

1: Identification of substance / mixture

1. Product Identifier

Substance

Product Name **2-(2H-Benzo[d][1,2,3]triazol-2-yl)-4,6-di-tert-butylphenol**
Product Code 235842
CAS Number 3846-71-7
Other Names
IUPAC
MFCD Number MFCD01075688
EC/EINECS
REACH Number

2. Relevant identified uses of the substance or mixture and uses advised against

Research and Development

3. Details of the supplier of the safety data sheet

Fluorochem Ltd
Unit 14, Graphite Way
Hadfield
Derbyshire
SK13 1QH
UK

Telephone: +44(0)1457 860111
Fax: +44(0)1457 892799
Email: sds@fluorochem.co.uk



4. Emergency telephone number

+44(0)7855 268577 -

2. Hazards Identification

1. Classification of the substance or mixture

| | | |
|------|-------------------|--|
| H301 | Acute Tox. 3 | |
| H315 | Skin Irrit. 2 | |
| H319 | Eye Irrit. 2 | |
| H332 | Acute Tox. 4 | |
| H335 | STOT SE 3a | |
| H410 | Aquatic Chronic 1 | |

2. Label elements

Signal Word **Danger**



Hazard Statements

| | |
|------|---|
| H301 | Toxic if swallowed. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Precautionary Phrases

| | |
|--------------------|--|
| P273 | Avoid release to the environment. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304 + P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P332 + P313 | If skin irritation occurs: Get medical advice/attention. |

P337 + P313 If eye irritation persists: Get medical advice/attention.

3. Other Hazards

Additional precautionary phrases are located throughout the safety data sheet

3. Composition / Information on Ingredients

1. Substances

2-(2H-Benzo[d][1,2,3]triazol-2-yl)-4,6-di-tert-butylphenol

Assay:100% CAS Number :3846-71-7

2. Mixtures

Not Relevant

4. First Aid Measures

1. Description of first aid measures

Skin Contact P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
P332 + P313: If skin irritation occurs: Get medical advice/attention.

Eye Contact P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313: If eye irritation persists: Get medical advice/attention.

Ingestion Wash out mouth with water.

Inhalation P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

2. Most important symptoms and effects

No symptoms.

3. Indication of any immediate medical attention

P312: Call a POISON CENTER or doctor/physician if you feel unwell.
No additional measures required

5. Firefighting measures

1. Extinguishing Media

Suitable Carbon dioxide.
Dry chemical powder.
Water.

Unsuitable Do not use water with a full water jet

2. Special Hazards arising from the substance or mixture

In combustion toxic fumes may form.

3. Advice for Fire Fighters

Wear protective clothing to prevent contact with skin and eyes.
Wear self-contained breathing apparatus.

6. Accidental Release Measures

1. Personal Precautions

Refer to section 8 of SDS for personal protection details.

2. Environmental Precautions

Do not discharge into drains or rivers.

3. Methods & Materials

P391: Collect spillage.
Mix with sand or vermiculite.
Transfer to a suitable container.

4. Preventing the occurrence of secondary hazards.

No Special Measures Required

7. Handling and Storage

1. Personal Precautions

| | |
|--|---|
| <i>Safe Handling</i> | Handle in fume hood. Wash hands immediately after contamination. P264: Wash hands thoroughly after handling. P273: Avoid release to the environment. |
| <i>Protection against explosions and fires</i> | P362: Take off contaminated clothing and wash before reuse. normal measures for preventive fire protection |

2. Conditions for safe storage, including any incompatibilities

| | |
|-------------------------------|--|
| <i>Managing Storage Risks</i> | Keep container tightly closed. Store in cool, well ventilated area. Store cold 2-8° C. |
| <i>Storage Controls</i> | No special requirements |
| <i>Maintaining Integrity</i> | Keep in tightly closed container in cool area away from direct sunlight or heat sources. |
| <i>Other advice</i> | P403 + P233: Store in a well-ventilated place. Keep container tightly closed. |

3. Specific End Uses

The end use(s) have not been fully determined. The substance is supplied for Research and Development purposes by professionals only.

8. Exposure Controls/Personal Protection

1. Control Parameters

No Data Available

2. Exposure Controls

| | |
|--|--|
| <i>General protective and hygiene measures</i> | P280: Wear protective gloves/protective clothing/eye protection/face protection. The standard precautionary measures should be adhered to when handling Wash hands during breaks and at the end of handling the material Immediately remove any contaminated clothing |
| <i>Engineering measures</i> | P271: Use only outdoors or in a well-ventilated area. Ensure there is sufficient ventilation of the area. |
| <i>Eye / Face Protection</i> | Safety Glasses. |
| <i>Hand protection</i> | Protective gloves. |
| <i>Respiratory protection</i> | P261: Avoid breathing dust/fume/gas/mist/vapours/spray. Respiratory protection not required. |
| <i>Skin protection</i> | Protective clothing. |
| <i>Other personal protection advice</i> | no data |

9. Physical and Chemical Properties

1. Physical and Chemical Properties

| | |
|---|-------------------|
| Appearance | Off-white powder |
| Odour | No Data Available |
| Odour threshold | No Data Available |
| PH | No Data Available |
| Melting point / Freezing point | 191° |
| 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 |
| Solubility(ies): | water solubility 0.1503mg/L @ 25° |
| Partition coefficient: n-octanol/water | No Data Available |
| Auto-ignition temperature | No Data Available |
| Decomposition temperature | No Data Available |
| Viscosity | No Data Available |
| Explosive properties | No Data Available |
| Oxidising properties | No Data Available |

2. Other Information

No additional information available

10. Stability and Reactivity

1. Reactivity

no unusual reactivity

2. Stability

Stable under normal conditions.

3. Possibility of Hazardous Reactions

no hazardous reactions known

4. Conditions to Avoid

no specific conditions to avoid

5. Incompatible Materials

Strong oxidizing agents.
Strong acids.
Strong bases.

6. Hazardous Decomposition Products

In combustion emits toxic fumes.
In combustion emits toxic fumes of carbon dioxide / carbon monoxide.
In combustion emits toxic fumes of nitrogen oxides.

11. Toxicology information

1. Information

| | |
|--|--|
| <i>Acute Toxicity</i> | no data |
| <i>Skin corrosion/irritation</i> | irritant for skin and mucous membranes |
| <i>Serious eye Damage/irritation</i> | irritant effect |
| <i>Respiratory or skin sensitisation</i> | No sensitizing effect known |
| <i>Germ Cell mutagenicity</i> | not known |
| <i>Carcinogenicity</i> | not known |
| <i>Reproductive toxicity</i> | not known |
| <i>STOT-single exposure</i> | not known |
| <i>STOT-repeated exposure</i> | |

There is evidence that indicates that the substance meets the criteria for classification as STOT RE 2 as defined in CLP regulation (EC) 1272/2008.

Aspiration hazard not known

2. Additional

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH

12. Ecological Information

1. Toxicity

PBT/ vPvB substance

2. Persistence and degradability

PBT/ vPvB substance

3. Bio-Accumulative Potential

not known

4. Mobility and Soil

not known

5. Results of PBT & vPvB assessment

PBT/ vPvB substance according to Art 57(d) and (e) of REACH adopted on 27 November 2014

6. Other adverse effects

not known

13. Disposal Considerations

1. Waste Treatment Methods

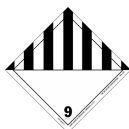
Disposal Operations Consult state, local or national regulations for proper disposal.
Hand over to authorised disposal company as hazardous waste.

Disposal of Packaging Disposal must be made according to official regulations.

14. Transport Information

Air (ICAO)

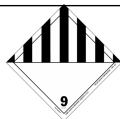
1. **UN Number:** 3077
2. **Shipping Name:** Environmentally hazardous substance, solid, n.o.s. (2-(2H-Benzo[d][1,2,3]triazol-2-yl)-4,6-di-tert-butylphenol)
3. **Transport hazard class(es):** : 9 **Sub Class :**



4. **Packing group:** III
5. **Environmental hazards:**
6. **Special Precautions for user:**
7. **Transport in bulk:**

Road (ADR)

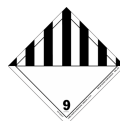
1. **UN Number:** 3077
2. **Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (2-(2H-Benzo[d][1,2,3]triazol-2-yl)-4,6-di-tert-butylphenol).
3. **Transport hazard class(es):** : 9 **Sub Class :**



4. **Packing group:** III
5. **Environmental hazards:**
6. **Special Precautions for user:** For the purposes of documentation and package marking, the Proper Shipping Name shall be supplemented with the technical name (see 3.1.2.8.1).
7. **Transport in bulk:**

Sea (IMDG)

1. **UN Number:** 3077
2. **Shipping Name:** Environmentally hazardous substance, solid, n.o.s. (2-(2H-Benzo[d][1,2,3]triazol-2-yl)-4,6-di-tert-butylphenol)
3. **Transport hazard class(es):** : 9 Sub Class :



4. **Packing group:** III
5. **Environmental hazards:**
6. **Special Precautions for user:** The transport of the following substances is prohibited:
AMMONIUM HYPOCHLORITE
AMMONIUM NITRATE liable to self-heating sufficient to initiate decomposition
AMMONIUM NITRITES and mixtures of an inorganic nitrite with an ammonium salt
CHLORIC ACID, AQUEOUS SOLUTION with more than 10% chloric acid
ETHYL NITRITE pure
HYDROCYANIC ACID, AQUEOUS SOLUTION (HYDROGEN CYANIDE, AQUEOUS SOLUTION) with more than 20% hydrogen cyanide
HYDROGEN CHLORIDE, REFRIGERATED LIQUID
HYDROGEN CYANIDE SOLUTION, IN ALCOHOL with more than 45% hydrogen cyanide
MERCURY OXYCYANIDE pure
METHYL NITRITE
PERCHLORIC ACID with more than 72% acid, by mass
SILVER PICRATE, dry or wetted with less than 30% water by mass
ZINC AMMONIUM NITRITE
See also special provisions 349, 350, 351, 352 and 353.
7. **Transport in bulk:** IBCINS: IBC08
IBCPPROV: B3
UNTANKINS: T1 BK1 BK2 BK3
TANKPROV: TP33

15. Safety, health, environmental and national regulations

1. **Safety, health, environmental and national regulations:**
substance of very high concern under REACH Reg (EC) No. 1907/2006

2. Safety Assessment

No Chemical Safety Assessment

16. Other Information

1. Other Information:

ADR: Accord Europeen sur le transport des marchandises Dangereuses par Route(European Agreement concerning the International Carriage of Dangerous Goods by road)
RID:Reglement International concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the International transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the International Air Transport Association
ICAO:International Civil Aviation Organization
ICAO-TI: Technical Instructions by the ICAO
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CAS:Chemical Abstracts Service

2. Associated risk phrases according to European directive 67/548/EEC

3. Disclaimer

The product listed is for research and development purposes only and not for human or animal use. As such, in most cases, the toxicological, ecological and physicochemical properties have not been fully determined and the product should be treated with respect and always handled under suitable conditions by appropriately qualified personnel. The responsible party shall use this datasheet only in conjunction with other sources of information gathered by them, and should make an independent judgement of suitability, to ensure proper use and protect the health and safety of employees. This information is furnished without warranty and any use of the product not in conformance with this material safety data sheet, or in combination with any other product or process, is the responsibility of the user.