

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 25-Aug-2021

Revision Number 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product Code(s)	DRE-C10539510
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Product Name 2-(2H-Benzotriazol-2-yl)-4,6-bis(1-methyl-1-phenylethyl)phenol

Form Not applicable

NOTE [8] - No registration number is given for this substance because it is under the threshold in REACH Article 6(1) and not subject to the registration requirements according to REACH Title II

EC No (EU Index No)	274-570-6
CAS No.	70321-86-7
Chemical name	2-(2H-benzotriazol-2-yl)-4,6-bis(1-methyl-1-phenylethyl)phenol
Pure substance/mixture	Substance
Formula	C30H29N3O
Molecular weight	447.58
1.2. Relevant identified uses of the s	substance or mixture and uses advised against
Recommended use	Laboratory use
Uses advised against	No information available
1.3. Details of the supplier of the sat	fety data sheet
<u>Supplier</u>	
LGC Limited Queens Road Teddington	

Queens Road Teddington Middlesex TW11 0LY UNITED KINGDOM :+44 (0) 20 8943 7000 Fax :+44 (0) 20 8943 2767 eMail : gb@lgcstandards.com

Web : www.lgcstandards.com

For further information, please contact



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E-mail address

sds-request@lgcstandards.com

1.4. Emergency telephone number

Emergency Telephone

For Hazardous Materials or Dangerous Goods Incident Spill, Leak, Fire Exposure, or Accident Call CHEMTREC: USA & Canada 1-800-424-9300 Rest of the world +1 703-741-3877

Emergency Telephone - §45 - (EC)1272/2008				
Europe	112			
Austria	No information available			
Bulgaria				
Croatia				
Cyprus				
Czech Republic				
Denmark				
France				
Hungary				
Ireland				
Italy				
Lithuania				
Luxembourg				
Netherlands				
Norway				
Portugal				
Romania				
Slovakia				
Slovenia				
Spain				
Sweden				
Switzerland				

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] This substance is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]



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2.2. Label elements

274-570-6 This substance is classified as not hazardous according to regulation (EC) 1272/2008 [CLP] Hazard statements This substance is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.3. Other hazards

No information available.

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

This product does not contain any known or suspected endocrine disruptors.

The product door in						
Ch	emical name	EU - REACH (1907/2006) - Article 59(1)	EU - REACH (1907/2006) - Endocrine			
		- Candidate List of Substances of Very	Disruptor Assessment List of			
		High Concern (SVHC) for Authorisation	Substances			
2-(2H-benzotriazol-	2-yl)-4,6-bis(1-methyl-1-phen	-	-			
yle	ethyl)phenol					

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical name	Weight-%	REACH registration number		Classification according to Regulation (EC) No. 1272/2008 [CLP]	•	M-Factor	M-Factor (long-term)
2-(2H-benzotriazol-2 -yl)-4,6-bis(1-methyl -1-phenylethyl)phen ol 70321-86-7		-	274-570-6	-	, , , , , , , , , , , , , , , , , , ,		

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50	Inhalation LC50 - 4	Inhalation LC50 - 4	Inhalation LC50 - 4
		mg/kg	hour - dust/mist - mg/L	hour - vapour - mg/L	hour - gas - ppm



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Chemical name	Oral LD50 mg/kg		Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
2-(2H-benzotriazol-2-yl)-4 ,6-bis(1-methyl-1-phenyle thyl)phenol 70321-86-7		2002	No data available	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove to fresh air.			
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.			
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.			
Ingestion	Rinse mouth.			
4.2. Most important symptoms and effects, both acute and delayed				
Symptoms	No information available.			
4.3. Indication of any immediate me	edical attention and special treatment needed			
Note to doctors	Treat symptomatically.			

SECTION 5: Firefighting 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.			



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Unsuitable extinguishing mediaDo not scatter spilled material with high pressure water streams.5.2. Special hazards arising from the substance or mixtureSpecific hazards arising from the
chemicalNo information available.5.3. Advice for firefightersFirefighters should wear self-contained breathing apparatus and full firefighting turnout gear.Special protective equipment and
precautions for fire-fightersFirefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation. **Personal precautions** For emergency responders Use personal protection recommended in Section 8. 6.2. Environmental precautions **Environmental precautions** See Section 12 for additional Ecological Information. 6.3. Methods and material for containment and cleaning up Methods for containment Prevent further leakage or spillage if safe to do so. Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal. Clean contaminated objects and areas thoroughly observing environmental regulations. Prevention of secondary hazards 6.4. Reference to other sections Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation.



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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 manufacturer's certificate for specific storage and transport temperature conditions. Store only in the original receptacle unless other advice is given on the CoA.			
7.3. Specific end use(s)				

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological 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 ConcentrationNo information available.(PNEC)

8.2. Exposure controls

Personal protective equipment

Eye/face protectionAvoid contact with eyes. Wear safety glasses with side shields (or goggles).Hand protectionThe protective gloves to be used must comply with the specifications of EC Directive
89/686/EEC and the related standard EN374.

Gloves					
Duration of contact PPE - Glove material Glove thickness Break through time					
	Wear protective butyl				



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	rubber gloves		
Skin and body protection	Wear suitable protective clothin	ng.	
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.		
General hygiene considerations	Avoid contact with skin, eyes o product. Wash hands before be protection.		
Environmental exposure controls	Do not allow into any sewer, or	n the ground or into any body c	of water.

SECTION 9: Physical and chemical properties

9.1. Information on basic	ph	ysical and	chemical	properties
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9.1. Information on basic physical a	ind chemical properties	
Physical state	Solid	
Appearance	Powder	
Colour	white to light yellow	
Odour	Odourless.	
Odour threshold	No information available	
Property	Values	Remarks • Method
Melting point / freezing point	<u>137 - 1</u> 41 °C	None known
Initial boiling point and boiling rang	eNo data available	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive	No data available	
limits		
Lower flammability or explosive	No data available	
limits		
Flash point	No data available	None known
Autoignition temperature	400 °C	None known
Decomposition temperature		None known

None known None known None known omposition temperature 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 <0.005 mg/L Water solubility None known Solubility(ies) Chloroform, Ethyl acetate No data available **Partition coefficient** None known Vapour pressure No data available None known 1.236 None known **Relative density** No data available **Bulk density**

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Liquid Density Relative vapour density Particle characteristics Particle Size Particle Size Distribution No data available No data available

No information available

No information available

None known

9.2. Other information Molecular weight Molecular formula

Not applicable

447.58 C30H29N3O

9.2.1. Information with regards to physical hazard classes

9.2.2. Other safety characteristics No information available

SECTION 10: Stability and reactivity

10.1. Reactivity No information available. Reactivity 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 None under normal processing. 10.4. Conditions to avoid Conditions to avoid None known based on information supplied. 10.5. Incompatible materials None known based on information supplied. Incompatible materials 10.6. Hazardous decomposition products Hazardous decomposition products None known based on information supplied.



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SECTION 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.
Ingestion	Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

No information available.

Numerical measures of toxicity

Acute toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2-(2H-benzotriazol-2-yl)-4,6-bis(> 7550 mg/kg (Rat)	> 2000 mg/kg (Rat)	
1-methyl-1-phenylethyl)phenol			

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitisation	No information available.
Germ cell mutagenicity	No information available.



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Other adverse effects	No information available.
11.2.2. Other information	
Endocrine disrupting properties	No information available.
11.2.1. Endocrine disrupting prop	erties
11.2. Information on other hazards	<u>s</u>
Aspiration hazard	No information available.
STOT - repeated exposure	No information available.
STOT - single exposure	No information available.
Reproductive toxicity	No information available.
Carcinogenicity	No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
2-(2H-benzotriazol-2-yl)-4 ,6-bis(1-methyl-1-phenyle thyl)phenol		LC50: >67mg/L (96h, Danio rerio)	_	EC50: >100 mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

Persistence and degradability No information available.



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12.3. Bioaccumulative potential

Bioaccumulation

No information available.

	Chemical name	Partition coefficient
2	2-(2H-benzotriazol-2-yl)-4,6-bis(1-methyl-1-phenylethyl)phenol	6.3

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
2-(2H-benzotriazol-2-yl)-4,6-bis(1-methyl-1-phenylethyl)phenol	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 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.

SECTION 14: Transport information

IATA

14.1	UN number or ID number	Not regulated
14.2	UN proper shipping name	Not regulated
14.3	Transport hazard class(es)	Not regulated
14.4	Packing group	Not regulated



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14.5 Environmental hazards	Not applicable	
14.6 Special precautions for user Special Provisions	None	
IMDG_		
14.1 UN number or ID number	Not regulated	
14.2 UN proper shipping name	Not regulated	
14.3 Transport hazard class(es)	Not regulated	
14.4 Packing group	Not regulated	
14.5 Marine pollutant	Not applicable	
14.6 Special precautions for user		
Special Provisions	None No information available	
14.7 Maritime transport in bulk	No information available	
according to IMO instruments		
RID		
<u>RID</u> 14.1 UN number or ID number	Not regulated	
14.1 UN proper shipping name	Not regulated	
14.2 Transport hazard class(es)	Not regulated	
14.4 Packing group	Not regulated	
14.5 Environmental hazards	Not applicable	
14.6 Special precautions for user		
Special Provisions	None	
ADR		
14.1 UN number or ID number	Not regulated	
14.2 UN proper shipping name	Not regulated	
14.3 Transport hazard class(es)	Not regulated	
14.4 Packing group	Not regulated	
14.5 Environmental hazards	Not applicable	
14.6 Special precautions for user		
Special Provisions	None	

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Germany

Water hazard class (WGK)

slightly hazardous to water (WGK 1)



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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 at 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

Ozone-depleting substances (ODS) regulation (EC) 2024/590 Not applicable

International Inventories

LGC, to the best of its ability, has confirmed that the chemical substances in this product are **TSCA** listed as "Active" in the EPA (Environmental Protection Agency) "TSCA Inventory Notification (Active-Inactive) Requirements Rule" ("the Final Rule") of Feb 2019, as amended Feb 2021." Contact supplier for inventory compliance status DSL/NDSL **EINECS/ELINCS** Contact supplier for inventory compliance status Contact supplier for inventory compliance status ENCS **IECSC** Contact supplier for inventory compliance status Contact supplier for inventory compliance status KECI Contact supplier for inventory compliance status PICCS Contact supplier for inventory compliance status AIIC

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 Chemicals Inventory



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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 is not required for this substance

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend	Section 8: Exposure controls/personal protection	า	
TŴĂ	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	Sk*	Skin designation

Classification procedure			
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used		
Acute oral toxicity	Calculation method		
Acute dermal toxicity	Calculation method		
Acute inhalation toxicity - gas	Calculation method		
Acute inhalation toxicity - vapour	Calculation method		
Acute inhalation toxicity - dust/mist	Calculation method		
Skin corrosion/irritation	Calculation method		
Serious eye damage/eye irritation	Calculation method		
Respiratory sensitisation	Calculation method		
Skin sensitisation	Calculation method		
Mutagenicity	Calculation method		
Carcinogenicity	Calculation method		
Reproductive toxicity	Calculation method		
STOT - single exposure	Calculation method		
STOT - repeated exposure	Calculation method		
Acute aquatic toxicity	Calculation method		
Chronic aquatic toxicity	Calculation method		
Aspiration hazard	Calculation method		
Ozone	Calculation method		

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database



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European Food Safety Authority (EFSA) **Environmental Protection Agency** Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) Japan GHS Classification Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) U.S. National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme Organisation for Economic Co-operation and Development Screening Information Data Set World Health Organization

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This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 Disclaimer

The information in this safety data sheet (SDS) has been prepared with due care and is true and accurate to the best of our knowledge. The user must determine the suitability of the information for its particular purpose, ensure compliance with existing laws and regulations, and be aware that other or additional safety or performance considerations may arise when using, handling and/ or storing the material. The information in this SDS does not purport to be all inclusive or a guarantee as to the properties of the material supplied, and should be used only as a guide. LGC makes no warranties or representations as to the accuracy and completeness of the information contained herein, shall not be held responsible for the suitability of this information for the user's intended purposes or the consequences of such use, and shall not be liable for any damage or loss, howsoever arising, direct or otherwise.

End of Safety Data Sheet