1. PRODUCT

1.1 Product identifiers

Name: 2,2-Methylenebis(6-tert-butyl-4-methylphenol)

CAS-No.: 119-47-1

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)

Reproductive toxicity (Category 2), H361

Chronic aquatic toxicity (Category 4), H413

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 statement(s) | H361 Suspected of damaging fertility or the unborn child. H413 May cause long lasting harmful effects to aquatic life. |
| Precautionary statement(s) | P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P273 Avoid release to the environment. P281 Use personal protective equipment as required. P308 + P313 IF exposed or concerned: Get medical advice/ attention. P405 Store locked up. P501 Dispose of contents/ container to an approved waste disposal plant. |

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

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

| $C_{23}H_{32}O_2$ |
|-------------------|
| 119-47-1 |
| 204-327-1 |
| |

Hazardous components

| Component | Classification | Concentration | |
|--|--|---------------|--|
| 6,6'-Di-tert-butyl-2,2'-methylenedi-p-cresol | | | |
| | Repr. 2; Aquatic Chronic 4; H361, H413 | 90 -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

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

4.2 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

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

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

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.

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 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 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 | impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. |
| protection | Where risk assessment shows air-purifying respirators are appropriate use a full-face 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 environmen tal 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

| Appearance | Form: solid |
|--|---|
| Odour | no data available |
| Odour Threshold | no data available |
| рН | no data available |
| Melting point/freezing point | Melting point/range: 123 - 127 °C (253 - 261 °F) - lit. |
| Initial boiling point and boiling range | no data available |
| 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 | insoluble |
|--|--------------------------------|
| Partition coefficient: n-octanol/water | log Pow: 6.25 at 20 °C (68 °F) |
| 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

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 - mouse - 11,000 mg/kg Inhalation: no data available Dermal: no data available no data available | entra |
| Skin corrosion/irritation | |
| Skin - rabbit Result: No skin irritation (OECD Test Guideline 404) | che |
| Serious eye damage/eye irritation | |
| Eyes - rabbit Result: No eye irritation (OECD Test Guideline 405) | |
| Respiratory or skin sensitisation | |
| in vivo assay - mouse Does not cause skin sensitisation. (OECD Test Guideline 429) | CS ^C |
| Germ cell mutagenicity | |
| no data available | 27 C |
| Carcinogenicity | |

| probable, possible or confirmed human card ACGIH: No component of this product prese carcinogen or potential carcinogen by ACG NTP: No component of this product present known or anticipated carcinogen by NTP. | ent at levels greater than or equal to 0.1% is identified as a IH. at levels greater than or equal to 0.1% is identified as a nt at levels greater than or equal to 0.1% is identified as a |
|--|--|
| Reproductive toxicity | |
| no data available Suspected of damaging fertility. Suspected | human reproductive toxicant |
| Specific target organ toxicity -single | exposure |
| no data available | |
| Specific target organ toxicity -repeat | ed exposure |
| no data available | |
| Aspiration hazard | |
| no data available | |
| Additional Information | |
| RTECS: PA3500000 To the best of our knowledge, the chemical investigated. | , physical, and toxicological properties have not been thoroughly |

12. ECOLOGICAL INFORMATION

12.1 Toxicity

no data available

12.2 Persistence and degradability

| Biodegradability | Result: - According to the results of tests of biodegradability this product is not readily biodegradable. (OECD Test Guideline 301C) |
|------------------|---|
| | (OECD Test Guideline 301C) |

12.3 Bioaccumulative potential

| Bioaccumulation | Cyprinus carpio (Carp) - 60 d - 0.002 mg/l Bioconcentration factor (BCF): 400 - 840 | |
|-----------------|---|--|
|-----------------|---|--|

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

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

no data available

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. |
| |

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

Not dangerous goods

IMDG

Not dangerous goods

ΙΑΤΑ

Not dangerous goods

15. REGULATORY INFORMATION

SARA 302 Components

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

SARA 313 Components

SARA 313: 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

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 |
|--|----------|---------------|
| 6,6'-Di-tert-butyl-2,2'-methylenedi-p-cresol | 119-47-1 | |

New Jersey Right To Know Components

| Component | CAS-No. | Revision Date |
|--|----------|---------------|
| 6,6'-Di-tert-butyl-2,2'-methylenedi-p-cresol | 119-47-1 | |

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.

Aquatic Chronic Chronic aquatic toxicity

H361 Suspected of damaging fertility or the unborn child.

H413 May cause long lasting harmful effects to aquatic life.

Repr. Reproductive toxicity

HMIS Rating

Health hazard: 0

Chronic Health Hazard: *

Flammability: 0

Physical Hazard 0

NFPA Rating

Health hazard: 0

Fire Hazard: 0

Reactivity Hazard: 0

