

1 EC safety data sheet in accordance with Directive 2001/58/EC



Version date: 22.09.08

1. MATERIAL, PREPARATION AND COMPANY ID

1.1. Name of the material or preparation
KaVo Laboratory Turbine Spray
Versions:
<ul style="list-style-type: none"> ▪ Single 150 ml can (Mat. no. 0.489.3020) ▪ Turbine care set with 2 individual 150 ml cans (Mat. no. 0.620.1931)
Internal versions:
<ul style="list-style-type: none"> ▪ Box with 24 150 ml individual cans (Mat. no. 0.620.2011)
1.2. Use of the material or preparation
Care spray for KaVo laboratory turbines.
1.3. Company name
Kaltenbach & Voigt GmbH Bismarckring 39 D-88400 Biberach Tel.: + 49 7351 56-0 Fax: + 49 7351 56-1488 Contact for information: Safety supervisor for medical devices
1.4. Emergency number
Fire department - national emergency number, Germany: 112
Emergency information: +49 5825-88-0 (Monday through Thursday 7-16, Fr. 7-13)
Emergency poison control: +49 761 19240

2. COMPOSITION/INFORMATION ON COMPONENTS

Chemical characterization:

- Fatty acid ester oil and white mineral oil with anticorrosion agents, antioxidants and wear protection agents with propane/butane as the propellant.
- Propellant gas:
 - Propane (CAS No. 74-98-6, EINECS No. 200-827-9)
 - Butane (CAS No. 106-97-8, EINECS No. 203-448-7)
 - Isobutane (CAS No. 75-28-5, EINECS No. 200-857-2)

Identification-requiring Component	CAS No.	EINECS No.	Mass fraction	Symbol	R phrases
none	–	–	–	–	–

3. POSSIBLE HAZARDS

Risk phrase:

- Highly flammable
- Preparation is rated hazardous according to Directive 1999/45/EC.

Additional hazard instructions for people and the environment:

- The formation of explosive, easily flammable vapour/air mixtures is possible during use.
- May explode when heated.

4. FIRST AID

After inhalation	<ul style="list-style-type: none"> ▶ Supply fresh air. ▶ If discomfort persists, consult a doctor and keep the safety data sheet/label to hand.
After skin contact	<ul style="list-style-type: none"> ▶ Wash immediately with soap and water and rinse thoroughly.
After eye contact	<ul style="list-style-type: none"> ▶ Keep eyes open and rinse them for several minutes with running water. ▶ Remove any contact lenses. ▶ If discomfort persists, consult a doctor and keep the safety data sheet/label to hand.
After swallowing	<ul style="list-style-type: none"> ▶ Do not induce vomiting. ▶ Obtain immediate medical assistance and bring the safety data sheet/label.

5. FIREFIGHTING MEASURES

Suitable extinguishing agents	<ul style="list-style-type: none"> ▪ Carbon dioxide ▪ Water fog ▪ Foam ▪ Extinguishing agent
Unsuitable extinguishing agents	<ul style="list-style-type: none"> ▶ Do not use full water jet.
Special hazards	Can form explosive gas/air mixtures. Explosion hazard!
Special protective equipment	<ul style="list-style-type: none"> ▶ Supply fresh air.



Note

Container must be removed from the area threatened by fire if this is possible without endangerment. Otherwise cool with water. Do not inhale vapours and smoke fumes. Ensure a fresh air supply.

6. MEASURES FOR UNINTENTIONAL RELEASE

Personal precautionary measures	▶ Keep away from sources of ignition – do not smoke.
Environmental measures	▶ May not enter the sewer system, surface water and/or ground water; e.g. install oil booms made of universal bonding agent
Cleaning procedure	▶ Absorb leaked product using hygroscopic material (sand, silica earth, universal binder, sawdust, wipes), as described in item 13.

7. HANDLING AND STORAGE

7.1. Handling	
▶	Keep away from sources of ignition – do not smoke.
▶	Only use in well-ventilated areas.
▶	Ensure extractor unit at the workplace, if natural ventilation is not sufficient.

7.2. Storage	
▶	Store in a cool and dry place.
▶	Observe official regulations for the storage of compressed gas containers. In Germany: TRG 300 (Industrial compressed gases).
Storage class according to VCI: 2B	

7.3. Specified use	
▶	Use only for intended purpose.
See also: Processing instructions	

8. RESTRICT EXPOSURE AND WEAR PERSONAL PROTECTIVE GEAR

8.1. Exposure threshold	
Workplace thresholds:	<ul style="list-style-type: none"> ▪ Propane: 1,800 mg/m³, 1000 ppm ▪ Butane: 2400 mg/m³, 1000 ppm ▪ Isobutane: 2400 mg/m³, 1000 ppm



Note

The indicated limits agree with TRGS 900 (EH40/2002 Occupational Exposure Limits 2002).

Monitoring procedure

- The indicated limits can be checked with industrial hygiene measurements.
 - WT: Workplace threshold
 - BT: Biological threshold
 - DFG: German Research Foundation

8.2. Limiting and monitoring exposure	
8.2.1. Limiting and monitoring exposure at the workplace	<ul style="list-style-type: none"> ▶ Wash hands before breaks and at the end of the working day.
8.2.1.1. Respiratory protection	Not necessary if the room ventilation is sufficient. <ul style="list-style-type: none"> ▶ If necessary, use a respiratory device (breathing apparatus) such as EN 137 or EN 138.
8.2.1.2. Gloves	<ul style="list-style-type: none"> ▶ Wear protective gloves made of nitrile rubber/nitrile latex NBR (DIN EN 374) to avoid direct skin contact.
8.2.1.3. Safety goggles	<ul style="list-style-type: none"> ▶ Wear safety glasses with closable side flaps (DIN EN 166).
8.2.1.4. Personal protective equipment	Not necessary if used properly.
8.2.2. Limiting and monitoring environmental exposure	Not necessary if used properly.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. General information	
Appearance	Shape: aerosol Colour: Clearer, slightly yellow
Odour	odourless

9.2. Important information on health, environmental protection and safety	
pH	Not applicable
Boiling point	Not applicable
Flashpoint	-80°C
Ignition temperature	> 350°C
Explosion hazard	The product is not explosive. Explosive vapour/air mixtures may form. Bottom explosion limit: 1.8 vol. % in air Top explosion limit: 11.2 vol. % in air
Fire-promoting Features	not determined
Relative density	0.855 g/ml at 20°C according to DIN 51757
Water solubility	low
Distribution coefficient	not determined
Viscosity	Not applicable
Vapour density	not determined
Evaporation speed	not determined

9.3. Other information	
No data known.	

10. STABILITY AND REACTIVITY

10.1. Conditions to be avoided

- Ignition sources
- Open flame
- Heating above 50°C (122°F) Explosion hazard!
- Explosion hazard from increased pressure.

10.2. Substances to be avoided

- Other chemicals

10.3. Hazardous decomposition products

No data known.

11. TOXICOLOGICAL INFORMATION

Inhalation	No data known.
Swallowing	Gases cannot be inhaled when handled normally.
Skin contact	No data known.
Eye contact	Eye irritant.
Long-term effect	Can damage the central nervous system.

12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity

No data known.

12.2. Mobility

No data known.

12.3. Persistence and biodegradability

Contains no AOX according to recipe.

12.4. Bioaccumulation potential

No data known.

12.5. Other harmful effects

- ▶ Do not allow to enter the sewerage system, surface water or surface waterways.

13. DISPOSAL INSTRUCTIONS



Note

Observe local and national regulations.

Product	16 05 05 gases containing hazardous materials (including halons)
Empty can	15 01 04 Metal packaging
Packaging cardboard	15 01 01 Paper and cardboard packaging

Waste code according to the European waste catalog (national: Ordinance on the list of wastes AVV):

14. INFORMATION ON TRANSPORTING



Note

Transportation must follow national and/or international rules for transporting hazardous materials by road, rail, sea and air according to ADR, RID, IMDG and IATA.

Maritime traffic (IMDG)	<ul style="list-style-type: none"> ▪ UN number: 1950 ▪ Technical name: AEROSOLS, FLAMMABLE ▪ ID: 2.1 ▪ Limited amount: LQ2 ▪ EmS: F-D; S-U
Surface and rail traffic (ADR/RID)	<ul style="list-style-type: none"> ▪ UN number: 1950 ▪ Name: AEROSOLS, FLAMMABLE ▪ Classification code: 5F ▪ ADR ID: 2.1 ▪ Hazard label: 2.1 ▪ Flashpoint: -80°C ▪ Transport according to ADR 1.1.3.6: Factor 3 ▪ Maximum overall amount per transported unit: 333 kg ▪ Limited amounts: LQ2
Air traffic (ICAO/IATA)	<ul style="list-style-type: none"> ▪ UN number: 1950 ▪ Class: 2.1 ▪ Correct shipping ID: AEROSOLS, FLAMMABLE ▪ Special regulations: 190, 625- ▪ MP: Marine Pollutant: No ▪ Limited amounts: LQ2

15. REGULATIONS

15.1. EU regulations	
Hazard symbol / hazard ID	F+, highly flammable
R phrases	The list introduction described the list content <ul style="list-style-type: none"> ▪ R12 – highly flammable

15.1. EU regulations	
S phrases	<ul style="list-style-type: none"> ▶ S23 – Do not inhale gas/smoke/vapour/aerosol. ▶ S51 – Only use in well-ventilated areas.
Special identification	<ul style="list-style-type: none"> ▪ Container under pressure. ▪ Protect from sunlight and temperatures above 50 °C. ▪ Do not forcefully open or burn after use. ▪ Do no spray toward flame or glowing objects. ▪ Keep away from ignition sources – no smoking. ▪ Keep out of the reach of children. ▪ Without sufficient ventilation, explosive vapour/air mixtures may occur.

15.2. National regulations	
TRGS 905	CAS No.: not applicable
Major Accidents Ordinance	not applicable
VbF class	Highly flammable
Water pollution class	WGK 1 (VwVwS): slightly water polluting (self-rated)
Information on Directive 1999/13/EC on the restriction of emissions of volatile organic compounds (VOC Directive)	63.9 % w/w VOC-CH: 0.062 kg/150 ml

16. OTHER INFORMATION

Packaging	Aerosol can, 150 ml
Sources	<ul style="list-style-type: none"> ▪ Ordinance (EC) no. 1907/2006, Annex II ▪ Directive 1999/45/EC ▪ Directive 67/548/EEC (materials list)
Additional information	<p>This safety data sheet is based on the information from the product's supplier. (such as safety data sheets, etc.)</p> <p>The product is classified and identified according to EC Directives and the GefStoffV (Hazardous Substance Ordinance).</p>
Revision of the safety data sheet	<ul style="list-style-type: none"> ▪ 2008-09-18: Revised according to Directive 2001/58/EC.

**Note**

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**Note**

Only for use in conjunction with the corresponding KaVo products according the instructions for use. Not to be used in homes or for other purposes. In case of contact or mixture with other products, check if other hazards may arise. The presented information does not free the user of the product from observing all guidelines regarding safety, hygiene, health and environmental protection.