

according to 29 CFR 1910.1200(g)

Gas cartridge for PYROSIL

Revision date: 05.03.2020 Product code: BO5209497 Page 1 of 7

1. Identification

Product identifier

Gas cartridge for PYROSIL

Further trade names

BO 5209495, 27,5 g, BO 5209490 SET BO 5209496, 27,5 g, BO 5209491 SET

BO 5209497, 330 g

Recommended use of the chemical and restrictions on use

Use of the substance/mixture

Plating agent

Uses advised against

None known.

Details of the supplier of the safety data sheet

Company name: BOHLE AG
Street: Dieselstr. 10
Place: D-42781 Haan
Telephone: +49 2129 5568-0

Telephone: +49 2129 5568-0 Telefax: +49 2129 5568-282

e-mail: info@bohle.de

Contact person: Klaus Nehren Telephone: +49 2129 5568-276

e-mail: MSDS@bohle.de Internet: www.bohle.com

Responsible Department: Chemie

Emergency phone number: Emergency CONTACT (24-Hour-Number):GBK GmbH +49 (0)6132-84463

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200

Flammable aerosols: Flam. Aerosol 1 Gases under pressure: Compressed gas

Label elements

29 CFR Part 1910.1200

Signal word: Danger

Pictograms:



Hazard statements

Extremely flammable aerosol

Contains gas under pressure; may explode if heated

Precautionary statements

Keep away from heat. - No Smoking.

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Do not breathe Aerosol.

Use only outdoors or in a well-ventilated area.



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3. Composition/information on ingredients

Mixtures

Hazardous components

CAS No	Components	Quantity
106-97-8	butane	65 %
74-98-6	propane	35 %

4. First-aid measures

Description of first aid measures

General information

Take off immediately all contaminated clothing and wash it before reuse.

After inhalation

Provide fresh air.

Call a doctor if you feel unwell.

After contact with skin

Wash frost-bitten areas with plenty of water. Do not remove clothing.

In case of skin irritation, consult a physician.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

After ingestion

Immediately give large quantities of water to drink. Do not induce vomiting. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Dizziness

May cause drowsiness or dizziness.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

carbon dioxide (CO2), Water spray jet, dry chemical, Foam

Unsuitable extinguishing media

high volume water jet

Specific hazards arising from the chemical

Danger of bursting container.

Pyrolysis products, toxic

Special protective equipment and precautions for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

Additional information

Use water spray to cool unopened containers.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition - No smoking.

Provide adequate ventilation.

Use personal protection equipment.



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Environmental precautions

Do not allow to enter into surface water or drains.

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Use only in well-ventilated areas.

Provide sufficient air exchange and/or exhaust in work rooms.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking.

Vapours can form explosive mixtures with air.

Further information on handling

When using do not eat, drink or smoke.

Draw up and observe skin protection programme.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container in a well-ventilated place.

Keep away from heat and sources of ignition.

Hints on joint storage

Oxidising agent

Keep away from food, drink and animal feedingstuffs.

8. Exposure controls/personal protection

Control parameters

Exposure limits

CAS No.	Substance	ppm	mg/m³	f/cc	Category	Origin
74-98-6	Propane	1000	1800		TWA (8 h)	PEL
		1000	1800		TWA (8 h)	REL
106-97-8	n-Butane	800	1900		TWA (8 h)	REL

Exposure controls

Appropriate engineering controls

Provide adequate ventilation.

Protective and hygiene measures

Keep away from food, drink and animal feeding stuffs.

Avoid contact with the skin and the eyes.

Do not breathe vapour/aerosol.

Eye/face protection

safety glasses with side-shields conforming to EN166

Hand protection

leather gloves, solvent-resistant gloves (butyl-rubber)

Skin protection

Wear suitable protective equipment.

Respiratory protection

No personal respiratory protective equipment normally required.



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9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: compressed liquefied gas

Color: colourless
Odor: characteristic

Changes in the physical state

Flash point: -40 °C

Flammability

Gas: Yes.

Lower explosion limits: 1,8 vol. %

Upper explosion limits: 8,8 vol. %

Density (at 20 °C): 0,56 g/cm³

10. Stability and reactivity

Reactivity

No hazardous reaction when handled and stored according to provisions.

Chemical stability

Stability: Stable

Stable under normal conditions.

Possibility of hazardous reactions

Hazardous reactions: Will not occur Heating causes rise in pressure with risk of bursting.

Conditions to avoid

No decomposition if stored and applied as directed. Keep away from heat and sources of ignition.

Incompatible materials

oxidizing agents

Hazardous decomposition products

Carbon monoxide

11. Toxicological information

Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met. None known.

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitizing effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - single exposure

Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - repeated exposure

Based on available data, the classification criteria are not met.



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Carcinogenicity (OSHA): No ingredient of this mixture is listed. Carcinogenicity (IARC): No ingredient of this mixture is listed. Carcinogenicity (NTP): No ingredient of this mixture is listed.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional information on tests

Health injuries are not known or expected under normal use. Concentration above the admissible concentration at the workplace may cause dizziness, headache and inebriation. Rapid evaporation of the liquid may cause frostbite.

12. Ecological information

Ecotoxicity

This product has no known eco-toxicological effects. Ecological injuries are not known or expected under

Bioaccumulative potential

Bioaccumulation is unlikely.

Mobility in soil

not relevant

13. Disposal considerations

Waste treatment methods

Disposal recommendations

Non-contaminated packages may be recycled.

14. Transport information

US DOT 49 CFR 172.101

UN 1950 **UN/ID number:** Proper shipping name: **AEROSOLS**

Transport hazard class(es): 2.1 Hazard label: 2.1



Marine transport (IMDG)

UN 1950 **UN number: AEROSOLS UN proper shipping name:**

Transport hazard class(es): Packing group: Hazard label: 2.1



2.1

Special Provisions: 63, 190, 277, 327, 344, 959

Limited quantity: 1000 mL Excepted quantity: EmS: F-D, S-U

Air transport (ICAO-TI/IATA-DGR)



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UN 1950
UN proper shipping name: AEROSOLS

Transport hazard class(es):

Packing group:

Hazard label:

2.1

2.1



Special Provisions: A145 A167 A802

Limited quantity Passenger: 30 kg G
Passenger LQ: Y203
Excepted quantity: E0

IATA-packing instructions - Passenger:203IATA-max. quantity - Passenger:75 kgIATA-packing instructions - Cargo:203IATA-max. quantity - Cargo:150 kg

15. Regulatory information

U.S. Regulations

National regulatory information

SARA Section 311/312 Hazards: Butane (106-97-8): Fire hazard Propane (74-98-6): Fire hazard Clean Air Act Section 112(r):

Butane (106-97-8): Threshold quantities = 10,000 lbs. Propane (74-98-6): Threshold quantities = 10,000 lbs.

State Regulations

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other information

Hazardous Materials Information Label (HMIS)

Health: 1
Flammability: 4
Physical Hazard: 2

NFPA Hazard Ratings

Health: 2
Flammability: 4
Reactivity: 0

Unique Hazard:

Revision date: 05.03.2020 Revision No: 2,03



The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.







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(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)