



Safety Data Sheet

KaVo. Dental Excellence.

according to Regulation (EC) No 1907/2006

KaVo Spray 2112

Page 1 of 9

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

1.1. Product identifier

KaVo Spray 2112

Product code:

0.411.9630

0.411.9640

Further trade names

KaVo Spray, KaVo Spray 2112 A

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

Use of the substance/mixture

The product is intended for professional use.

1.3. Details of the supplier of the safety data sheet

Company name:	Kaltenbach & Voigt GmbH	
Street:	Bismarckring 39	
Place:	D-88400 Biberach	
Telephone:	+49 (0) 7351 56 0	Telefax: + 49 (0) 7351 56 1488
e-mail:	sdb@kavo.com	
e-mail (Contact person):	support@gefahrstoff.com	
Internet:	http://www.kavo.com/	
Responsible Department:	Questions concerning SDB: PES-Ingenieurgesellschaft mbH	

1.4. Emergency telephone number:

+49 (0) 7351 56 4000 (24 h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Aerosol: Aerosol 1

Hazard Statements:

Extremely flammable aerosol.

Pressurised container: May burst if heated.

2.2. Label elements

Regulation (EC) No. 1272/2008

Signal word: Danger

Pictograms:



Hazard statements

H222

Extremely flammable aerosol.

H229

Pressurised container: May burst if heated.

Precautionary statements

P210

smoking.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

P211

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

P251

Do not pierce or burn, even after use.

P410+P412

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



Safety Data Sheet

KaVo. Dental Excellence.

according to Regulation (EC) No 1907/2006

KaVo Spray 2112

Page 2 of 9

2.3. Other hazards

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
8042-47-5	White mineral oil (petroleum)			25 - < 50 %
	232-455-8		01-2119487078-27	
	Asp. Tox. 1; H304			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air.

After contact with skin

Wash with plenty of water. Change contaminated clothing.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion

Rinse mouth immediately and drink plenty of water.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂), Foam, Extinguishing powder.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Extremely flammable. Combustible. Vapours can form explosive mixtures with air.

Danger of bursting container.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures



Safety Data Sheet

KaVo. Dental Excellence.

according to Regulation (EC) No 1907/2006

KaVo Spray 2112

Page 3 of 9

Remove all sources of ignition. Provide adequate ventilation.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Danger of explosion.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Do not pierce or burn, even after use.

Advice on protection against fire and explosion

Do not spray on naked flames or any incandescent material. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Keep away from sources of ignition. - No smoking.

Advice on storage compatibility

Do not store together with: Material, oxygen-rich, oxidizing. Oxidising agent. Pyrophoric or self-heating substances.

Further information on storage conditions

Protect from frost. Protect against direct sunlight.

7.3. Specific end use(s)

The product is intended for professional use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL

Additional advice on limit values

none

8.2. Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe



Safety Data Sheet

KaVo. Dental Excellence.

according to Regulation (EC) No 1907/2006

KaVo Spray 2112

Page 4 of 9

gas/fumes/vapour/spray. If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Flame-retardant protective clothing. Wear anti-static footwear and clothing

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Suitable respiratory protection apparatus: Combination filtering device (EN 14387)

Filtering device with filter or ventilator filtering device of type: AX

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid (Aerosol)
Colour:	light yellow
Odour:	odourless

Test method

pH-Value:	not determined
-----------	----------------

Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	-40 °C
Flash point:	- 80 °C

Flammability

Solid:	not applicable
Gas:	not applicable

Explosive properties

Vapours can form explosive mixtures with air.

Lower explosion limits:	1 vol. %
Upper explosion limits:	11 vol. %
Ignition temperature:	> 350 °C

Auto-ignition temperature

Solid:	not applicable
Gas:	not applicable

Decomposition temperature:	not determined
----------------------------	----------------

Oxidizing properties

Not oxidizing.

Vapour pressure:	not determined
------------------	----------------



Safety Data Sheet

KaVo. Dental Excellence.

according to Regulation (EC) No 1907/2006

KaVo Spray 2112

Page 5 of 9

Density (at 20 °C):	0,853 g/cm ³ DIN 51757
Water solubility:	insoluble
Solubility in other solvents	
not determined	
Partition coefficient:	not determined
Viscosity / dynamic:	not determined
Viscosity / kinematic:	15,5 mm ² /s
Vapour density:	not determined
Evaporation rate:	not determined

9.2. Other information

Odour threshold: not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Extremely flammable. Ignition hazard.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Vapours can form explosive mixtures with air.
Heating causes rise in pressure with risk of bursting.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

Further information

Do not mix with other chemicals.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
8042-47-5	White mineral oil (petroleum)				
	oral	LD50	> 5000 mg/kg	Rat	Manufacturer
	dermal	LD50	> 2000 mg/kg	Rabbit	Manufacturer
	inhalative (4 h) aerosol	LC50	> 5000 mg/l	Rat	Manufacturer

Irritation and corrosivity

Based on available data, the classification criteria are not met.
Irritating to eyes. Repeated exposure may cause skin dryness or cracking.

Sensitising effects

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



Safety Data Sheet

KaVo. Dental Excellence.

according to Regulation (EC) No 1907/2006

KaVo Spray 2112

Page 6 of 9

STOT-single exposure

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

Severe effects after repeated or prolonged exposure

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.

Aspiration hazard

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

Additional information on tests

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
8042-47-5	White mineral oil (petroleum)					
	Acute fish toxicity	LC50	> 100 mg/l	96 h	Brachydanio rerio (zebra-fish)	Manufacturer
	Acute algae toxicity	ErC50	> 100 mg/l	72 h	Desmodesmus subspicatus.	Manufacturer
	Acute crustacea toxicity	EC50	> 100 mg/l	48 h	Daphnia magna (Big water flea)	Manufacturer

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
8042-47-5	White mineral oil (petroleum)	> 3,5

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products



Safety Data Sheet

KaVo. Dental Excellence.

according to Regulation (EC) No 1907/2006

KaVo Spray 2112

Page 7 of 9

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances
Classified as hazardous waste.

Waste disposal number of used product

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances
Classified as hazardous waste.

Waste disposal number of contaminated packaging

150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

Contaminated packaging

Completely emptied packages can be recycled.

For cleaning up: Water

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
Hazard label: 2.1



Classification code: 5F
Special Provisions: 190 327 344 625
Limited quantity: 1 L
Excepted quantity: E0
Transport category: 2
Tunnel restriction code: D

Inland waterways transport (ADN)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
Hazard label: 2.1



Classification code: 5F
Special Provisions: 190 327 344 625
Limited quantity: 1 L
Excepted quantity: E0

Marine transport (IMDG)

14.1. UN number: UN 1950



Safety Data Sheet

KaVo. Dental Excellence.

according to Regulation (EC) No 1907/2006

KaVo Spray 2112

Page 8 of 9

14.2. UN proper shipping name: AEROSOLS

14.3. Transport hazard class(es): 2.1

14.4. Packing group: -

Hazard label: 2.1



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

Limited quantity: 1000 mL

Excepted quantity: E0

EmS: F-D, S-U

Air transport (ICAO)

14.1. UN number: UN 1950

14.2. UN proper shipping name: AEROSOLS, flammable

14.3. Transport hazard class(es): 2.1

14.4. Packing group: -

Hazard label: 2.1



Special Provisions: A145 A167 A802

Limited quantity Passenger: 30 kg G

Passenger LQ: Y203

Excepted quantity: E0

IATA-packing instructions - Passenger: 203

IATA-max. quantity - Passenger: 75 kg

IATA-packing instructions - Cargo: 203

IATA-max. quantity - Cargo: 150 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Warning: Flammable gases.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC): 59,82 %

Information according to 2012/18/EU (SEVESO III): P3a FLAMMABLE AEROSOLS

Additional information:

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Water contaminating class (D): 1 - slightly water contaminating



Safety Data Sheet

KaVo. Dental Excellence.

according to Regulation (EC) No 1907/2006

KaVo Spray 2112

Page 9 of 9

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 7.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized 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
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H304	May be fatal if swallowed and enters airways.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.