

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87099 Cyclododecane Spray

Page 1

Revised edition: 03.06.2015

Version: 3

Printed: 15.01.2019

1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product Identifier

Product Name: Cyclododecane Spray

Article No.: 87099

1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:

Varnish aerosol

Uses advised against:

1.3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

Company: Kremer Pigmente GmbH & Co. KG

Address: Hauptstr. 41-47, 88317 Aichstetten, Germany

Tel./Fax.: Tel +49 7565 914480, Fax +49 7565 1606

Internet: www.kremer-pigmente.de

E-Mail: info@kremer-pigmente.de

Importer: --

1.4. Emergency No.

Emergency No.: +49 7565 914480 (Mon-Fri 8:00 - 17:00)

2. Hazards Identification

2.1. Classification of the Substance or Mixture

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

Flammable aerosols, hazard category 1

H222 Extremely flammable material.

Cat.: 1

H229 Pressurized container: may burst if heated.

Cat.:

Classification according to Directive No. 67/548/EC or No. 1999/45/EC

Extremely flammable (F+) R12 Extremely flammable.

Safety Phrases:

Possible Environmental Effects:

2.2. Label Elements

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

This product is classified and labelled according to CLP/GHS regulations.

Hazard designation:



GHS02-2

next page: 2

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87099 Cyclododecane Spray

Page 2

Revised edition: 03.06.2015

Version: 3

Printed: 15.01.2019

Signal word:

Danger

Hazard designation:

H222 Extremely flammable material.
H229 Pressurized container: may burst if heated.

Safety designation:

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Pressurized container: do not pierce or burn, even after use.
P260b Do not breathe aerosol.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C (122°F).
P501 Dispose of contents/ container according to regional, national and international regulations.

Hazardous components for labelling:

2.3. Other Hazards

Without adequate ventilation formation of explosive mixtures may be possible.

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization: Preparation of active component Cyclododecane and propellants.

Information on Components / Hazardous Ingredients:

Cyclododecane	25 - 50 %	CAS-Nr: 294-62-2 EINECS-Nr: 206-033-9 EC-Nr:
---------------	-----------	--

Propane (F+, R12; H220-280); REACH Reg. No. 01-2119486944-21	25 - 50 %	CAS-Nr: 74-98-6 EINECS-Nr: 200-827-9 EC-Nr: 601-003-00-5
--	-----------	--

Butane (< 0.1 % butadiene) (F+; R12; H220-280); REACH Reg. No. 01-2119474691-32	25 - 50 %	CAS-Nr: 106-97-8 EINECS-Nr: 203-448-7 EC-Nr: 601-004-00-0
---	-----------	---

Isobutane (< 0,1 % butadiene) (F+; R12; H220-280); REACH Reg. No. 01-2119485395-27	10 - 12.5 %	CAS-Nr: 75-28-5 EINECS-Nr: 200-857-2 EC-Nr:
--	-------------	---

Additional information:

The content of benzene (EINECS 700-753-7) in the single components is below 0.1 %.

First Aid Measures

next page: 3

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87099 Cyclododecane Spray

Page 3

Revised edition: 03.06.2015

Version: 3

Printed: 15.01.2019

4.

4.1. Description of the First Aid Measures

General information:

Take affected persons out into the fresh air.

After inhalation:

Supply fresh air and seek medical advice in case of complaints.

After skin contact:

This product is in general not irritating to the skin.

After eye contact:

Rinse open eyes with plenty of water. In case of discomfort seek medical help.

After ingestion:

*Rinse mouth with water and drink plenty of water.
Immediately get medical help.*

4.2. Most important Symptoms and Effects, both Acute and Delayed

Symptoms:

No further information available.

Effects:

No further information available.

4.3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

No further information available.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

*CO2, extinguishing powder, water jet.
Fight larger fire with water jet or alcohol resistant foam.*

Unsuitable extinguishing media:

Water with full jet.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

No information available.

5.3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Further information:

Do not inhale explosion and fire gases.

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Provide adequate ventilation. Keep away from sources of ignition.

next page. 4

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87099 Cyclododecane Spray

Page 4

Revised edition: 03.06.2015

Version: 3

Printed: 15.01.2019

Wear appropriate protective equipment. Keep spectators away.

6.2. Environmental Precautions

Environmental precautions:

*Prevent contamination of soils, drains and surface water.
Contact local authorities if product pollutes soil or vegetation.*

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

*Do not use water or other watery cleaning fluids.
Provide adequate ventilation.*

6.4. Reference to other Sections

*Protective clothing, see Section 8.
See Section 13 for information on disposal.*

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling:

*Protect against heat and direct sunlight.
Provide adequate ventilation.
Open and handle container with care.
Provide adequate ventilation, also in floor area (vapors are heavier than air).*

Hygienic measures:

Do not eat or drink during work. Do not smoke.

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

*Keep container tightly closed. Protect against heat and direct sunlight. Store cool and dry. Heat can lead to a pressure increase and risk of bursting.
Do not close containers gas-proof.*

Requirements for storage areas and containers:

*Store in a cool place.
Follow the official regulations for storing aerosol dispensers.*

Information on fire and explosion protection:

*Keep away from sources of ignition - do not smoke. Take measures to prevent electrostatic discharge.
Vapors may form an explosive mixture with air.*

Storage class (VCI):

2 B (TRGS 510)

Further Information:

7.3. Specific End Use(s)

Further information:

No further information available.

next page: 5

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87099 Cyclododecane Spray

Page 5

Revised edition: 03.06.2015

Version: 3

Printed: 15.01.2019

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

Propane, CAS 74-98-6, TLC: 1800 mg/m³; 1000 ml/m³; 4(II); DFG
Butane (< 0,1% Butadiene, 203-450-8), CAS 106-97-8, TLC: 2400 mg/m³; 1000 ml/m³; 4(II); DFG
Isobutane, CAS 75-28-5, TLC: 2400 mg/m³; 1000 ml/m³; 4(II); DFG

Parameters to be controlled:

Propane, CAS 74-98-6, MAK (A): Short term value: 3600 mg/m³; 1800 ml/m³; Long term value: 1800 mg/m³; 1000 ml/m³
Butane (< 0.1% Butadiene, 203-450-8), CAS 106-97-8, MAK (A): Short term value: 3800 mg/m³; 1600 ml/m³; Long term value: 1900 mg/m³; 800 ml/m³
Isobutane, CAS 75-28-5, MAK (A): Short term value: 3800 mg/m³; 1600 ml/m³; Long term value: 1900 mg/m³; 800 ml/m³

Derived No-Effect Level (DNEL):

No values available.

Predicted No-Effect Concentration (PNEC):

No values available.

Additional Information:

8.2. Exposure Controls

Technical protective measures:

No further measures, see Section 7.

Personal Protection

General protective measures:

Avoid contact with skin and avoid inhalation of vapour. Do not eat, drink or smoke while working.

Wash hands before breaks and after work.

Respiratory protection:

None required under normal operating conditions.

Respiratory equipment required in case of insufficient ventilation. Filter type AX (organic vapors).

Hand protection:

Solvent resistant protective gloves.

Protective gloves. The glove material has to be impermeable and resistant to the product / substance / preparation.

Protective glove material:

For short-term exposure: Butyl rubber (> 0.4 mm).

Natural latex.

Protective gloves made of butyl rubber (0.4 mm) are resistant against acetone (480 min), butyl acetate (60 min), ethyl acetate (170 min), xylene (42 min).

Eye protection:

Tightly fitting safety goggles (EN 166).

next page: 6

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87099 Cyclododecane Spray

Page 6

Revised edition: 03.06.2015

Version: 3

Printed: 15.01.2019

Body protection:

Protective clothing.

Environmental precautions:

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

<i>Form:</i>	<i>aerosol</i>
<i>Color:</i>	<i>clear</i>
<i>Odor:</i>	<i>characteristic</i>
<i>Odor threshold:</i>	<i>No information available.</i>
<i>pH-Value:</i>	<i>not determined</i>
<i>Melting temperature:</i>	<i>not determined</i>
<i>Boiling temperature:</i>	<i>not applicable</i>
<i>Flash point:</i>	<i>not applicable</i>
<i>Evaporation rate:</i>	<i>not applicable</i>
<i>Flammability (solid, gas):</i>	<i>230°C</i>
<i>Upper explosion limit:</i>	<i>10.9 Vol.%</i>
<i>Lower explosion limit:</i>	<i>1.5 Vol.%</i>
<i>Vapor pressure:</i>	<i>8300 hPa (20°C)</i>
<i>Vapor density:</i>	<i>No information available.</i>
<i>Density:</i>	<i>0.65 g/cm³ (20°C)</i>
<i>Solubility in water:</i>	<i>not miscible</i>
<i>Coefficient of variation (n-Octanol/Water):</i>	<i>not determined</i>
<i>Auto-ignition temperature:</i>	<i>Product is not auto-ignitable.</i>
<i>Decomposition temperature:</i>	<i>not determined</i>
<i>Viscosity, dynamic:</i>	<i>not determined</i>
<i>Explosive properties:</i>	<i>An explosive vapor/air mixture can be formed.</i>

next page: 7

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87099 Cyclododecane Spray

Page 7

Revised edition: 03.06.2015

Version: 3

Printed: 15.01.2019

Oxidizing properties:

no information available

Bulk density:

not determined

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic

Burning class:

Solvent content:

488.6 g/l

VOC-EC%: 75.0 %

Solid content:

25 %

Particle size:

Other information:

No further information.

10. Stability and Reactivity

10.1. Reactivity

No decomposition if used according to specifications.

10.2. Chemical Stability

Stable if used according to specifications.

10.3. Possibility of Hazardous Reactions

Unknown.

10.4. Conditions to Avoid

Conditions to avoid:

Avoid heat and sources of ignition.

Thermal decomposition:

Avoid temperatures above 50°C, risk of bursting.

10.5. Incompatible Materials

No information available.

10.6. Hazardous Decomposition Products

None known.

10.7. Further Information

11. Toxicological Information

11.1. Information on Toxicological Effects

No information available.

Acute Toxicity

LD50, oral:

LD50, dermal:

LC50, inhalation:

Primary effects

next page: 8

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87099 Cyclododecane Spray

Page 8

Revised edition: 03.06.2015

Version: 3

Printed: 15.01.2019

Irritant effect on skin:

Non irritating

Irritant effect on eyes:

Non-irritating to eyes

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

No sensitizing effects known.

Mutagenicity:

No relevant data found.

Reproductive toxicity:

No relevant data found.

Carcinogenicity:

No relevant data found.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

No relevant data found.

Additional toxicological information:

Vapors have a narcotic effect.

12. Ecological Information

12.1. Aquatic Toxicity

No information available.

Fish toxicity:

Daphnia toxicity:

Bacteria toxicity:

Algae toxicity:

12.2. Persistency and Degradability

No information available.

12.3. Bioaccumulation

No information available.

12.4. Mobility

No information available.

12.5. Results of PBT- und vPvP Assessment

Cyclododecane: not applicable.

12.6. Other Adverse Effects

Water hazard class:

1, slightly hazardous

Do not allow undiluted product or large quantities of it to reach

next page: 9

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87099 Cyclododecane Spray

Page 9

Revised edition: 03.06.2015

Version: 3

Printed: 15.01.2019

ground water, waterways or sewage system.

Behaviour in sewage systems:

Further ecological effects:

AOX Value:

13. Disposal Considerations

13.1. Waste Treatment Methods

Product:

Dispose of according to official national and local regulations.

Must not be disposed together with household garbage.

Do not let product enter water systems.

European Waste Code (EWC):

080111 - Waste paint and varnish containing organic solvents or other dangerous substances

150104 - Metallic packaging

150111 - Metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers.

Uncleaned packaging:

Dispose of according to official local regulations.

Waste Code No.:

14. Transport Information

14.1. UN Number

ADR, IMDG, IATA 1950

14.2. UN Proper Shipping Name

ADR/RID: DRUCKGASPACKUNGEN, entzündbar

IMDG/IATA: AEROSOLS, flammable

14.3. Transport Hazard Classes

ADR Class: 2.1

Hazard no.: 2.1

Classification code: 5F

Tunnel restriction code: D

IMDG Class (sea): 2.1

Hazard no.: 2.1

EmS No.: F-D, S-U

IATA Class: 2.1

Hazard no.: 2.1

14.4. Packaging Group

ADR/RID:

not applicable

next page: 10

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87099 Cyclododecane Spray

Page 10

Revised edition: 03.06.2015

Version: 3

Printed: 15.01.2019

IMDG: ---

IATA: ---

14. 5. Environmental Hazards

None

14. 6. Special Precautions for User

Warning: gases

14. 7. Transportation in Bulk according to Annex II of MARPOL 73/78 and IBC-Code

not applicable

14. 8. Further Information

15. Regulatory Information

15. 1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

Water hazard class:

1, slightly hazardous for water (German Regulation, self-assessment)

Local regulations on chemical accidents:

Employment restrictions:

The employment restrictions for young workers in accordance with the Youth Employment Protection Law (94/33/EC) are to be observed.

Restriction and prohibition of application:

Technical instructions on air quality:

15. 2. Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

15. 3. Further Information

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.