



# Safety Data Sheet

KaVo. Dental Excellence.

according to Regulation (EC) No 1907/2006

## KaVo QUATTROcare plus Spray

Page 1 of 9

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

#### 1.1. Product identifier

KaVo QUATTROcare plus Spray

#### Product code:

1.005.4525  
1.011.4624  
1.005.3843

#### Further trade names

QUATTROcare plus Spray 2140, QUATTROcare plus Spray 2140P

#### 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:	<a href="http://www.kavo.com/">http://www.kavo.com/</a>	
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 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P211 Do not spray on an open flame or other ignition source.  
P251 Do not pierce or burn, even after use.



## Safety Data Sheet

KaVo. Dental Excellence.

according to Regulation (EC) No 1907/2006

### KaVo QUATTROcare plus Spray

Page 2 of 9

P410+P412

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

#### **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**

Headache, nausea, dizziness, fatigue, skin irritation

#### **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 (CO<sub>2</sub>), 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. Wear protective gloves/protective clothing/eye protection/face protection.

#### **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.



## Safety Data Sheet

KaVo. Dental Excellence.

according to Regulation (EC) No 1907/2006

### KaVo QUATTROcare plus Spray

Page 3 of 9

#### SECTION 6: Accidental release measures

##### **6.1. Personal precautions, protective equipment and emergency procedures**

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**

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means. Do not pierce or burn, even after use.

###### **Advice on protection against fire and explosion**

Take precautionary measures against static discharges. Vapours can form explosive mixtures with air. Do not spray on naked flames or any incandescent material. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

##### **7.2. Conditions for safe storage, including any incompatibilities**

###### **Requirements for storage rooms and vessels**

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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 <sup>3</sup>	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**



# Safety Data Sheet

KaVo. Dental Excellence.

according to Regulation (EC) No 1907/2006

## KaVo QUATTROcare plus Spray

Page 4 of 9

### Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

### Protective and hygiene measures

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

### Eye/face protection

Tightly sealed safety glasses. (DIN EN 166)

### 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.

Suitable material: NBR (Nitrile rubber)

Breakthrough time (maximum wearing time):  $\geq 480$  min.

Thickness of the glove material:  $\geq 0,45$  mm

DIN EN 374

### 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 filter device (DIN EN 141)..

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: characteristic

#### Test method

pH-Value: not applicable

### 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: not determined

### Auto-ignition temperature

Solid: not applicable

Gas: not applicable

Decomposition temperature: not determined



## Safety Data Sheet

KaVo. Dental Excellence.

according to Regulation (EC) No 1907/2006

### KaVo QUATTROcare plus Spray

Page 5 of 9

#### **Oxidizing properties**

Not oxidizing.

Vapour pressure:

not determined

Density (at 20 °C):

0,853 g/cm<sup>3</sup> DIN 51757

Water solubility:

insoluble

#### **Solubility in other solvents**

not determined

Partition coefficient:

not determined

Viscosity / dynamic:

not determined

Viscosity / kinematic:

15,5 mm<sup>2</sup>/s

Vapour density:

not determined

Evaporation rate:

not determined

#### **9.2. Other information**

Odour threshold: not determined

Density: Data apply to the technically active substance.

pressure: ca. 4,3 bar (20 °C)

### **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.

Do not expose to temperatures above 50 °C.

#### **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.



## Safety Data Sheet

KaVo. Dental Excellence.

according to Regulation (EC) No 1907/2006

### KaVo QUATTROcare plus Spray

Page 6 of 9

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.

#### Sensitising effects

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

#### 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.  
AOX: 0 mg/L

### 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 substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.



## Safety Data Sheet

KaVo. Dental Excellence.

according to Regulation (EC) No 1907/2006

### KaVo QUATTROcare plus Spray

Page 7 of 9

#### **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**

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 (with cleaning agent)

### **SECTION 14: Transport information**

#### **Land transport (ADR/RID)**

<b><u>14.1. UN number:</u></b>	UN 1950
<b><u>14.2. UN proper shipping name:</u></b>	AEROSOLS
<b><u>14.3. Transport hazard class(es):</u></b>	2
<b><u>14.4. Packing group:</u></b>	-
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)**

<b><u>14.1. UN number:</u></b>	UN 1950
<b><u>14.2. UN proper shipping name:</u></b>	AEROSOLS
<b><u>14.3. Transport hazard class(es):</u></b>	2



# Safety Data Sheet

KaVo. Dental Excellence.

according to Regulation (EC) No 1907/2006

## KaVo QUATTROcare plus Spray

Page 8 of 9

### 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

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

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



## Safety Data Sheet

KaVo. Dental Excellence.

according to Regulation (EC) No 1907/2006

### KaVo QUATTROcare plus Spray

Page 9 of 9

#### **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

#### **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): 7,8,9,10,11.

#### **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.