

SAFETY DATA SHEET

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Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.05.2021

Revision: 28.05.2021

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

- **1.1 Product identifier**
- **Trade name:** Cyclododecan (Granulat)
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Life cycle stages**
 - F Formulation or re-packing
 - IS Use at industrial Sites
- **Sector of Use**
 - SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Product category** PC14 Metal surface treatment products
- **Process category** PROC7 Industrial spraying
- **Environmental release category** ERC7 Use of functional fluid at industrial site
- **Article category** AC7 Metal articles
- **Application of the substance / the mixture** Anti-reflection agent for optical 3D-metrology
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 - Deffner & Johann GmbH
 - Mühlackerstraße 13
 - D-97520 Rötthlein
 - Tel. +49 9723 9350-0
 - Fax +49 9723 9350-25
 - E-Mail: info@deffner-johann.de
 - www.deffner-johann.de
- **Further information obtainable from:**
 - Tel. +49 9723 9350-0 (Mo. - Fr.: 8:00 - 15:00 Uhr)
- **1.4 Emergency telephone number:**
 - 24h- Emergency Contact Phone Number For Chemical Emergency, Spill, Leak, Fire, Exposure or Accident (WISAG FMO Cargo Service GmbH & CO.KG)
 - Call Day or Night within USA and Canada: 1 800 424 9300
 - Outside USA and Canada: 001 703 527 3887
 - In-Country Emergency Number for:
 - Germany: 0800-181-7059
 - China: 4001 204937 (Mandarin)
 - Hong Kong: 800 968 793 (Cantonese)
 - India: 000 800 100 7141 (Hindi)
 - South Africa: 0 800 983 611 (English)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
 - The mixture is classified according to Regulation (EC) No 1272/2008 according to the most recent ATP.
 - The product is not classified, according to the CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**

· **PBT:**

294-62-2	cyclododecane
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· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

· Dangerous components:

CAS: 294-62-2	cyclododecane	non-classified PBT substance	> 90%
EINECS: 206-033-9			
Reg.nr.: 01-2119490407-33-XXXX			

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· **General information:** Immediately remove any clothing soiled by the product.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· **After eye contact:**

Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.

If symptoms persist consult doctor.

· **Information for doctor:**

Grease with skin-cream to restore fat film in order to prevent skin inflammation.

· 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

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· Suitable extinguishing agents:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· 5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide (CO)

· 5.3 Advice for firefighters

· **Protective equipment:** Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

· 6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

In case of gas release or seepage into the ground inform responsible authorities.

· 6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

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6.4 Reference to other sections

- 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

- Ensure good ventilation/exhaustion at the workplace.
- Any unavoidable deposit of dust must be regularly removed.

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:

- Store in a cool location.
- Protect from frost, heat and direct sunlight.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Protect from heat and direct sunlight.

Recommended storage temperature: 5 - 45°C, 41 - 113 °F

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Additional information about design of technical facilities: No further data; see item 7.

Ingredients with limit values that require monitoring at the workplace:

- The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

- The usual precautionary measures are to be adhered to when handling chemicals.
- Avoid contact with the eyes.

Respiratory protection:

- For good ventilation provide, this can be achieved by local or space exhaust. If the concentration lies over the job limit values, then, a certified respirator suitable for this purpose must be used.

Protection of hands:

- Check the permeability prior to each renewed use of the glove.
- For the protection against chemicals in areas with heightened risk of injury (mechanical hazard) no recommendation for a suitable glove material can be given.
- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

- 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Butyl rubber, BR

Penetration time of glove material

- Supplier for suitable protection gloves:

ASD ArbeitsSicherheit Dortmund

Torstr. 101 - 37355 Niederorschel OT Rüdigershagen

Tel.: 02301 / 919543 - Fax: 02301 / 9453893

E-Mail: m.schnellhardt@t-online.de - <http://www.arbeitssicherheitdortmund.de>

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The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Solid
Colour:	White
Odour:	Characteristic
Odour threshold:	Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

Melting point/freezing point:	61 °C
Initial boiling point and boiling range:	243 °C

· **Flash point:** 98 °C

· **Flammability (solid, gas):** Product is not flammable.

· **Ignition temperature:** 230 °C

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Not determined.

· **Explosive properties:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

· **Vapour pressure:** Not applicable.

· Density at 20 °C:	0.82 g/cm ³
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.

· **Solubility in / Miscibility with water:** Soluble.

· **Partition coefficient: n-octanol/water:** Not determined.

· **Viscosity:**

Dynamic:	Not applicable.
Kinematic:	Not applicable.

· **Solvent separation test:**
VOC (EU) <0.1 %

· **Solids content:** 100.0 %

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· **9.2 Other information**

No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **General remarks:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1: weakly water-endangering
Do not allow product to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**

· **PBT:**

294-62-2 cyclododecane

· **vPvB:** Not applicable.

- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Smaller quantities can be disposed of with household waste.

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- **Waste disposal key:**
For this product no waste key number can be specified, because only the intended purpose permits an allocation. The waste key number is to be specified in arrangement with the regional waste disposal.
The indications for Waste key reflect the pure unmodified product and are only a recommendation.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- | | |
|---|-----------------|
| · 14.1 UN-Number
· ADR, IMDG, IATA | Void |
| · 14.2 UN proper shipping name
· ADR, IMDG, IATA | Void |
| · 14.3 Transport hazard class(es)
· ADR, ADN, IMDG, IATA
· Class | Void |
| · 14.4 Packing group
· ADR, IMDG, IATA | Void |
| · 14.5 Environmental hazards: | Not applicable. |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| · UN "Model Regulation": | Void |

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** None of the ingredients is listed.
- **National regulations:**
- **Waterhazard class:** Water hazard class 1: slightly hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

- **Relevant phrases** The wording of the listed risk phrases are those of the individual raw materials.
- **Recommended restriction of use**
Existing national and local laws concerning chemicals are to be considered.
- **Department issuing SDS:**
Deffner & Johann GmbH, Tel. +49 9723 9350-0 (Mo. - Fr.: 8:00 - 15:00 Uhr)
- **Contact:**
Deffner & Johann GmbH, Tel. +49 9723 9350-0 (Mo. - Fr.: 8:00 - 15:00 Uhr)
- **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

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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
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

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

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