

Paclobutrazol

Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 14/10/2011 Revision date 15/05/2019
Supersedes 22/02/2018

P0922

Version: 3.0

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

1.1. Product identifier

Product form : Substance
Trade name : Paclobutrazol
CAS-No. : 76738-62-0
Product code : P0922
Formula : C₁₅H₂₀CIN₃O
Synonyms : α-tert-Butyl-β-(4-chlorobenzyl)-1H-1,2,4-triazole-1-ethanol
Product group : Raw material

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

1.2.1. Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Duchefa Biochemie B.V.
A. Hofmanweg 71
2031 BH Haarlem - The Netherlands
T +31(0)23-5319093 - F +31(0)23-5318027
info@duchefa.nl

1.4. Emergency telephone number

Emergency number : Supplier contact information:
+31(0)23-5319093 (M-F 09:00-17:00)
+31(0)6-30109355 (outside office hours)

Organisation/Company	Address	Comment
World Health Organization world directory of poison centres	http://apps.who.int/poisoncentres/	Consult website for a local poison centre

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable solids, Category 1 H228
Acute toxicity (oral), Category 4 H302
Reproductive toxicity, Category 2 H361

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS07

GHS08

Signal word (CLP) : Danger

Hazard statements (CLP) : H228 - Flammable solid.
H302 - Harmful if swallowed.
H361 - Suspected of damaging fertility or the unborn child.

Precautionary statements (CLP) : P201 - Obtain special instructions before use.
P301+P312 - IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P308+P313 - IF exposed or concerned: Get medical advice/attention.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : Paclobutrazol

CAS-No. : 76738-62-0

Name	Product identifier	%
Paclobutrazol	(CAS-No.) 76738-62-0	> 90

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If you feel unwell, seek medical advice
Move to fresh air.

First-aid measures after skin contact : Wash skin with plenty of water and soap
Seek medical attention if ill effect or irritation develops.

First-aid measures after eye contact : Rinse with water
Seek medical attention if ill effect or irritation develops.

First-aid measures after ingestion : Rinse mouth out with water
Get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : Damage to liver.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Alcohol resistant foam.
Dry chemical powder.
Carbon dioxide (CO₂).
Water spray.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : When heated to decomposition, emits toxic fumes:
- CO_x
- NO_x.

5.3. Advice for firefighters

Firefighting instructions : Avoid (reject) fire-fighting water to enter environment. Use water spray or fog for cooling exposed containers.
Protection during firefighting : Wear proper protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid raising powdered materials into airborne dust.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Sweep up dry powder and dispose properly.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in dry, well-ventilated area
Keep container tightly closed and dry
Powder: store at room temperature
Liquid: 2 - 8 °C.

7.3. Specific end use(s)

For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Hand protection:

Type	Material	Permeation	Thickness (mm)	Standard
Gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,11	EN ISO 374

Eye protection:

Safety glasses (to European standard EN 166 or equivalent)

Skin and body protection:

Wear suitable protective clothing. Long sleeved protective clothing

Respiratory protection:

Wear appropriate mask. Filter type P3 (EN 143)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Crystalline powder. Powder.
Molecular mass	: 293,8 g/mol
Colour	: White Brown.
Odour	: Odourless.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 165 - 166 °C
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Poorly soluble in water.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of storage, handling and use.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

High temperature.

10.5. Incompatible materials

Strong oxidizing agent.

10.6. Hazardous decomposition products

When heated to decomposition, emits dangerous fumes

- COx
- NOx.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed.

Paclobutrazol (76738-62-0)	
LD50 oral rat	1300 mg/kg
LD50 oral	840 mg/kg (LD50 oral rabbit)
LD50 dermal rat	> 1000 mg/kg
LC50 inhalation rat (mg/l)	369 g/m ³ (gm/m ³ /4h)

Skin corrosion/irritation : Not classified
 Serious eye damage/irritation : Not classified
 Respiratory or skin sensitisation : Not classified
 Germ cell mutagenicity : Not classified
 Carcinogenicity : Not classified

Reproductive toxicity : Suspected of damaging fertility or the unborn child.
 STOT-single exposure : Not classified
 STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Other information : See actual entry in RTECS for complete information: XZ4803300.

SECTION 12: Ecological information

12.1. Toxicity

Paclobutrazol (76738-62-0)	
LC50 fish 1	27,8 mg/l
EC50 Daphnia 1	28,7 mg/l

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Prevent entry to sewers and public waters. Avoid release to the environment




SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with ADN / ADR / IATA

ADR	IATA	ADN
14.1. UN number		
1325	1325	1325
14.2. UN proper shipping name		
FLAMMABLE SOLID, ORGANIC, N.O.S.	Flammable solid, organic, n.o.s.	FLAMMABLE SOLID, ORGANIC, N.O.S.
Transport document description		
UN 1325 FLAMMABLE SOLID, ORGANIC, N.O.S., 4.1, II, (E)	UN 1325 Flammable solid, organic, n.o.s., 4.1, II	UN 1325 FLAMMABLE SOLID, ORGANIC, N.O.S., 4.1, II
14.3. Transport hazard class(es)		
4.1	4.1	4.1
		
14.4. Packing group		
II	II	II
14.5. Environmental hazards		
Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
Clean up even minor leaks or spills if possible without unnecessary risk, No naked lights. No smoking.		

14.6. Special precautions for user

Special transport precautions : The driver shall not attempt to deal with any fire of the load.

. Overland transport

Classification code (ADR) : F1
Special provisions (ADR) : 274
Limited quantities (ADR) : 1kg
Excepted quantities (ADR) : E2
Transport category (ADR) : 2
Hazard identification number (Kemler No.) : 40
Orange plates :



Tunnel restriction code (ADR) : E
EAC code : 1Z

- Air transport

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y441
PCA limited quantity max net quantity (IATA) : 5kg
PCA packing instructions (IATA) : 445
PCA max net quantity (IATA) : 15kg
CAO packing instructions (IATA) : 448
CAO max net quantity (IATA) : 50kg
Special provisions (IATA) : A3
ERG code (IATA) : 3L

- Inland waterway transport

Number of blue cones/lights (ADN) : 1

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**15.1.1. EU-Regulations**

No REACH Annex XVII restrictions
Paclobutrazol is not on the REACH Candidate List
Paclobutrazol is not on the REACH Annex XIV List

15.1.2. National regulations

Ensure all national/local regulations are observed.

Germany

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed
SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed
 NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed
 NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product
 Pregnant/breastfeeding women working with the product must not be in direct contact with the product
 The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes:

2.2	Hazard statements (CLP)	Modified	H228;H302;H312;H412 -> H228;H302;H361 based on new data
2.2	Precautionary statements (CLP)	Modified	P210;P273;P280 -> P201;P301+P312;P308+P313
8.2	Respiratory protection	Modified	P2 -> P3

Abbreviations and acronyms:

ATE	Acute Toxicity Estimate
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SDS	Safety Data Sheet

Data sources : Supplier. ECHA (European Chemicals Agency).

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Flam. Sol. 1	Flammable solids, Category 1
Repr. 2	Reproductive toxicity, Category 2
H228	Flammable solid.

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according to Regulation (EU) 2015/830

H302	Harmful if swallowed.
H361	Suspected of damaging fertility or the unborn child.

SDS Biochemicals version 2019

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product