

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

070373266

**The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).**

070398388 273030094



# 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 QUATTROcare plus Spray  
**REACH Registration Number** -  
**Product code** 1,005,3843-45;1,005,4523/24  
**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. Do not breathe dust/fume/gas/mist/vapors/spray.  
**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

<b>R-phrases</b>	R12 Extremely flammable.
<b>S-phrases</b>	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.
<b>Authorisation number</b>	Not available.
<b>Supplemental label information</b>	Not applicable.
<b>2.3. Other hazards</b>	Not assigned.

### **SECTION 3: Composition/information on ingredients**

#### **3.2. Mixtures**

##### **General information**

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

<b>Inhalation</b>	Move to fresh air. For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Take off immediately all contaminated clothing. Rinse skin with water/shower.
<b>Eye contact</b>	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.
<b>Ingestion</b>	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**

<b>Suitable extinguishing media</b>	Water spray, foam, dry powder or carbon dioxide.
<b>Unsuitable extinguishing media</b>	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 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 <sup>3</sup>
	TWA	750 ppm
		1450 mg/m <sup>3</sup>
		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. Nitrile rubber. Latex gloves.

- 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	4.2 bar @ 20 °C
Vapour density	Not applicable.
Relative density	Not available.
Solubility(ies)	slight emulsifiable
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	0.85 g/ml @ 20 °C
VOC (Weight %)	84.46 %

## **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.
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## Information on likely routes of exposure

<b>Ingestion</b>	Not available.
<b>Inhalation</b>	Vapours may cause drowsiness and dizziness.
<b>Skin contact</b>	Not available.
<b>Eye contact</b>	Not available.
<b>Symptoms</b>	Not available.

### 11.1. Information on toxicological effects

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

## **SECTION 12: Ecological information**

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

## **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

<b>Residual waste</b>	Dispose of in accordance with local regulations. Avoid discharge into water courses or onto the ground.
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.
<b>EU waste code</b>	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Disposal methods/information</b>	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**

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

### **IATA**

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

### **IMDG**

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





## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### QUATTROcare plus Spray AMERICA 2141

Print date: 10.01.2014

Product code: 1.005.3844

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

##### 1.1. Product identifier

QUATTROcare plus Spray AMERICA 2141

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

##### 1.3. Details of the supplier of the safety data sheet

Company name:	KaVo Dental GmbH		
Street:	Bismarckring 39		
Place:	D-88400 Biberach/Riß		
Telephone:	+49 (0) 7351 56-0	Telefax:	+49 (0) 7351 56-1488
e-mail:	info@kavo.com		
Internet:	www.kavo.de		

##### 1.4. Emergency telephone number:

+ 49 (0) 30 / 30 686 790 (Poison Centre Berlin)

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

Indications of danger: F+ - Extremely flammable

R phrases:

Extremely flammable.

##### 2.2. Label elements

Danger symbols: F+ - Extremely flammable



F+ - Extremely flammable

##### R phrases

12 Extremely flammable.

##### S phrases

23 Do not breathe Aerosol .  
51 Use only in well-ventilated areas.

##### Special labelling of certain mixtures

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

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children.

##### 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



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#### Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
232-455-8	White mineral oil (petroleum)	25 - < 50 %
8042-47-5		
	Asp. Tox. 1; H304	
01-2119487078-27		

Full text of R and H phrases: see Section 16.

#### SECTION 4: First aid measures

##### 4.1. 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. 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

Combustible. Vapours may form explosive mixtures with air.

##### 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

Remove all sources of ignition. Provide adequate ventilation.



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#### 6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion hazard.

#### 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

See chapter 8.

## 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. Dust must be exhausted directly at the point of origin. When using do not eat, drink, smoke, sniff.

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

Do not spray on naked flames or any incandescent material. Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharge. Vapours may form explosive mixtures with air.

### 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 sources of ignition.  
- No smoking.

#### **Advice on storage compatibility**

Do not store together with: Material, rich in oxygen, oxidizing.

#### **Further information on storage conditions**

Protect from frost. Protect against direct sunlight.

### 7.3. Specific end use(s)

No information available.

## 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
8042-47-5	White mineral oil (petroleum)		5		TWA (8 h) STEL (15 min)	TWA TWA
106-97-8	Butane	600 750	1450 1810		TWA (8 h) STEL (15 min)	WEL WEL

#### **Additional advice on limit values**

- a no restriction
- b End of exposure or shift
- c in long-term exposure: after several shifts
- d prior to next shift

TWA (EC): time-weighted average

U: Urea

### 8.2. Exposure controls



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#### Protective and hygiene measures

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

#### Eye/face protection

Suitable eye protection: Tightly sealed safety glasses.

#### 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.

Suitable material: NBR (Nitrile rubber) Breakthrough time (maximum wearing time) 480min

Thickness of the glove material 0,45 mm

#### Skin protection

No special measures are necessary.

#### Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Suitable respiratory protective equipment: 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:	Aerosol
Colour:	slightly yellow
Odour:	characteristic

pH-Value (at 20 °C): not applicable

#### Changes in the physical state

Melting point: No information available.

Initial boiling point and boiling range: -40 °C

Sublimation point: No information available.

Softening point: No information available.

: No information available.

Flash point: -80 °C

Lower explosion limits: 1 vol. %

Upper explosion limits: 11 vol. %

Ignition temperature: No information available.

Vapour pressure: No information available.

Vapour pressure: No information available.

Density (at 20 °C): 0,853 g/cm<sup>3</sup> DIN 51757

Bulk density: No information available.

Water solubility: insoluble

Partition coefficient: No information available.

Viscosity / dynamic: No information available.

Viscosity / kinematic: 15,5 mm<sup>2</sup>/s

Flow time: No information available.

Vapour density: No information available.

Evaporation rate: No information available.

#### Test method



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Solvent separation test:

No information available.

Solvent content:

No information available.

#### 9.2. Other information

Solid content:

No information available.

density: Data apply to technical substance.

pressure: ca. 4,3 bar (20°C)

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Reacts with : Oxidising agent

#### 10.2. Chemical stability

The product is stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Do not expose to temperatures above 50 °C. Heating causes rise in pressure with risk of bursting.

#### 10.4. Conditions to avoid

Keep away from heat. Ignition hazard.

#### 10.5. Incompatible materials

No information available.

#### 10.6. Hazardous decomposition products

No information available.

#### Further information

Do not mix with other chemicals.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Toxicokinetics, metabolism and distribution

No information available.

##### Acute toxicity

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

##### Irritation and corrosivity

No information available.

##### Sensitising effects

No information available.

##### Severe effects after repeated or prolonged exposure

No information available.

##### Carcinogenic/mutagenic/toxic effects for reproduction

No indication of human carcinogenicity.

No indications of human germ cell mutagenicity exist.



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No indications of human reproductive toxicity exist.

#### Specific effects in experiment on an animal

No information available.

#### Additional information on tests

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

## SECTION 12: Ecological information

### 12.1. Toxicity

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

### 12.2. Persistence and degradability

There are no data available on the mixture itself. AOX (mg/l): 0

### 12.3. Bioaccumulative potential

There are no data available on the mixture itself.

#### 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

No information available.

### 12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

### 12.6. Other adverse effects

No information available.

#### Further information

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Advice on disposal

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 dangerous 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 dangerous substances  
Classified as hazardous waste.



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**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**

Water (with cleaning agent). Completely emptied packages can be recycled.

### SECTION 14: Transport information

**Land transport (ADR/RID)**

**14.1. UN number:** UN1950  
**14.2. UN proper shipping name:** AEROSOLS  
**14.3. Transport hazard class(es):** 2  
Hazard label: 2.1  
Classification code: 5F  
Special Provisions: 190 327 344 625  
Limited quantity: 1 L  
Transport category: 2  
Tunnel restriction code: D

**Other applicable information (land transport)**

Limited quantity: E0

**Inland waterways transport (ADN)**

**14.1. UN number:** UN1950  
**14.2. UN proper shipping name:** AEROSOLS  
**14.3. Transport hazard class(es):** 2  
Hazard label: 2.1  
Classification code: 5F  
Special Provisions: 190 327 344 625  
Limited quantity: 1 L

**Other applicable information (inland waterways transport)**

Limited quantity: E0

**Marine transport (IMDG)**

**14.1. UN number:** UN1950  
**14.2. UN proper shipping name:** AEROSOLS  
**14.3. Transport hazard class(es):** 2  
**14.4. Packing group:** -  
Hazard label: 2, see SP63  
Special Provisions: 63, 190, 277, 327, 344, 959  
Limited quantity: See SP277  
EmS: F-D, S-U

**Other applicable information (marine transport)**

Limited quantity: E0

**Air transport (ICAO)**

**14.1. UN number:** UN1950  
**14.2. UN proper shipping name:** AEROSOLS, flammable  
**14.3. Transport hazard class(es):** 2.1  
Hazard label: 2.1



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Special Provisions:	A145 A167 A802
Limited quantity Passenger:	30 kg G
IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

**Other applicable information (air transport)**

Limited quantity: E0  
Passenger-LQ: Y203

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

1999/13/EC (VOC): VOC-CH: 0,197 kg/500ml Dose (59,82 % w/w)  
VOC 1999/13/EG: 59,82 % w/w

**Additional information**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)  
Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).

**National regulatory information**

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

**SECTION 16: Other information****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)  
IATA: International Air Transport Association  
IMDG: International Maritime Code for Dangerous Goods  
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

**Full text of R phrases referred to under Sections 2 and 3**

12 Extremely flammable.

**Full text of H statements referred to under Sections 2 and 3**

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



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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.

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