

according to WHMIS

Page 1 of 9

Revision date: 17.01.2020

Telefax: + 49 (0) 7351 56 1488

#### 1. Identification

#### **Product identifier**

QUATTROcare plus Spray AMERICA 2141

#### Product code:

1.005.3844 1.005.4524

#### Relevant identified uses of the substance or mixture and uses advised against

#### Use of the substance/mixture

Lubricating agent

# Details of the supplier of the safety data sheet

Company name: KaVo Dental GmbH
Street: Bismarckring 39
Place: D-88400 Biberach
Telephone: +49 (0) 7351 56 0

e-mail: sdb@kavo.com

e-mail (Contact person): support@gefahrstoff.com Internet: www.kavo.com

Responsible Department: Questions concerning SDB: PES-Ingenieurgesellschaft mbH

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

# 2. Hazard identification

#### Classification of the substance or mixture

#### **WHMIS 2015**

Aerosol: Aerosol 1

Gases under pressure: Compressed gas

Aspiration hazard: Asp. Tox. 1

#### **Label elements**

#### **WHMIS 2015**

Signal word: Danger

Pictograms:







#### **Hazard statements**

Extremely flammable aerosol.

Contains gas under pressure; may explode if heated. May be fatal if swallowed and enters airways.

# **Precautionary statements**

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

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

Do not pierce or burn, even after use.

IF SWALLOWED: Immediately call a POISON CENTER/doctor.

Do NOT induce vomiting.



according to WHMIS

Page 2 of 9

Revision date: 17.01.2020

Print date: 20.01.2020

Store in a well-ventilated place.

Store locked up.

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

Dispose of waste according to applicable legislation.

#### Other hazards

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

# 3. Composition/information on ingredients

#### **Mixtures**

#### **Hazardous components**

CAS No	Chemical name	Quantity
106-97-8	butane	15 - < 40% (*)
75-28-5	isobutane	15 - < 40% (*)
8042-47-5	White mineral oil (petroleum)	10 - < 30% (*)
74-98-6	propane	5 - < 10% (*)

<sup>(\*)</sup> The actual concentration is withheld as a trade secret.

#### 4. First-aid measures

# **Description of first aid measures**

#### **General information**

First aider: Pay attention to self-protection! Remove persons to safety. Never give anything by mouth to an unconscious person or a person with cramps.

#### After inhalation

Remove person to fresh air and keep comfortable for breathing. In all cases of doubt, or when symptoms persist, seek medical advice.

#### After contact with skin

Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. When in doubt or if symptoms are observed, get medical advice.

#### After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

#### After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Call a physician in any case!

# Most important symptoms and effects, whether acute or delayed

Headache, Nausea, Dizziness. May cause drowsiness or dizziness. Frequently or prolonged contact with skin may cause dermal irritation.

#### Indication of immediate medical attention and special treatment needed

Treat symptomatically. Symptoms can occur only after several hours.

# 5. Fire-fighting measures

#### **Extinguishing media**

#### Suitable extinguishing media

Carbon dioxide (CO2), Foam, Extinguishing powder. Water mist.



according to WHMIS

Page 3 of 9

Revision date: 17.01.2020

Co-ordinate fire-fighting measures to the fire surroundings.

#### Unsuitable extinguishing media

Full water jet.

#### Specific hazards arising from the hazardous product

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

In case of fire may be liberated: Gases/vapours, toxic (Carbon dioxide (CO2), Carbon monoxide, aldehydes, carbon black)

#### Special protective equipment and precautions for fire-fighters

In case of fire: Wear self-contained breathing apparatus. In case of fire and/or explosion do not breathe fumes. Move undamaged containers from immediate hazard area if it can be done safely.

#### 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. Do not breathe gas/fumes/vapour/spray. Remove persons to safety. Evacuate area. Avoid contact with skin, eyes and clothes. Wear breathing apparatus if exposed to vapours/dusts/aerosols.

#### **Environmental precautions**

Do not allow uncontrolled discharge of product into the environment. Explosion risk. Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Ensure all waste water is collected and treated via a waste water treatment plant.

#### Methods and material for containment and cleaning up

Ventilate affected area. 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. Clean contaminated articles and floor according to the environmental legislation.

#### Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

# 7. Handling and storage

#### Precautions for safe handling

#### Advice on safe handling

Observe instructions for use. Do not pierce or burn, even after use. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Wear breathing apparatus if exposed to vapours/dusts/aerosols.

#### 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. Heating causes rise in pressure with risk of bursting.

# 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,



according to WHMIS

Page 4 of 9

Revision date: 17.01.2020

sparks, open flames and other ignition sources. No smoking.

# Hints on joint storage

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances. Food and feedingstuffs.

#### Further information on storage conditions

Protect against: frost. Protect against direct sunlight. Protect from sunlight.

#### 8. Exposure controls/Personal protection

#### **Control parameters**

#### **Exposure limits (ACGIH)**

CAS No	Chemical name	ppm	mg/m³	F/ml	Category	Origin
75-28-5	Butane: isobutane	-	-		TWA (8 h)	ACGIH-2019
		1000			STEL (15 min)	ACGIH-2019
106-97-8	Butane: n-butane	-	-		TWA (8 h)	ACGIH-2019
		1000			STEL (15 min)	ACGIH-2019
74-98-6	Propane	-	-		Asphyxiant	ACGIH-2019

# **Exposure controls**







#### Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

#### Protective and hygiene measures

Take off contaminated clothing. Draw up and observe skin protection programme. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. Do not breathe gas/fumes/vapour/spray.

#### Eye/face protection

Suitable eye protection: Tightly sealed safety glasses.

#### Hand protection

Wear suitable gloves. EN ISO 374

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) 480 min. Thickness of the glove material: 0,45 mm

#### Skin protection

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

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection. Wear breathing apparatus if exposed to



according to WHMIS Page 5 of 9

Revision date: 17.01.2020

Print date: 20.01.2020

vapours/dusts/aerosols. Respiratory protection necessary at: exceeding exposure limit values.

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

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

Observe the wear time limits as specified by the manufacturer.

#### **Environmental exposure controls**

Do not allow uncontrolled discharge of product into the environment. Explosion risk. Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Ensure all waste water is collected and treated via a waste water treatment plant.

# 9. Physical and chemical properties

# Information on basic physical and chemical properties

Physical state: Aerosol
Colour: light yellow
Odour: characteristic

Test method

pH-Value: not determined DIN 19268

Changes in the physical state

Melting point:

Initial boiling point and boiling range:

-40 °C

Flash point:

-80 °C

**Flammability** 

Solid: not applicable
Gas: not applicable

**Explosive properties** 

Heating may cause an explosion. Vapours can form explosive mixtures with air.

Lower explosive limits: 0,9 vol. % Upper explosive limits: 15 vol. %

**Auto-ignition temperature** 

Solid: not applicable
Gas: not applicable

Decomposition temperature: not determined

**Oxidizing properties** 

Not oxidising.

Vapour pressure: not determined

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

Water solubility:

The study does not need to be conducted because the substance is known to be insoluble in water.

Solubility in other solvents

not determined

Partition coefficient:

Viscosity / dynamic:

not determined

not determined

not determined

not determined



according to WHMIS Page 6 of 9

Revision date: 17.01.2020

Print date: 20.01.2020

Vapour density: not determined Evaporation rate: not determined

Other information

Odour threshold: not determined.

Relative density, Colour, Odour, Viscosity, pH: Data apply to the technically active substance.

# 10. Stability and reactivity

#### Reactivity

Extremely flammable aerosol.

#### **Chemical stability**

The product is stable under storage at normal ambient temperatures.

#### Possibility of hazardous reactions

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

#### **Conditions to avoid**

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Protect against direct sunlight. Protect against: Frost. Take precautionary measures against static discharges.

#### **Incompatible materials**

Oxidizing agent. Pyrophoric or self-heating substances.

#### Hazardous decomposition products

In case of fire may be liberated: Gases/vapours, toxic (Carbon dioxide (CO2), Carbon monoxide, aldehydes, carbon black)

#### **Further information**

Do not mix with other chemicals.

# 11. Toxicological information

#### Information on toxicological effects

#### **Acute toxicity**

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

CAS No	Chemical name									
	Route of exposure	Dose		Species	Source	Method				
8042-47-5	White mineral oil (petroleum)									
	oral	LD50 mg/kg	> 5000	Rat	Manufacturer					
	dermal	LD50 mg/kg	> 2000	Rabbit	Manufacturer					
	inhalation (4 h) aerosol		> 5000	Rat	Manufacturer					

# 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.

### Carcinogenic/mutagenic/toxic effects for reproduction



according to WHMIS Page 7 of 9

Revision date: 17.01.2020

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

#### STOT-single exposure

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

#### STOT-repeated exposure

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

#### **Aspiration hazard**

May be fatal if swallowed and enters airways.

# Name of toxicologically synergistic products

No information available.

# 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**

Avoid release to 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

Dispose of waste according to applicable legislation.

# 14. Transport information

# **Canadian TDG**

UN/ID number: UN 1950

Proper shipping name: AEROSOLS

Hazard classes:2.1Hazard label:2.1Limited quantity:1 L

Marine transport (IMDG)

UN 1950
United Nations proper shipping AEROSOLS

name:

Transport hazard class(es): 2.1



according to WHMIS Page 8 of 9

Revision date: 17.01.2020

Packing group:

Hazard label: 2.1



Special Provisions: 63, 190, 277, 327, 344, 381, 959

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

Air transport (ICAO-TI/IATA-DGR)

UN number: UN 1950

<u>United Nations proper shipping</u> AEROSOLS, FLAMMABLE

name

Transport hazard class(es):

Packing group:

Hazard label:

2.1

2.1



Special Provisions: A145 A167 A802

Limited quantity Passenger: 30 kg G
Passenger LQ: Y203
Excepted quantity: E0

IATA-packing instructions - Passenger:

IATA-max. quantity - Passenger:

IATA-packing instructions - Cargo:

IATA-max. quantity - Cargo:

150 kg

**Environmental hazards** 

ENVIRONMENTALLY HAZARDOUS: no

# 15. Regulatory information

# **Canadian regulations**

# **DSL/NDSL** inventory status

DSL / LIS: butane: Yes. isobutane: Yes.

White mineral oil (petroleum): Yes.

propane: Yes.

NDSL / LES: butane: No. isobutane: No.

White mineral oil (petroleum): No.

propane: No.

National Pollutant Release Inventory (NPRI)

butane: No.



according to WHMIS Page 9 of 9

Revision date: 17.01.2020

Print date: 20.01.2020

isobutane: No.

White mineral oil (petroleum): Yes.

propane: Yes.

#### 16. Other information

#### Changes

This data sheet contains changes from the previous version in section(s): 1,3,4,5,6,7,8,9,10,11,12,13,14,15.

# Abbreviations and acronyms

ACGIH: American Conference of Governmental Industrial Hygienists

**DSL: Domestic Substances List** 

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

DGR: Dangerous Goods Regulations

TI: Technical Instructions

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service LES: Liste extérieure des substances LIS: Liste intérieure des substances NDSL: Non-Domestic Substances List

SIMDUT: Système d'information sur les matières dangereuses utilisées au travail

STEL: Short-term exposure limit

TDG: Transportation of Dangerous Goods TMD: Transport des marchandises dangereuses

TWA: time-weighted average

WHMIS: Workplace Hazardous Materials Information System

**UN: United Nations** 

ATE: Acute toxicity estimate LC50: Lethal concentration, 50%

LD50: Lethal dose, 50% LL50: Lethal loading, 50% EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

#### **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.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)