## SECTION 1. IDENTIFICATION

Product name : PUROLAN BHT

Product code : 000000000001787059

**Manufacturer or supplier's details**

Company : LANXESS Corporation
Product Safety & Regulatory Affairs
111 RIDC Park West Drive
15275-1112 Pittsburgh, United States of America

Responsible Department : +1800LANXESS

Emergency telephone number : Chemtrec (800) 424-9300
International (703) 527-3887
Lanxess Emergency Phone (800) 410-3063

**Recommended use of the chemical and restrictions on use**

Recommended use : Personal care
Food additive
Antioxidant

## SECTION 2. HAZARDS IDENTIFICATION

**GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200).**

Combustible dust

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

**GHS label elements**

Hazard pictograms :

Signal word : Warning

Hazard statements : May form combustible dust concentrations in air.
May cause respiratory irritation.

Supplemental Hazard Statements : Prevent dust accumulation.
Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.

Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink.

Get medical attention if symptoms occur.
In case of contact, flush skin or eyes with plenty of lukewarm water.

Precautionary statements :

**Prevention:**

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
Use only outdoors or in a well-ventilated area.

**Response:**

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel un-well.

**Storage:**

Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Substance name : Butylated Hydroxy Toluene (BHT)

**Components**

| Chemical name | CAS-No. | Concentration (% w/w) |
|---|---|---|
| 2,6-di-tert-butyl-p-cresol | 128-37-0 | >= 99.8 |
| methanol | 67-56-1 | <= 0.3 |

## SECTION 4. FIRST AID MEASURES

If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms occur.

In case of skin contact : Wash off with soap and water.
Get medical attention if symptoms occur.

| | | |
|---|---|---|
| In case of eye contact | : | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.<br>Keep eye wide open while rinsing.<br>Continue to rinse for at least 10 minutes.<br>Remove contact lenses.<br>Protect unharmed eye.<br>If eye irritation persists, consult a specialist. |
| If swallowed | : | Rinse mouth with water.<br>Do not induce vomiting unless directed to do by medical personnel.<br>Get medical attention if symptoms occur. |

**Most important symptoms and effects, both acute and delayed**

| | | |
|---|---|---|
| Symptoms | : | May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose. |
| Effects | : | May cause respiratory irritation. |

## SECTION 5. FIREFIGHTING MEASURES

| | | |
|---|---|---|
| Suitable extinguishing media | : | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Unsuitable extinguishing media | : | None known. |
| Specific hazards during firefighting | : | Do not allow run-off from fire fighting to enter drains or water courses.<br>Very toxic to aquatic life with long lasting effects.<br><br>Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.<br><br>Toxic and irritating gases/fumes may be given off during burning or thermal decomposition. |
| Hazardous combustion products | : | Carbon dioxide (CO2)<br>Carbon monoxide |
| Further information | : | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.<br>No action shall be taken involving any personal risk or without suitable training.<br>Cool containers/tanks with water spray.<br>Collect contaminated fire extinguishing water separately. This must not be discharged into drains.<br>Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

| | | |
|---|---|---|
| Special protective equipment for firefighters | : | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |

## SECTION 6. ACCIDENTAL RELEASE MEASURES

| | | |
|---|---|---|
| Personal precautions, protective equipment and emergency procedures | : | No action shall be taken involving any personal risk or without suitable training.<br>Keep unnecessary and unprotected personnel from entering.<br>Do not touch or walk through spilled material.<br>Avoid dust formation.<br>Ensure adequate ventilation.<br>In case of inadequate ventilation wear respiratory protection.<br>Use personal protective equipment. |
| Environmental precautions | : | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.<br>Prevent product from entering drains.<br>Prevent further leakage or spillage if safe to do so.<br>If the product contaminates rivers and lakes or drains inform respective authorities. |
| Methods and materials for containment and cleaning up | : | Move containers from spill area.<br>Use non-sparking tools.<br>Use explosion-proof electrical equipment.<br>Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).<br>Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container.<br>Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).<br>Do not allow into the sewerage system, surface waters or groundwater or into the soil. |

## SECTION 7. HANDLING AND STORAGE

| | | |
|---|---|---|
| Advice on safe handling | : | Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame).<br>Avoid inhalation, ingestion and contact with skin and eyes.<br>Use only with adequate ventilation.<br>Electrical equipment should be protected to the appropriate standard.<br>Take precautionary measures against static discharges.<br>Empty containers retain product residue; observe all precautions for product.<br>Workers should wash hands and face before eating, drinking and smoking.<br>Put on appropriate personal protection equipment. |

Use non-sparking tools and equipment. Consult National Fire Protection Association (NFPA) 654 Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids for details on the safe handling and equipment design.

Conditions for safe storage : Store in accordance with local regulations.
Minimize dust generation and accumulation, especially on elevated surfaces (e.g., roof beams and trusses, ventilation ducts, wall sills). A dust layer just 1/32nd of an inch(0.793 mm) deep on elevated surfaces may create a dust cloud explosion hazard.
Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink.
Keep away from heat and sources of ignition.
Keep in a cool place away from oxidizing agents.
Keep container closed when not in use.
Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
Do not store in unlabeled containers.
Use appropriate container to avoid environmental contamination.
Empty containers retain residue and can be dangerous.
Do not reuse container.
Keep away from water or moist air.

Recommended storage temperature : < 122 °F / < 50 °C

Further information on storage stability : No decomposition if stored and applied as directed.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Components with workplace control parameters**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---|---|---|---|---|
| 2,6-di-tert-butyl-p-cresol | 128-37-0 | TWA (Inhalable fraction and vapor) | 2 mg/m3 | ACGIH |
| methanol | 67-56-1 | TWA | 200 ppm | ACGIH |
| | | STEL | 250 ppm | ACGIH |
| | | TWA | 200 ppm<br>260 mg/m3 | OSHA Z-1 |

**Engineering measures** : Use only in an area equipped with explosion proof exhaust ventilation.
If user operations generate dust, fumes or mist, use ventila-

tion to keep exposure to airborne contaminants below the exposure limit.

Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use explosion-proof ventilating equipment.

**Personal protective equipment**

Respiratory protection : The following respirator is recommended if airborne concentrations exceed the appropriate standard/guideline.
NIOSH approved, air-purifying particulate respirator with N-95 filters.

Hand protection
Material : Polyvinyl chloride - PVC
Wearing time : < 60 min

Material : Natural rubber - NR
Wearing time : < 60 min

Remarks : Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection : Safety glasses with side-shields

Skin and body protection : Wear work clothing including long pants and long-sleeve shirts.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.
Appropriate techniques should be used to remove potentially contaminated clothing.
Wash contaminated clothing before reusing.
Ensure that eyewash stations and safety showers are close to the workstation location.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Crystalline solid

Colour : colourless

Odour : odourless

| | | |
|---|---|---|
| Odour Threshold | : | No data available |
| pH | : | No data available |
| Melting point/range | : | 157.6 °F / 69.8 °C |
| Boiling point/boiling range | : | 509 °F / 265 °C<br>(1,013 hPa) |
| Flash point | : | 261 °F / 127 °C<br>Method: closed cup |
| Evaporation rate | : | No data available |
| Flammability (solid, gas) | : | May form combustible dust concentrations in air. |
| Self-ignition | : | No data available |
| Burning number | : | No data available |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapour pressure | : | 0.01 hPa (68 °F / 20 °C) |
| Relative density | : | No data available |
| Density | : | 1.03 kg/l (68 °F / 20 °C) |
| Bulk density | : | 650 kg/m3 |
| Solubility(ies) | | |
| Water solubility | : | 0.76 mg/l |
| Solubility in other solvents | : | Solvent: Aliphatic hydrocarbons<br>Solvent: Aromatic hydrocarbons<br>Solvent: Acetone<br>Solvent: Ethanol<br>Solvent: ethyl acetate<br>Solvent: Dichloromethane. |

| | | |
|---|---|---|
| Partition coefficient: n-octanol/water | : | No data available |
| Auto-ignition temperature | : | > 752 °F / > 400 °C |
| Decomposition temperature | : | > 509 °F / > 265 °C |
| Viscosity | | |
| Viscosity, dynamic | : | No data available |
| Viscosity, kinematic | : | No data available |
| Explosive properties | : | No data available |
| Oxidizing properties | : | No data available |
| Dust explosion class | : | St2 |

## SECTION 10. STABILITY AND REACTIVITY

| | | |
|---|---|---|
| Reactivity | : | No dangerous reaction known under conditions of normal use. |
| Chemical stability | : | The product is chemically stable. |
| Possibility of hazardous reactions | : | Dust can form an explosive mixture in air.<br>Under normal conditions of storage and use, hazardous reactions will not occur.<br>No hazards to be specially mentioned. |
| Conditions to avoid | : | Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame).<br>Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death.<br>Avoid dust accumulation in enclosed space. |
| Incompatible materials | : | Oxidizing agents |
| Hazardous decomposition products | : | No hazardous decomposition products are known. |

## SECTION 11. TOXICOLOGICAL INFORMATION

The most important known symptoms and effects are described in Section 2 and/or Section 4.

**Information on likely routes of exposure**

Inhalation
Eye contact
Skin contact
Ingestion

**Acute toxicity**

Not classified based on available information.

**Product:**

Acute oral toxicity : LD50 (Rat): > 2,930 mg/kg
Method: OECD Test Guideline 401
GLP: yes
Assessment: The substance or mixture has no acute oral toxicity
Remarks: Dosage caused no mortality

Acute inhalation toxicity : Acute toxicity estimate: > 200 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Dosage caused no mortality

**Components:**

**2,6-di-tert-butyl-p-cresol:**

Acute oral toxicity : LD50 (Rat, male and female): > 2,930 mg/kg
Method: OECD Test Guideline 401
GLP: yes
Assessment: The substance or mixture has no acute oral toxicity
Remarks: Dosage caused no mortality

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Dosage caused no mortality

**methanol:**

Acute oral toxicity : LD50 (Rat): > 2,528 mg/kg
Method: OECD Test Guideline 401
GLP: no
Remarks: Dosage caused no mortality

(Human): Assessment: The component/mixture is toxic after single ingestion.

Acute inhalation toxicity : LC50 (Rat, male and female): 128.2 mg/l

Exposure time: 4 h
Test atmosphere: vapour

(Human): Assessment: The component/mixture is toxic after short term inhalation.

Acute dermal toxicity : LD50 (Rabbit): 15,800 mg/kg

(Human): Assessment: The component/mixture is toxic after single contact with skin.

**Skin corrosion/irritation**

Not classified based on available information.

**Product:**

Species : Rabbit
Result : No skin irritation

**Components:**

**2,6-di-tert-butyl-p-cresol:**

Species : Rabbit
Exposure time : 24 h
Remarks : Mild skin irritation
(not subject to classification)

**methanol:**

Species : Rabbit
Result : No skin irritation

**Serious eye damage/eye irritation**

Not classified based on available information.

**Product:**

Species : Rabbit
Result : No eye irritation

**Components:**

**2,6-di-tert-butyl-p-cresol:**

Species : Rabbit
Exposure time : 24 h
Remarks : Mild eye irritation
(not subject to classification)

**methanol:**

Species : Rabbit
Result : No eye irritation

**Respiratory or skin sensitisation**

**Skin sensitisation**

Not classified based on available information.

**Respiratory sensitisation**

Not classified based on available information.

**Product:**

| | | |
|---|---|---|
| Exposure routes | : | Skin contact |
| Species | : | Human |
| Result | : | Does not cause skin sensitisation. |

**Components:**

**2,6-di-tert-butyl-p-cresol:**

| | | |
|---|---|---|
| Exposure routes | : | Skin contact |
| Species | : | Human |
| Result | : | Does not cause skin sensitisation. |

**methanol:**

| | | |
|---|---|---|
| Test Type | : | Maximisation Test |
| Exposure routes | : | Skin contact |
| Species | : | Guinea pig |
| Method | : | OECD Test Guideline 406 |
| Result | : | Did not cause sensitisation on laboratory animals. |
| GLP | : | no |

**Germ cell mutagenicity**

Not classified based on available information.

**Components:**

**2,6-di-tert-butyl-p-cresol:**

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Test system: rat hepatocytes
Metabolic activation: with metabolic activation
Result: negative

Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Result: negative

Genotoxicity in vivo : Test Type: Cytogenetic assay
Species: Rat (male)
Cell type: Bone marrow
Application Route: Oral
Result: negative

Test Type: Micronucleus test
Species: Mouse (male and female)
Cell type: Bone marrow
Application Route: Intraperitoneal
Result: negative

**methanol:**

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: No information available.

Test Type: HPRT test
Test system: Chinese hamster fibroblasts
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: No information available.

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse (male and female)
Cell type: Bone marrow
Application Route: Intraperitoneal
Method: OECD Test Guideline 474
Result: negative
GLP: No information available.

**Carcinogenicity**

Not classified based on available information.

**Components:**

**2,6-di-tert-butyl-p-cresol:**

| | | |
|---|---|---|
| Species | : | Rat, male and female |
| Application Route | : | Oral |
| NOAEL | : | 247 mg/kg bw/day |
| Target Organs | : | Liver |
| GLP | : | yes |

**methanol:**

| | | |
|---|---|---|
| Species | : | Rat, male and female |
| Application Route | : | Inhalation |

| | | |
|---|---|---|
| Exposure time | : | 24 month(s) |
| Dose | : | 0,013 - 0,13 - 1,3 mg/l |
| Frequency of Treatment | : | 20 h daily |
| | : | >= 1.3 mg/l |
| Method | : | OECD Test Guideline 453 |
| Result | : | negative |
| GLP | : | No information available. |

**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.

**IARC**
**OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**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.

**Reproductive toxicity**

Not classified based on available information.

**Components:**

**2,6-di-tert-butyl-p-cresol:**

| | | |
|---|---|---|
| Effects on fertility | : | Test Type: Two-generation study<br>Species: Rat, male and female<br>Application Route: Oral<br>Fertility: NOAEL: 500 mg/kg body weight<br>GLP: yes |
| Effects on foetal development | : | Test Type: Two-generation study<br>Species: Rat, male and female<br>Application Route: Oral<br>General Toxicity Maternal: NOAEL: 100 mg/kg body weight<br>Developmental Toxicity: NOAEL: 100 mg/kg body weight<br>GLP: yes |

**STOT - single exposure**

May cause respiratory irritation.

**Components:**

**2,6-di-tert-butyl-p-cresol:**

| | | |
|---|---|---|
| Assessment | : | May cause respiratory irritation. |

**methanol:**

| | | |
|---|---|---|
| Target Organs | : | Central nervous system, Eyes |
| Assessment | : | Causes damage to organs. |

**STOT - repeated exposure**

Not classified based on available information.

**Repeated dose toxicity**

**Components:**

**2,6-di-tert-butyl-p-cresol:**

| | | |
|---|---|---|
| Species | : | Rat, male |
| NOAEL | : | 25 mg/kg |
| Application Route | : | Oral |
| GLP | : | yes |
| Target Organs | : | Liver |
| Symptoms | : | alteration in liver enzymes |

**Aspiration toxicity**

Not classified based on available information.

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Components:**

**2,6-di-tert-butyl-p-cresol:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Danio rerio (zebra fish)): > 0.57 mg/l<br>Exposure time: 96 h<br>Method: Regulation (EC) No. 440/2008, Annex, C.1<br>GLP: yes |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 0.48 mg/l<br>Exposure time: 48 h<br>Method: OECD Test Guideline 202<br>GLP: yes |
| Toxicity to algae/aquatic plants | : | EC50 (Desmodesmus subspicatus (green algae)): > 0.4 mg/l<br>End point: Growth rate<br>Exposure time: 72 h<br>Method: Regulation (EC) No. 440/2008, Annex, C.3<br>GLP: yes<br><br>NOEC (Desmodesmus subspicatus (green algae)): 0.4 mg/l<br>End point: Growth rate<br>Exposure time: 72 h<br>Method: Regulation (EC) No. 440/2008, Annex, C.3<br>GLP: yes |
| Toxicity to fish (Chronic toxicity) | : | NOEC (Oryzias latipes (Orange-red killifish)): 0.053 mg/l<br>Exposure time: 42 d<br>Method: OECD Test Guideline 210<br>GLP: yes |

| | | |
|---|---|---|
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC (Daphnia magna (Water flea)): 0.023 mg/l<br>Exposure time: 21 d<br>Method: OECD Test Guideline 202<br>GLP: yes |
| Toxicity to microorganisms | : | EC50 (activated sludge): > 10,000 mg/l<br>End point: Respiration inhibition<br>Exposure time: 3 h<br>Method: OECD Test Guideline 209<br>GLP: yes |

**methanol:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Lepomis macrochirus (Bluegill sunfish)): 15,400 mg/l<br>Exposure time: 96 h<br>Analytical monitoring: yes<br>Method: EPA-660/3-75-009<br>GLP: No information available.<br>Remarks: Fresh water |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): > 10,000 mg/l<br>Exposure time: 48 h<br>Analytical monitoring: no<br>Method: DIN 38412<br>GLP: no<br>Remarks: Fresh water |
| Toxicity to algae/aquatic plants | : | EC50 (Pseudokirchneriella subcapitata (microalgae)): ca. 22,000 mg/l<br>End point: Growth rate<br>Exposure time: 96 h<br>Analytical monitoring: No information available.<br>Method: OECD Test Guideline 201<br>GLP: No information available.<br>Remarks: Fresh water |
| Toxicity to microorganisms | : | EC50 (activated sludge): > 1,000 mg/l<br>Exposure time: 3 h<br>Analytical monitoring: yes<br>Method: OECD Test Guideline 209<br>GLP: No information available.<br>Remarks: Fresh water |

**Persistence and degradability**

**Components:**

**2,6-di-tert-butyl-p-cresol:**

| | | |
|---|---|---|
| Biodegradability | : | Result: Not readily biodegradable.<br>Biodegradation: 4.5 % |

Exposure time: 28 d
Method: OECD Test Guideline 301C

**methanol:**

Biodegradability : aerobic
Concentration: 3 mg/l
Result: Readily biodegradable.
Biodegradation: 76 %
Exposure time: 5 d
Method: Closed Bottle test
GLP: no

**Bioaccumulative potential**

**Components:**

**2,6-di-tert-butyl-p-cresol:**

Bioaccumulation : Bioconcentration factor (BCF): > 2,000

Partition coefficient: n-octanol/water : log Pow: 5.1
Method: measured

**methanol:**

Partition coefficient: n-octanol/water : log Pow: -0.77
Method: Calculated value

**Mobility in soil**

**Components:**

**2,6-di-tert-butyl-p-cresol:**

Distribution among environmental compartments : Koc: 14750, log Koc: 3.9 - 4.2
Method: estimated

**Other adverse effects**

**Components:**

**2,6-di-tert-butyl-p-cresol:**

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

## SECTION 13. DISPOSAL CONSIDERATIONS

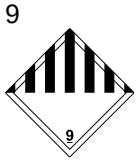
**Disposal methods**

| | | |
|---|---|---|
| RCRA - Resource Conservation and Recovery Authorization Act | : | If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24) |
| Waste from residues | : | The generation of waste should be avoided or minimized wherever possible.<br>This material and its container must be disposed of in a safe way.<br>When uncleaned empty containers are passed on, the recipient must be warned of any possible hazard that may be caused by residues.<br>Empty containers retain product residue; observe all precautions for product.<br>Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.<br>Waste disposal should be in accordance with existing federal, state, provincial and/or local environmental controls. |

## SECTION 14. TRANSPORT INFORMATION

**International Regulations**

**IATA-DGR**

| | | |
|---|---|---|
| UN/ID No. | : | UN 3077 |
| Proper shipping name | : | Environmentally hazardous substance, solid, n.o.s. (2,6-DI-TERT-BUTYL-P-CRESOL) |
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | 9 |
| | : |  |
| Packing instruction (cargo aircraft) | : | 956 : 400.00 KG |
| Packing instruction (passenger aircraft) | : | 956 : 400.00 KG |
| Environmentally hazardous | : | yes |

**IMDG-Code**

| | | |
|---|---|---|
| UN number | : | UN 3077 |
| Proper shipping name | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,6-DI-TERT-BUTYL-P-CRESOL) |
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | 9 |
| | : |  |
| EmS Code | : | F-A, S-F |
| Marine pollutant | : | yes |

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**National Regulations**

**49 CFR**

| | | |
|---|---|---|
| UN/ID/NA number | : | UN 3077 |
| Proper shipping name | : | Environmentally hazardous substance, solid, n.o.s. (2,6-DI-TERT-BUTYL-P-CRESOL) |
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | 9 |
| | : |  |
| ERG Code | : | 171 |
| Marine pollutant | : | yes |

The U.S. DOT regulations in 49 CFR 172.102 permit this material to ship as an Environmentally Hazardous Substance, Class 9, using Special Provision 146.

Hazard and Handling Notes. : Environmentally hazardous substance., Keep dry., Keep separated from foodstuffs

**Special precautions for user**

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

## SECTION 15. REGULATORY INFORMATION

**CERCLA Reportable Quantity**

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---|---|---|---|
| methanol | 67-56-1 | 5000 | * |

*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**

This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards** : Combustible dust
Specific target organ toxicity (single or repeated exposure)

**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.

**US State Regulations**

**Massachusetts Right To Know**

| | | |
|---|---|---|
| 2,6-di-tert-butyl-p-cresol | 128-37-0 | >= 99.8 |

**Pennsylvania Right To Know**

| | | |
|---|---|---|
| 2,6-di-tert-butyl-p-cresol | 128-37-0 | >= 99.8 |
| methanol | 67-56-1 | <= 0.3 |

**California Prop. 65**

WARNING: This product can expose you to chemicals including methanol, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

**TSCA inventory**

TSCA : This product is regulated under the United States Food and Drug Act (FDA).

**TSCA list**

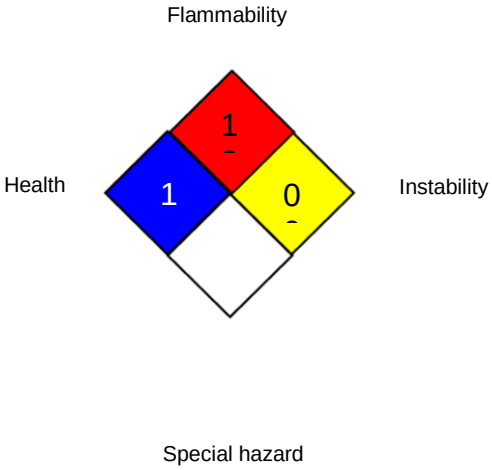
No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

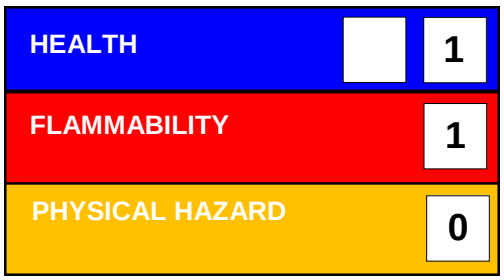
## SECTION 16. OTHER INFORMATION

### Further information

**NFPA 704:**




**HMIS® IV:**




HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

### Full text of other abbreviations

| | | |
|---|---|---|
| ACGIH | : | USA. ACGIH Threshold Limit Values (TLV) |
| OSHA Z-1 | : | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| ACGIH / TWA | : | 8-hour, time-weighted average |
| ACGIH / STEL | : | Short-term exposure limit |
| OSHA Z-1 / TWA | : | 8-hour time weighted average |

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose);

MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 09/30/2020

The data contained in this Safety Data Sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered to be a guidance for processing and does not contain any warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. It is the responsibility of the recipient of the product to ensure that any proprietary rights and existing laws and legislation are observed.