

## 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)

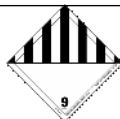
1. **UN Number:** 3077
2. **Shipping Name:** Environmentally hazardous substance, solid, n.o.s. (2-(2H-Benzo[d][1,2,3]triazol-2-yl)-4,6-di-tert-butylphenol)
3. **Transport hazard class(es):** : 9 **Sub Class :**



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 Européen 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

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

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## 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.