



SAFETY DATA SHEET

KaVo. Dental Excellence.

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

1.1. Product identifier

Trade name or designation of the mixture KaVo Labor-Turbinen-Spray
REACH Registration Number -
Product code 0,620,1931; 0,620,1931/2011
Issue date 09-November-2011
Version number 1.0
Revision date 08-January-2013
Supersedes date 09-November-2011
Product use professional use

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Not available.
Uses advised against None known

1.3. Details of the supplier of the safety data sheet

Company name Kaltenbach & Voigt GmbH
Address Bismarckring 39
D-88400 Biberach
Germany
Telephone number +49 (0) 7351 56-0
Fax +49 (0) 7351 1488
Contact person Peter Fischer
Telephone number +49 (0) 175 30 57725
e-mail peter.fischer@bayer.com
Emergency telephone number +49 (0) 7351 56 4000

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Classification F+;R12

The full text for all R-phrases is displayed in section 16.

Hazard summary

Physical hazards Extremely flammable.
Health hazards Not classified for health hazards.
Environmental hazards Not classified for hazards to the environment.
Specific hazards Extremely flammable.
Main symptoms Not available.

2.2. Label elements

Label according to Directive 67/548/EEC or 1999/45/EC as amended

Contains: Butane (< 0,1 % Butadiene), Isobutane (< 0,1% Butadiene), PROPANE
EC number -
EC label



Extremely flammable

| | |
|---------------------------------------|--|
| R-phrases | R12 Extremely flammable. |
| S-phrases | S9 Keep container in a well-ventilated place. S16 Keep away from sources of ignition - No smoking. S23 Do not breathe gas/fumes/vapour/spray. S60 This material and its container must be disposed of as hazardous waste. |
| Authorisation number | Not available. |
| Supplemental label information | Not applicable. |
| 2.3. Other hazards | Not assigned. |

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

| Chemical name | % | CAS-No. / EC No. | REACH Registration No. | INDEX No. | Notes |
|------------------------------|----------|---|-------------------------------|------------------|--------------|
| Butane (< 0,1 % Butadiene) | | 106-97-8 203-448-7 | - | 601-004-00-0 | |
| Classification: | | DSD: F+;R12 CLP: Flam. Gas 1;H220 | | | |
| Isobutane (< 0,1% Butadiene) | | 75-28-5 200-857-2 | - | 601-004-00-0 | |
| Classification: | | DSD: F+;R12 CLP: Flam. Gas 1;H220, Press. Gas;H280 | | | |
| PROPANE | | 74-98-6 200-827-9 | - | 601-003-00-5 | |
| Classification: | | DSD: F+;R12 CLP: Flam. Gas 1;H220 | | | |

#: This substance has workplace exposure limit(s).
PBT: persistent, bioaccumulative and toxic substance.
vPvB: very persistent and very bioaccumulative substance.

Composition comments The full text for all R-phrases is displayed in Section 16.

SECTION 4: First aid measures

General information Not available.

4.1. Description of first aid measures

| | |
|---------------------|---|
| Inhalation | Move to fresh air. For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or persist. |
| Skin contact | Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| Eye contact | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Get medical attention if irritation develops and persists. |

4.2. Most important symptoms and effects, both acute and delayed Not available.

4.3. Indication of any immediate medical attention and special treatment needed Not available.

SECTION 5: Firefighting measures

General fire hazards Not available.

5.1. Extinguishing media

| | |
|---------------------------------------|--|
| Suitable extinguishing media | Water spray, foam, dry powder or carbon dioxide. |
| Unsuitable extinguishing media | Do not use water jet. |

5.3. Advice for firefighters

Special protective equipment for firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Special fire fighting procedures

Containers close to fire should be removed immediately or cooled with water. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering them.

For emergency responders

Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the MSDS.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Contact local authorities in case of spillage to drain/aquatic environment. Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Refer to attached safety data sheets and/or instructions for use. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Pressurised container: Do not pierce or burn, even after use. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. May be ignited by open flame. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Ground and bond containers when transferring material. Do not use if spray button is missing or defective. Do not re-use empty containers. Do not breathe dust/fume/gas/mist/vapors/spray. Use only in well-ventilated areas. Avoid prolonged exposure.

7.2. Conditions for safe storage, including any incompatibilities

Level 1 Aerosol.

Contents under pressure. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Avoid exposure to long periods of sunlight. Refrigeration recommended. Store in a well-ventilated place. Keep out of the reach of children.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

UK. EH40 Workplace Exposure Limits (WELs)

| Components | Type | Value |
|--|------|-----------------------------------|
| Butane (< 0,1 % Butadiene) (106-97-8) | STEL | 1810 mg/m ³ |
| | TWA | 750 ppm |
| | | 1450 mg/m ³ 600 ppm |

Biological limit values

No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures

Follow standard monitoring procedures.

8.2. Exposure controls

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide adequate general and local exhaust ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields.

Skin protection

| | |
|--|---|
| - Hand protection | Wear protective gloves. Latex gloves. Nitrile rubber. |
| - Other | Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. |
| Respiratory protection | Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. |
| Thermal hazards | Not available. |
| Hygiene measures | When using do not smoke. Handle in accordance with good industrial hygiene and safety practices. |
| Environmental exposure controls | Environmental manager must be informed of all major releases. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

| | |
|---|------------------------|
| Physical state | Liquid. |
| Form | Aerosol |
| Colour | Light yellow. |
| Odour | Odourless. |
| Odour threshold | Not available. |
| pH | Not applicable. |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | Not available. |
| Flash point | -80.00 °C (-112.00 °F) |
| Evaporation rate | Not applicable. |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or explosive limits | |
| Flammability limit - lower (%) | 1.8 % |
| Flammability limit - upper (%) | 11.2 % |
| Vapour pressure | Not applicable. |
| Vapour density | Not applicable. |
| Relative density | Not available. |
| Solubility(ies) | slight |
| Partition coefficient (n-octanol/water) | Not available. |
| Ignition temperature | > 350 °C (> 662 °F) |
| Decomposition temperature | Not available. |
| Viscosity | Not applicable. |
| Explosive properties | Not available. |
| Oxidizing properties | Not available. |
| 9.2. Other information | |
| Density | 0.86 g/ml @ 20 °C |
| VOC (Weight %) | 63.9 % |

SECTION 10: Stability and reactivity

| | |
|---|--|
| 10.2. Chemical stability | Risk of ignition. |
| 10.3. Possibility of hazardous reactions | Not available. |
| 10.4. Conditions to avoid | Heat, flames and sparks. Aerosol containers are unstable at temperatures above 50°C. |
| 10.5. Incompatible materials | Do not mix with other chemicals. |
| 10.6. Hazardous decomposition products | No dangerous reaction known under conditions of normal use. |

SECTION 11: Toxicological information

| | |
|----------------------------|----------------|
| General information | Not available. |
|----------------------------|----------------|

Information on likely routes of exposure

| | |
|---------------------|---|
| Ingestion | Not available. |
| Inhalation | Vapours may cause drowsiness and dizziness. |
| Skin contact | Not available. |
| Eye contact | Not available. |

Symptoms Not available.

11.1. Information on toxicological effects

| Components | Species | Test results |
|---|--|-----------------------------|
| Butane (< 0,1 % Butadiene) (106-97-8) | | |
| Acute | | |
| <i>Inhalation</i> | | |
| LC50 | Mouse | 680 mg/l, 2 Hours |
| | Rat | 658 mg/l, 4 Hours |
| Isobutane (< 0,1% Butadiene) (75-28-5) | | |
| Acute | | |
| <i>Inhalation</i> | | |
| LC50 | Mouse | 52 mg/l, 1 Hours |
| PROPANE (74-98-6) | | |
| Acute | | |
| <i>Inhalation</i> | | |
| LC50 | Rat | > 1442.847 mg/l, 15 Minutes |
| Skin corrosion/irritation | Prolonged or repeated contact may cause drying, cracking, or irritation. | |
| Serious eye damage/irritation | May irritate eyes. | |
| Respiratory sensitisation | Not available. | |
| Skin sensitisation | Not available. | |
| Germ cell mutagenicity | Not available. | |
| Carcinogenicity | Not available. | |
| Reproductive toxicity | Not available. | |
| Specific target organ toxicity - single exposure | Not available. | |
| Specific target organ toxicity - repeated exposure | Not available. | |
| Aspiration hazard | Not available. | |
| Mixture versus substance information | Not available. | |
| Other information | Not available. | |

SECTION 12: Ecological information

| | |
|--|--|
| 12.1. Toxicity | There are no data on the ecotoxicity of this product. |
| 12.2. Persistence and degradability | No data is available on the degradability of this product. |
| 12.3. Bioaccumulative potential | Not available. |
| Partition coefficient n-octanol/water (log Kow) | |
| PROPANE | 2.36 |
| Isobutane (< 0,1% Butadiene) | 2.76 |
| Butane (< 0,1 % Butadiene) | 2.89 |
| Bioconcentration factor (BCF) | Not available. |
| 12.4. Mobility in soil | Not available. |
| 12.5. Results of PBT and vPvB assessment | Not a PBT or vPvB substance or mixture. |
| 12.6. Other adverse effects | Not available. |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|-------------------------------------|---|
| Residual waste | Dispose of in accordance with local regulations. Avoid discharge into water courses or onto the ground. |
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. |
| EU waste code | The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. |
| Disposal methods/information | Contents under pressure. Do not puncture, incinerate or crush. This material and its container must be disposed of as hazardous waste. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not discharge into drains, water courses or onto the ground. Dispose in accordance with all applicable regulations. |

SECTION 14: Transport information

ADR

| | |
|---|---------------------|
| 14.1. UN number | UN1950 |
| 14.2. UN proper shipping name | Aerosols, flammable |
| 14.3. Transport hazard class(es) | 2.1 |
| Subsidiary class(es) | - |
| 14.4. Packing group | Not available. |
| 14.5. Environmental hazards | No |
| Tunnel restriction code | Not available. |
| Labels required | 2.1 |
| 14.6. Special precautions for user | Not available. |

IATA

| | |
|---|---------------------|
| 14.1. UN number | UN1950 |
| 14.2. UN proper shipping name | Aerosols, flammable |
| 14.3. Transport hazard class(es) | 2.1 |
| Subsidiary class(es) | 6.1 (PGIII) |
| 14.4. Packing group | Not available. |
| 14.5. Environmental hazards | Not available. |
| Labels required | 2.1 |
| ERG Code | Not available. |
| 14.6. Special precautions for user | Not available. |

IMDG

| | |
|---|---|
| 14.1. UN number | UN1950 |
| 14.2. UN proper shipping name | Aerosols, flammable |
| 14.3. Transport hazard class(es) | 2 |
| Subsidiary class(es) | - |
| 14.4. Packing group | Not available. |
| 14.5. Environmental hazards | |
| Marine pollutant | No |
| Labels required | Not available. |
| 14.6. Special precautions for user | Not available. |
| 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | This substance/mixture is not intended to be transported in bulk. |

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I

Not listed.

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II

Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended
Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended
Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended
Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended
Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry
Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(1) Candidate List as currently published by ECHA
Not listed.

Authorisations

Regulation (EC) No. 143/2011 Annex XIV Substances Subject to Authorisation
Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended
Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not regulated.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding

Not regulated.

Other EU regulations

Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances
Not regulated.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work
PROPANE (CAS 74-98-6)

Directive 94/33/EC on the protection of young people at work
Not regulated.

Other regulations

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

National regulations

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations Not available.

References Not available.

Information on evaluation method leading to the classification of mixture Not available.

Full text of any statements or R-phrases and H-statements under Sections 2 to 15 R12 Extremely flammable.

H220 - Extremely flammable gas.
H280 - Contains gas under pressure; may explode if heated.

Revision information Not available.

Training information Not available.

Disclaimer The information in the sheet was written based on the best knowledge and experience currently available.