


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

- **1.1 Product identifier**
- Trade name: **PERGASAFE FR**
- CAS Number: 1889-67-4
- EC number: 217-568-2
- Registration number: 01-2119971824-27
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture**  
For industrial use  
Fire retarding agent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:** PERGAN GmbH  
Hilfsstoffe für industrielle Prozesse  
Schlavenhorst 71  
D-46395 Bocholt  
Tel: +49 2871 9902-0  
Fax: +49 2871 9902-50
- **Further information obtainable from:**  
Environment protection / Security of labour  
Competent person:  
\* Sales Manager Germany: Mr. Ansgar Pappenheim, e-mail: a.pappenheim@pergan.com  
\* Export Sales Manager: Mr. Dr. Thomas Philipps, e-mail: dr.philipps@pergan.com  
\* Environment protection / : Mr. Christoph Wiltling, e-mail: c.wiltling@pergan.com  
Security of labour
- **1.4 Emergency telephone number:** - Tel: +49 2871 9902-0

## SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**  
Skin Sens. 1 H317 May cause an allergic skin reaction.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**   
GHS07
- **Signal word** Warning
- **Hazard-determining components of labelling:** 2,3-Dimethyl-2,3-diphenylbutane
- **Hazard statements** H317 May cause an allergic skin reaction.
- **Precautionary statements**  
P261 Avoid breathing dust.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P363 Wash contaminated clothing before reuse.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
- **vPvB:** This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

## SECTION 3: Composition/information on ingredients

- **3.1 Substances**
- **CAS No. Description** 1889-67-4 2,3-Dimethyl-2,3-diphenylbutane
- **Identification number(s)**
- **EC number:** 217-568-2

## SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

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- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture** Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **5.3 Advice for firefighters**
- **Protective equipment:** Do not inhale explosion gases or combustion gases.
- **Additional information** Self-protection first!

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**  Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Pick up mechanically.
- **6.4 Reference to other sections** No dangerous substances are released.  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special measures required.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Storage in a collecting room is required.
- **Recommended storage temperature (To maintain quality):** max.: +30°C
- **Storage class:** 11
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.

· **DNELs**





**1889-67-4 2,3-Dimethyl-2,3-diphenylbutane**

Dermal	DNEL Longterm System	1 mg/kg bw/day (Worker)
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Inhalative	DNEL Longterm System	0,353 mg/m <sup>3</sup> (Worker)
<b>· PNECs</b>		
<b>1889-67-4 2,3-Dimethyl-2,3-diphenylbutane</b>		
PNEC Marinewater sed	250 mg/kg sed dw (-)	
PNEC Freshwater	0,08 mg/l (-)	
PNEC Freshwater sed	250 mg/kg sed dw (-)	
PNEC Soil	49,7 mg/kg soil dw (-)	
PNEC STP	10 mg/l (AF 10)	
PNEC Marinewater	0,08 mg/l (-)	
<b>· Additional information:</b> The lists valid during the making were used as basis.		
<b>· 8.2 Exposure controls</b>		
<b>· Appropriate engineering controls</b> No further data; see section 7.		
<b>· Individual protection measures, such as personal protective equipment</b>		
<b>· General protective and hygienic measures:</b> The usual precautionary measures are to be adhered to when handling chemicals.		
<b>· Respiratory protection:</b> Not necessary if room is well-ventilated. Use suitable respiratory device when it exceed exposure limit and when insufficiently ventilated.		
		Filter P1
<b>· Hand protection</b> Not required.		
<b>· Material of gloves</b>  The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.		
<b>· Penetration time of glove material</b> The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.		
<b>· Eye/face protection</b> Not required.		
		Safety glasses
<b>· Body protection:</b>  Protective work clothing		

\* **SECTION 9: Physical and chemical properties**

<b>· 9.1 Information on basic physical and chemical properties</b>	
<b>· General Information</b>	
<b>· Colour:</b>	white - yellowish
<b>· Odour:</b>	Characteristic
<b>· Melting point/freezing point:</b>	Undetermined.
<b>· Boiling point or initial boiling point and boiling range</b>	Not applicable.
<b>· Flammability</b>	Product is not flammable.
<b>· Lower and upper explosion limit</b>	
<b>· Lower:</b>	Not determined.
<b>· Upper:</b>	Not determined.
<b>· Flash point:</b>	Not applicable.
<b>· Decomposition temperature:</b>	Not determined.
<b>· pH</b>	Not applicable.
<b>· Viscosity:</b>	
<b>· Kinematic viscosity</b>	Not applicable.
<b>· Dynamic:</b>	Not applicable.
<b>· Solubility</b>	
<b>· water:</b>	Undetermined.
<b>· Partition coefficient n-octanol/water (log value)</b>	not determined
<b>· Vapour pressure:</b>	Not applicable.
<b>· Density and/or relative density</b>	
<b>· Density at 20 °C:</b>	1,1 g/cm <sup>3</sup>
<b>· Relative density</b>	Not determined.
<b>· Vapour density</b>	Not applicable.
<b>· Particle characteristics</b>	
See section 3.	

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· <b>9.2 Other information</b>	No further relevant information available.
· <b>Appearance:</b>	
· <b>Form:</b>	Like powder
· <b>Important information on protection of health and environment, and on safety.</b>	
· <b>Ignition temperature:</b>	Not determined.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Change in condition</b>	
· <b>Evaporation rate</b>	Not applicable.
· <b>Information with regard to physical hazard classes</b>	
· <b>Explosives</b>	Void
· <b>Flammable gases</b>	Void
· <b>Aerosols</b>	Void
· <b>Oxidising gases</b>	Void
· <b>Gases under pressure</b>	Void
· <b>Flammable liquids</b>	Void
· <b>Flammable solids</b>	Void
· <b>Self-reactive substances and mixtures</b>	Void
· <b>Pyrophoric liquids</b>	Void
· <b>Pyrophoric solids</b>	Void
· <b>Self-heating substances and mixtures</b>	Void
· <b>Substances and mixtures, which emit flammable gases in contact with water</b>	Void
· <b>Oxidising liquids</b>	Void
· <b>Oxidising solids</b>	Void
· <b>Organic peroxides</b>	Void
· <b>Corrosive to metals</b>	Void
· <b>Desensitised explosives</b>	Void

## SECTION 10: Stability and reactivity

· <b>10.1 Reactivity</b>	No further relevant information available.
· <b>10.3 Possibility of hazardous reactions</b>	No dangerous reactions known.
· <b>10.4 Conditions to avoid</b>	No further relevant information available.
· <b>10.5 Incompatible materials:</b>	No further relevant information available.
· <b>10.6 Hazardous decomposition products:</b>	No hazardous decomposition products if used and stored according to specifications.

## SECTION 11: Toxicological information

· <b>11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008</b>	
· <b>Acute toxicity</b>	Based on available data, the classification criteria are not met.

### · LD/LC50 values relevant for classification:

**1889-67-4 2,3-Dimethyl-2,3-diphenylbutane**

Oral LD50 >5.000 mg/kg (rattus)

· <b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
· <b>Serious eye damage/irritation</b>	Based on available data, the classification criteria are not met.
· <b>Respiratory or skin sensitisation</b>	May cause an allergic skin reaction.
· <b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
· <b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.
· <b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
· <b>STOT-single exposure</b>	Based on available data, the classification criteria are not met.
· <b>STOT-repeated exposure</b>	Based on available data, the classification criteria are not met.
· <b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.

### · 11.2 Information on other hazards

#### · **Endocrine disrupting properties**

Substance is not listed.

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**SECTION 12: Ecological information**

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability**
- **Degree of elimination:**
- **Classification:**
- 1889-67-4 2,3-Dimethyl-2,3-diphenylbutane**
- Degradation | (Not readily biodegradable) (OECD 301 D)
- **12.3 Bioaccumulative potential**
- **Partition coefficient: nOctanol/water: [Log Kow]**
- 6,68 (25°C)
- **Bioconcentration factor (BCF)**
- 1889-67-4 2,3-Dimethyl-2,3-diphenylbutane**
- BCF | 1.275
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
- **vPvB:** This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
- **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.

**SECTION 13: Disposal considerations**

- **13.1 Waste treatment methods**
- **Recommendation** Smaller quantities can be disposed of with household waste.
- **Waste disposal key:** Please contact your hazardous waste disposers to assign the right EWC-(European waste catalog)-number.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

**SECTION 14: Transport information**

- |   |  |
|---|--|
| · <b>14.1 UN number or ID number</b>                                  | Void   |
| · <b>ADR, IMDG, IATA</b>  |  |
| · <b>14.2 UN proper shipping name</b>                                 | Void   |
| · <b>ADR, IMDG, IATA</b>  |  |
| · <b>14.3 Transport hazard class(es)</b>                              | Void   |
| · <b>ADR, IMDG, IATA</b>  |  |
| · <b>Class</b>  |  |
| · <b>14.4 Packing group</b>   | Void   |
| · <b>ADR, IMDG, IATA</b>  |  |
| · <b>14.5 Environmental hazards:</b>                                  | Not applicable.  |
| · <b>14.6 Special precautions for user</b>                            | Not applicable.  |
| · <b>14.7 Maritime transport in bulk according to IMO instruments</b> | Not applicable.  |
| · <b>Transport/Additional information:</b>                            | No dangerous good according the regulation of transport. |

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**\* SECTION 15: Regulatory information**· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**· **Directive 2012/18/EU**· **Named dangerous substances**- **ANNEX I**

Substance is not listed.

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

Substance is not listed.

· **REGULATION (EU) 2019/1148**· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

Substance is not listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

Substance is not listed.

· **Regulation (EC) No 273/2004 on drug precursors**

Substance is not listed.

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

Substance is not listed.

**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Environment protection / Security of labour· **Contact:** Tel: +49 2871 9902-0

E-mail: mail@pergan.com

· **Version number of previous version:**

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· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
 ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 DNEL: Derived No-Effect Level (REACH)  
 PNEC: Predicted No-Effect Concentration (REACH)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 PBT: Persistent, Bioaccumulative and Toxic  
 vPvB: very Persistent and very Bioaccumulative  
 Skin Sens. 1: Skin sensitisation – Category 1

· **\* Data compared to the previous version altered.**