



Safety Data Sheet

KaVo. Dental Excellence.

according to 29 CFR 1910.1200(g)

KaVo QUATTROcare plus Spray North America - Canada

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1. Identification

Product identifier

KaVo QUATTROcare plus Spray North America - Canada

Product code:

1.005.3844

1.005.4524

Further trade names

QUATTROcare plus Spray AMERICA+CANADA, KaVo Spray 2141, KaVo Spray 2141P

Recommended use of the chemical and restrictions on use

Use of the substance/mixture

The product is intended for professional use.

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
e-mail: sdb@kavo.com
Internet: <http://www.kavo.com/>
Telefax: + 49 (0) 7351 56 1488

Emergency phone number: +49 (0) 7351 56 4000 (24 h)

2. Hazard(s) identification

Classification of the chemical

Hazard categories:
Flammable aerosols: Flam. Aerosol 1
Hazard Statements:
Extremely flammable aerosol
Contains gas under pressure; may explode if heated

Label elements

Signal word: Danger

Pictograms:



Hazard statements

Extremely flammable aerosol
Contains gas under pressure; may explode if heated

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - 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.

Hazards not otherwise classified

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

3. Composition/information on ingredients

Mixtures



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Hazardous components

CAS No	Components	Quantity
8042-47-5	White mineral oil (petroleum)	14.99 %

4. First-aid measures

Description of first aid measures

General information

Never give anything by mouth to an unconscious person or a person with cramps. Remove persons to safety.

After inhalation

Provide fresh air.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

After contact with eyes

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

After ingestion

Rinse mouth immediately and drink plenty of water. Observe risk of aspiration if vomiting occurs.

Most important symptoms and effects, both acute and delayed

Headache, nausea, dizziness, fatigue, skin irritation

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂), Foam, Extinguishing powder

Unsuitable extinguishing media

Full water jet.

Specific hazards arising from the chemical

Extremely flammable. Vapours can form explosive mixtures with air.

Special protective equipment and precautions for fire-fighters

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.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Provide adequate ventilation.

Environmental precautions

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

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.

Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13



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7. Handling and storage

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.

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: Oxidising agent. Pyrophoric or self-heating substances.

Further information on storage conditions

Protect from frost. Protect against direct sunlight.

8. Exposure controls/personal protection

Control parameters

Exposure limits

CAS No.	Substance	ppm	mg/m ³	f/cc	Category	Origin
75-28-5	Butane: isobutane	-	-		TWA (8 h)	TLV
		1000			STEL (15 min)	TLV
106-97-8	Butane: n-butane	-	-		TWA (8 h)	TLV
		1000			STEL (15 min)	TLV
75-28-5	Isobutane	800	1900		TWA (8 h)	REL
8012-95-1	Oil mist (mineral)	-	5		TWA (8 h)	REL
8012-95-1	Oil mist, mineral	-	5		TWA (8 h)	PEL
74-98-6	Propane	1000	1800		TWA (8 h)	PEL
		1000	1800		TWA (8 h)	REL
		-	-		Asphyxiant	TLV
106-97-8	n-Butane	800	1900		TWA (8 h)	REL

Additional advice on limit values

- a no restriction
- b End of exposure or end of shift
- c at long term exposure: after several previous shifts
- d before next shift

TWA (EC): time-weighted average

Y: A risk of reproductive effects needs not to be feared if the occupational exposure limit value (AGW) and the biological limit value (BGW) is kept

Z: A risk of reproductive effects cannot to be excluded if the occupational exposure limit value (AGW) and the biological limit value (BGW) is kept

Urine (U)

Whole blood (B)



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Exposure controls

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

Wear eye/face protection.

Hand protection

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.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: liquid (Aerosol)
Color: light yellow
Odor: characteristic

Test method

pH-Value (at 20 °C): not determined DIN 19268

Changes in the physical state

Melting point/freezing point: not determined
Initial boiling point and boiling range: - 40 °C
Sublimation point: No information available.
Softening point: No information available.
Flash point: - 80 °C

Flammability

Solid: not applicable
Gas: not applicable

Explosive properties

No information available.

Lower explosion limits: 1 vol. %
Upper explosion limits: 11 vol. %
Ignition temperature: No information available.

Auto-ignition temperature

Solid: not applicable
Gas: not applicable

Decomposition temperature: not determined

Oxidizing properties

Not oxidizing.

Vapor pressure: not determined

Density (at 20 °C): 0,853 g/cm³ DIN 51757

Bulk density: No information available.



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Water solubility: insoluble

Solubility in other solvents

not determined

Partition coefficient: not determined

Viscosity / dynamic: No information available.

Viscosity / kinematic: 15,5 mm²/s

Vapour density: not determined

Evaporation rate: not determined

Other information

Density: Data apply to the technically active substance.

pressure: - bar (20°C)

Odour threshold: not determined

10. Stability and reactivity

Reactivity

Extremely flammable, Ignition hazard.

Chemical stability

Stability: Stable

The product is stable under storage at normal ambient temperatures.

Possibility of hazardous reactions

Hazardous reactions: May occur

Conditions to avoid

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

Vapours can form explosive mixtures with air.

Incompatible materials

No information available.

Hazardous decomposition products

No known hazardous decomposition products.

Further information

Do not mix with other chemicals.

11. Toxicological information

Information on toxicological effects

Route(s) of Entry

Inhalation

Acute toxicity

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

CAS No	Components				
	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



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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.

Specific target organ toxicity (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.

No indication of human carcinogenicity.

No indications of human germ cell mutagenicity exist.

No indications of human reproductive toxicity exist.

Carcinogenicity (NTP): none

Carcinogenicity (IARC): Mineral oils, highly-refined is listed in group 3.

Carcinogenicity (OSHA): none

Aspiration hazard

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

12. Ecological information

Ecotoxicity

The product is not: Ecotoxic.

Persistence and degradability

The product has not been tested.

Bioaccumulative potential

The product has not been tested.

Mobility in soil

The product has not been tested.

Other adverse effects

No information available.

Further information

Do not allow uncontrolled discharge of product into the environment.

13. Disposal considerations

Waste treatment methods

Advice on disposal

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

Contaminated packaging

Completely emptied packages can be recycled.

14. Transport information

US DOT 49 CFR 172.101

UN/ID number:

UN 1950

Proper shipping name:

Aerosols, flammable, (each not exceeding 1 L capacity)

Transport hazard class(es):

2.1

Hazard label:

2.1

Marine transport (IMDG)



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UN number: UN 1950
UN proper shipping name: AEROSOLS
Transport hazard class(es): 2.1
Packing group: -
Hazard label: 2.1



Limited quantity: 1000 mL
Excepted quantity: E0
EmS: F-D, S-U

Air transport (ICAO)

UN number: UN 1950
UN proper shipping name: AEROSOLS, flammable
Transport hazard class(es): 2.1
Packing group: -
Hazard label: 2.1



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

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

Special precautions for user

Warning: Flammable gases.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

15. Regulatory information

U.S. Regulations

National Inventory TSCA

White mineral oil (petroleum): Yes.
butane: Yes.
isobutane: Yes.
propane: Yes.

National regulatory information

SARA Section 311/312 Hazards:
Butane (106-97-8): Fire hazard
Propane (74-98-6): Fire hazard
Isobutane (75-28-5): Fire hazard

Clean Air Act Section 112(r):
Butane (106-97-8): Threshold quantities = 10,000 lbs.



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

Isobutane (75-28-5): Threshold quantities = 10,000 lbs.

State Regulations

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

This product contains no chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other information

Health: 1

Flammability: 4

Physical Hazard: 3

NFPA Hazard Ratings

Health: 1

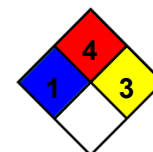
Flammability: 4

Reactivity: 3

Unique Hazard:

Revision date: 05.08.2015

Revision No: 2,0



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)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

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 (division of the American Chemical Society)

DNEL/DMEL: Derived No Effect Level / Derived Minimal Effect Level

WEL (UK): Workplace Exposure Limits

TWA (EC): Time-Weighted Average

ATE: Acute Toxicity Estimate

STEL (EC) Short Term Exposure Limit

LC50: Lethal Concentration

EC50: half maximal Effective Concentration

ErC50: means EC50 in terms of reduction of growth rate

VwVwS: Verwaltungsvorschrift wassergefährdende Stoffe (17. Mai 1999)

Other data

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.