

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH) Classifications according to Regulation (EC) No 1272/2008. Printdate 24 May 2023

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

1.1. Product name:

2,6-Di-tert-butyl-4-ethylphenol

1.1. Catalog No.:

683183

1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical uses: R&D

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 Regulation (EC) No 1272/2008 Acute toxicity - Oral Category 4 - (H302) Skin corrosion/irritation Category 2 - (H315) Serious eye damage/eye irritation Category 2 - (H319) Skin sensitisation Category 1 - (H317) Acute aquatic toxicity Category 1 - (H400) Chronic aquatic toxicity Category 1 - (H410)

2.2. Label elements

2.2.1. Pictogram



2.2. Label elements



Signal word Warning

Hazard statements

H302 - Harmful if swallowed H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation H410 - Very toxic to aquatic life with long lasting effects Precautionary Statements - EU (§28, 1272/2008) P264 - Wash face, hands and any exposed skin thoroughly after handling

P273 - Avoid release to the environment

P280 - Wear protective gloves and eye/face protection P391 - Collect spillage

P501 - Dispose of contents/ container to an approved waste disposal plant

2.3. Other hazards

No information available.

- This substance does not meet the PBT/vPvB criteria of REACH, annex XIII. Chemical name: 2,6-di-tert-butyl-4-ethylphenol EU REACH (1907/2006) Article 59(1) Candidate List of Substances of Very High Concern (SVHC) for Authorisation: -EU REACH (1907/2006) Endocrine Disruptor Assessment List of Substances: -

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Chemical name: 2,6-di-tert-butyl-4-ethylphenol 4130-42-1 Weight-%: 100 REACH registration number: -EC No: 223-945-2 Classification according to Regulation (EC) No. 1272/2008 [CLP]: Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) M-Factor M-Factor (long-term) Acute Toxicity Estimate No information available This product does not contain candidate substances of very high concern at a concentration >=0.1% RRegulation (EC) No. 1907/2006 (REACH), Article 59)

3.1.1. Formula

C16H26O

3.1.2. Molecular Weight (g/mol)

234.38



3.1.3. CAS-No.

4130-42-1

4. FIRST AID MEASURES

4.1. Description of first aid measures

4.1. Description of first aid measures
General advice Show this safety data sheet to the doctor in attendance.
Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur.
Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
Skin contact May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a doctor. Wash off immediately with soap and plenty of water for at least 15 minutes. Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a doctor. Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).
4.2. Most important symptoms and effects, both acute and delayed Symptoms Itching. Rashes. Hives. May cause redness and tearing of the eyes. Burning sensation.
4.3. Indication of any immediate medical attention and special treatment needed Note to doctors May cause sensitisation in susceptible persons. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Large Fire CAUTION: Use of water spray when fighting fire may be inefficient. Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams. 5.2. Special hazards arising from the substance or mixture Specific hazards arising from the chemical Product is or contains a sensitiser. May cause sensitisation by skin contact. 5.3. Advice for firefighters Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Other information Refer to protective measures listed in Sections 7 and 8. For emergency responders Use personal protection recommended in Section 8. 6.2. Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. 6.3. Methods and material for containment and cleaning up Methods for containment Prevent further leakage or spillage if safe to do so.



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Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal. Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations. 6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. General hygiene considerations Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face

protection.

7.2. Conditions for safe storage, including any incompatibilities Storage Conditions Please refer to the manufacturers certificate for specific storage and transport temperature

conditions. Store only in the original receptacle unless other advice is given on the CoA. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children.

7.3. Specific end use(s) Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

a.1. Control parameters
 Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits
 This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.
 Derived No Effect Level (DNEL) No information available.
 Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

8.2. Exposure controls
Personal protective equipment
Eye/face protection Avoid contact with eyes. Wear safety glasses with side shields (or goggles).
Hand protection Wear suitable gloves. Impervious gloves. The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374. Wear protective nitrile rubber gloves. Wear protective butyl rubber gloves.
Skin and body protection Wear suitable protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

exceeded or irritation is experienced, ventilation and evacuation may be required. General hygiene considerations Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face

protection. Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties



Physical state Solid Appearance Solid Colour off-white Odour Odourless. Odour threshold No information available Property Values Remarks o Method Melting point / freezing point 45 °C None known Initial boiling point and boiling range No data available None known Flammability No data available None known Flammability Limit in Air None known Upper flammability or explosive limits No data available Lower flammability or explosive limits No data available Flash point No data available None known Autoignition temperature No data available None known Decomposition temperature None known pH No data available None known pH No data available None known pH (as aqueous solution) No data available No information available Kinematic viscosity No data available None known Dynamic viscosity No data available None known Water solubility No data available None known Solubility(ies) Chloroform, Methanol Partition coefficient No data available None known Vapour pressure No data available None known Relative density No data available None known Bulk density No data available Liquid Density No data available Liquid Density No data available Relative vapour density No data available None known Particle characteristics Particle Size No information available Particle Size Distribution No information available 9.2. Other information Molecular weight 234.38 Molecular formula C16H26O 9.2.1. Information with regards to physical hazard classes Not applicable 9.2.2. Other safety characteristics No information available

10. STABILITY AND REACTIVITY

10.1. Reactivity
Reactivity No information available.
10.2. Chemical stability
Stability Stable under normal conditions.
Explosion data
Sensitivity to mechanical impact None.
Sensitivity to static discharge None.
10.3. Possibility of hazardous reactions
Possibility of hazardous reactions
Possibility of hazardous reactions None under normal processing.
10.4. Conditions to avoid
Conditions to avoid
Conditions to avoid None known based on information supplied.
10.5. Incompatible materials
Incompatible materials Strong acids. Strong bases. Strong oxidising agents.
Hazardous decomposition products None known based on information supplied.



11. TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 Information on likely routes of exposure Product Information Inhalation Specific test data for the substance or mixture is not available. Eye contact Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain. Skin contact May cause sensitisation by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes skin irritation. Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Harmful if swallowed. (based on components). Symptoms related to the physical, chemical and toxicological characteristics Symptoms Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes. Numerical measures of toxicity Acute toxicity Delayed and immediate effects as well as chronic effects from short and long-term exposure Delayed and immediate effects as well as chronic effects from short and long-term exposure Skin corrosion/irritation Classification based on data available for ingredients. Causes skin irritation. Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation. Respiratory or skin sensitisation May cause an allergic skin reaction. Germ cell mutagenicity No information available. Carcinogenicity No information available. STOT - single exposure No information available. STOT - repeated exposure No information available. Aspiration hazard No information available. 11.2. Information on other hazards 11.2.1. Endocrine disrupting properties Endocrine disrupting properties No information available. Endocrine disrupting properties No information available. 11.2.2. Other information

Other adverse effects No information available.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity Very toxic to aquatic life with long lasting effects. 12.2. Persistence and degradability Persistence and degradability No information available. 12.3. Bioaccumulative potential Bioaccumulation No information available.

Bloaccumulation No information available.
12.4. Mobility in soil
Mobility in soil No information available.
12.5. Results of PBT and vPvB assessment
PBT and vPvB assessment This substance is not considered to be persistent, bioaccumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB).
12.6. Endocrine disrupting properties.

12.6. Endocrine disrupting properties Endocrine disrupting properties No information available.

12.7. Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Contaminated packaging Do not reuse empty containers



14. TRANSPORT INFORMATION

IATA 14.1 UN number or ID number UN3077 14.2 UN proper shipping name Environmentally hazardous substances, solid, n.o.s. (2,6-di-tert-butyl-4-ethylphenol) 14.3 Transport hazard class(es) 9 14.4 Packing group III Description UN3077, Environmentally hazardous substances, solid, n.o.s. (2,6-di-tert-butyl-4-ethylphenol), 9, III 14.5 Environmental hazards Yes 14.6 Special precautions for user Special Provisions A97, A158, A179, A197, A215 ERG Code 9L IMDG 14.1 UN number or ID number UN3077
 14.2 UN proper shipping name Environmentally hazardous substances, solid, n.o.s. (2,6-di-tert-butyl-4-ethylphenol)
 14.3 Transport hazard class(es) 9 14.3 Transport hazard class(es) 9
14.4 Packing group III
Description UN3077, Environmentally hazardous substances, solid, n.o.s. (2,6-di-tert-butyl-4-ethylphenol), 9, III, Marine pollutant
14.5 Marine pollutant P
Environmental hazards Yes
14.6 Special precautions for user
Special Provisions 274, 335, 966, 967, 969
EmS-No F-A, S-F No information available
14.7 Maritime transport in bulk
according to IMO instruments
No information available No information available RID 14.1 UN number or ID number UN3077 14.2 UN proper shipping name Environmentally hazardous substances, solid, n.o.s. (2,6-di-tert-butyl-4-ethylphenol) 14.3 Transport hazard class(es) 9 14.4 Packing group III Description UN3077, Environmentally hazardous substances, solid, n.o.s. (2,6-di-tert-butyl-4-ethylphenol), 9, III 14.5 Environmental hazards Yes 14.6 Special precautions for user Special Provisions 274, 335, 375, 601 Classification code M7 ADR 14.1 UN number or ID number UN3077 14.2 UN proper shipping name Environmentally hazardous substances, solid, n.o.s. (2,6-di-tert-butyl-4-ethylphenol) 14.3 Transport hazard class(es) 9 14.4 Packing group III Description UN3077, Environmentally hazardous substances, solid, n.o.s. (2,6-di-tert-butyl-4-ethylphenol), 9, III, (-) 14.5 Environmental hazards Yes 14.6 Special precautions for user Special Provisions 274, 335, 601, 375 Classification code M7 Tunnel restriction code (-)

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Water hazard class (WGK) obviously hazardous to water (WGK 2) Poland SDS created according to the following Polish regulation: Act of February 25, 2011 on chemical substances and their mixtures (Journal of Laws of 2018, item 143, as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing the European Chemicals Agency (EC) as amended. Regulation (EC) No 1272/2008 of the European Parliament and of the Council on the Registration, labeling and packaging of substances and mixtures, as amended. Regulation of the Minister of Health of 10 August 2012 on the criteria and method of classifying chemical substances and their mixtures (Journal of Laws of 2012, item 1018). Regulation of the Minister of Health of 20 April 2012 on labeling packaging of hazardous substances and mixtures and some mixtures (Journal of Laws of 2012, item 445). Regulation of the Minister of Family, Labor and Social Policy of 12 June 2018 on the maximum allowable concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286). Announcement of the Minister of Economy, Labor and Social Policy of August 28,



2003 on the publication of the unified text of the Ordinance of the Minister of Labor and Social Policy on general health and safety at work regulations (Journal of Laws of 2003, No. 169, item 1650). Regulation of the Minister of Health of 30 December 2004 on occupational safety and health related to the presence of chemical agents in the workplace (Journal of Laws of 2005, No. 11, item 86). Act of December 14, 2012 on waste (Journal of Laws of 2013, item 21) Regulation of the Minister of Health of December 30, 2004 on occupational health and safety related to the presence of chemical agents in the workplace (Journal U. of 2005, No. 11, item 86). Waste Act of December 14, 2012 (Journal of Laws of 2013, item 21). Act of 13 June 2013 on the management of packaging and packaging waste, Journal of Laws 2013, item 888). Government statement of September 24, 2002 - European Agreement on the International Carriage of Dangerous Goods by Road (ADR) (Journal of Laws No. 194, item 1629 and Journal of Laws of 2003, No. 207, item 2013 and 2014). European Union Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents ať work. Authorisations and/or restrictions on use: This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII) DIRECTIVE (EU) 2021/1187 on the marketing and use of explosives precursors Not applicable Persistent Organic Pollutants Not applicable Dangerous substance category per Seveso Directive (2012/18/EU) E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1 Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

International Inventories TSCA Contact supplier for inventory compliance status

DSL/NDSL Contact supplier for inventory compliance status

EINECS/ELINCS Contact supplier for inventory compliance status

ENCS Contact supplier for inventory compliance status IECSC Contact supplier for inventory compliance status

KECL Contact supplier for inventory compliance status

PICCS Contact supplier for inventory compliance status AIIC Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report A Chemical Safety Assessment has been carried out for this substance

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!