 Packaging group ADR/RID: 111 IMDG: 111 IATA: 111 14.5 Environmental hazards ADR/RID: yes IMDG Marine pollutant: yes IATA: yes 14.6 Special precautions for user Further information EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids

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 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!