Printing date 22.11.2023

Version number 5 (replaces version 4)

Revision: 22.11.2023

#### · 1.1 Product identifier

- · Trade name: smart Kältespray Orange
- 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture Auxiliary for manufacture of dental prothesis
- 1.3 Details of the supplier of the safety data sheet
  Manufacturer/Supplier: PRISMAN GmbH
   Otto Hahn Ring 6-18
   D-64653 Lorsch
   Germany

• Further information obtainable from:

Abteilung Produktsicherheit

A lexander. Metz @prisman. de

• 1.4 Emergency telephone number: ++49 (0)6251 866980-0, Mo - Fr 8-18 Uhr

## **SECTION 2: Hazards identification**

· 2.1 Classification of the substance or mixture

- · Classification according to Regulation (EC) No 1272/2008
- Aerosol 1 H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

#### · 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

*The product is classified and labelled according to the GB CLP regulation. Hazard pictograms* 



GHS02

Signal word Danger
 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.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

### • Additional information:

Contains Orange juice oil. May produce an allergic reaction.

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
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 2)

Printing date 22.11.2023

Version number 5 (replaces version 4)

Revision: 22.11.2023

#### Trade name: smart Kältespray Orange

(Contd. of page 1)

<b>3.2 Mixtures</b> <b>Description:</b> Mixture of substances	listed below with nonhazardous additions.	
Dangerous components:		
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5 RTECS: TX 2275000 Reg.nr.: 01-2119486944-21-xxxx	propane Flam. Gas 1, H220 Press. Gas (Comp.), H280	50-1009
CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0 RTECS: EJ 4200000 Reg.nr.: 01-2119474691-32-xxxx	butane, pure Flam. Gas 1, H220 Press. Gas (Comp.), H280	25-50%
CAS: 64-17-5 EINECS: 200-578-6 Index number: 603-002-00-5 RTECS: KQ 6300000 Reg.nr.: 01-2119457610-43-XXXX	ethanol 🚸 Flam. Liq. 2, H225	2.5-10%
CAS: 8028-48-6 EINECS: 232-433-8 Reg.nr.: 01-2119493353-35-xxxx	Orange juice oil Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Skin Sens. 1, H317	≤1.0%

## **SECTION 4: First aid measures**

• 4.1 Description of first aid measures

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: In cases of frost bites, rinse with plenty of water. Do not remove clothing.
- *After eye contact: Rinse opened eye for several minutes under running water.*
- After swallowing: If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.
- **SECTION 5: Firefighting measures**
- 5.1 Extinguishing media
- · Suitable extinguishing agents:
- CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- Protective equipment: No special measures required.

(Contd. on page 3)

GB

Printing date 22.11.2023

*Version number 5 (replaces version 4)* 

Revision: 22.11.2023

#### Trade name: smart Kältespray Orange

(Contd. of page 2)

## **SECTION 6:** Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation
- Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow to penetrate the ground/soil.

• **6.3** *Methods and material for containment and cleaning up:* Allow to evaporate. Ensure adequate ventilation.

- · 6.4 Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## **SECTION 7: Handling and storage**

• 7.1 Precautions for safe handling Use only in well ventilated areas.

Information about fire - and explosion protection:

*Do not spray onto a naked flame or any incandescent material. Keep ignition sources away - Do not smoke.* 

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

### · 7.2 Conditions for safe storage, including any incompatibilities

· Storage:

· Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Observe official regulations on storing packagings with pressurised containers.

• Information about storage in one common storage facility: Not required.

- Further information about storage conditions: Keep container tightly sealed.
- 7.3 Specific end use(s) No further relevant information available.

## **SECTION 8: Exposure controls/personal protection**

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

## 106-97-8 butane, pure

WEL Short-term value: 1810 mg/m<sup>3</sup>, 750 ppm

Long-term value: 1450 mg/m<sup>3</sup>, 600 ppm Carc (if more than 0.1% of buta-1.3-diene)

## 64-17-5 ethanol

WEL Long-term value: 1920 mg/m<sup>3</sup>, 1000 ppm

· Additional information: The lists valid during the making were used as basis.

### · 8.2 Exposure controls

• Appropriate engineering controls No further data; see section 7.

- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures: Wash hands before breaks and at the end of work.

· Respiratory protection: Not required.

(Contd. on page 4)

GB ·

Printing date 22.11.2023

*Version number 5 (replaces version 4)* 

Revision: 22.11.2023

(Contd. of page 3)

## Trade name: smart Kältespray Orange

#### · Hand protection

- Not required.
- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation · Material of gloves -
- · Penetration time of glove material -
- For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:
- Rubber gloves
- For the permanent contact gloves made of the following materials are suitable: Neoprene gloves
- As protection from splashes gloves made of the following materials are suitable:
- Butyl rubber, BR
- Nitrile rubber, NBR
- Natural rubber, NR
- Eye/face protection Not required.

## **SECTION 9: Physical and chemical properties**

• 9.1 Information on basic physical and chemical prope	erties
· General Information	
· Physical state	Aerosol
· Colour:	Transparent
· Odour:	Characteristic
· Odour threshold:	Not determined.
· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	e Not applicable, as aerosol.
· Flammability	Not applicable.
· Lower and upper explosion limit	
· Lower:	1.5 Vol % (Propan/Butan)
· Upper:	10.9 Vol % (Propan/Butan)
· Flash point:	-97 °C
· Auto-ignition temperature:	365 °C
· Decomposition temperature:	Not determined.
· pH	Not applicable
· Viscosity:	**
· Kinematic viscosity	Not applicable
Dynamic:	Not determined.
Solubility	
· water:	Not miscible or difficult to mix.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure at 20 °C:	5,000 hPa
• Density and/or relative density	
· Density at 20 °C:	$0.57  g/cm^3$
Relative density	Not determined.
· Vapour density	Not determined.
· 9.2 Other information	
· Appearance:	
· Form:	Aerosol
Important information on protection of health and environment, and on safety.	1
Ignition temperature:	Product is not selfigniting.
• Explosive properties:	Product is not explosive. However, formation o explosive air/vapour mixtures are possible.
	(Contd. on page 5

5) GB

Printing date 22.11.2023

Version number 5 (replaces version 4)

Revision: 22.11.2023

Trade name: smart Kältespray Orange

	(Contd. of page
Solvent content:	
Organic solvents:	99.5%
VOC (EC)	100 %
Solids content:	0.0 %
Change in condition	
Evaporation rate	Not applicable.
Information with regard to physical hazard cla	ISSES
Explosives	Void
	Void
Flammable gases	Void
	Void
Aerosols	Extremely flammable aerosol. Pressurised container
	May burst if heated.
	Void
Oxidising gases	Void
	Void
Gases under pressure	Void
	Void
Flammable liquids	Void
1 ummubie ilquius	Void
Flammable solids	Void
1 ummuble soluis	Void
Self-reactive substances and mixtures	Void
Seij-reactive substances and mixtures	Void
Pyrophoric liquids	Void
r yropnoric uquus	Void
Dunanh ania salida	Void Void
Pyrophoric solids	
Call handing an had an and minter	Void Void
Self-heating substances and mixtures	Void Void
Substances and mintures which with a	Void
Substances and mixtures, which emit flammab in contact with water	ne gases Void
	Void Void
Ovidising liquids	Void Void
Oxidising liquids	Voia Void
Quidicing colide	
Oxidising solids	Void Void
One state in the state of the s	Void Void
Organic peroxides	Void
	Void
Corrosive to metals	Void
	Void
Desensitised explosives	Void
	Void

### \*

# SECTION 10: Stability and reactivity

• 10.1 Reactivity No further relevant information available.

· 10.2 Chemical stability

• Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· 10.3 Possibility of hazardous reactions No dangerous reactions known.

• 10.4 Conditions to avoid No further relevant information available.

• 10.5 Incompatible materials: No further relevant information available.

(Contd. on page 6)

Printing date 22.11.2023

*Version number 5 (replaces version 4)* 

Revision: 22.11.2023

(Contd. of page 5)

GB

Trade name: smart Kältespray Orange

· 10.6 Hazardous decomposition products: No dangerous decomposition products known.

## **SECTION 11: Toxicological information**

• 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 • Acute toxicity Based on available data, the classification criteria are not met.

## · LD/LC50 values relevant for classification:

64-17-5 ethanol		
Oral	LD50	>2,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>2,000 mg/kg (rat) >2,000 mg/kg (rabbit) >20 mg/l (rat)

8028-48-6 Orange juice oil

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)

• Skin corrosion/irritation Based on available data, the classification criteria are not met.

• Serious eye damage/irritation Based on available data, the classification criteria are not met.

• Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

• Germ cell mutagenicity Based on available data, the classification criteria are not met.

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

• *Reproductive toxicity Based on available data, the classification criteria are not met.* 

• STOT-single exposure Based on available data, the classification criteria are not met.

 $\cdot$  **STOT-repeated exposure** Based on available data, the classification criteria are not met.

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

• Additional toxicological information:

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

• 11.2 Information on other hazards

• *Endocrine disrupting properties* None of the ingredients is listed.

## **SECTION 12: Ecological information**

Aquatic t	oxicity:
74-98-6 р	ropane
EC50	7.71 mg/l(A)
LC50/96h	27.98 mg/l (fish)
106-97-8	butane, pure
EC50	7.71 mg/l(A)
LC50/96h	27.98 mg/l (fish)
64-17-5 e	thanol
EC50	>10,000 mg/kg (daphnia)
EC50	275 mg/l (A)
	>10,000 mg/l (daphnia)
LC50/96h	15,300 mg/l (fish)
LC50/48h	5,012 mg/l (daphnia)

Printing date 22.11.2023

*Version number 5 (replaces version 4)* 

Revision: 22.11.2023

(Contd. of page 6)

#### Trade name: smart Kältespray Orange

#### 8028-48-6 Orange juice oil

0.67 mg/l (daphnia) *EC50* 

LC50/96h 0.7 mg/l (fish)

- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Endocrine disrupting properties
- The product does not contain substances with endocrine disrupting properties.
- · 12.7 Other adverse effects
- Additional ecological information:
- · General notes: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

## **SECTION 13: Disposal considerations**

· 13.1 Waste treatment methods

· Recommendation

\*

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

• Uncleaned packaging:

• *Recommendation: Disposal must be made according to official regulations.* 

14.1 UN number or ID number		
ADR, IMDG, IATA	UN1950	
14.2 UN proper shipping name		
ADR	1950 AEROSOLS	
IMDG	AEROSOLS	
IATA	AEROSOLS, flammable	
14.3 Transport hazard class(es)		
ADR		
Class	2.1 5F Gases.	
Label	2.1 SF Gases. 2.1	
	2.1	
IMDG, IATA		
Class	2.1 Gases.	
Ciuss		

Printing date 22.11.2023

*Version number 5 (replaces version 4)* 

Trade name: smart Kältespray Orange

		(Contd. of page 7)
· 14.4 Packing group · ADR, IMDG, IATA	Void	
· 14.5 Environmental hazards: · Marine pollutant:	No	
· 14.6 Special precautions for user · Hazard identification number (Kemler code): · EMS Number:	- F-D,S-U	
· 14.7 Maritime transport in bulk according to IM instruments	<b>10</b> Not applicable.	
Transport/Additional information:		
ADR Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity	
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E0 Not permitted as Excepted Quantity	

## **SECTION 15: Regulatory information**

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Labelling according to Regulation (EC) No 1272/2008 GHS label elements
- The product is classified and labelled according to the GB CLP regulation.
- · Hazard pictograms



### · Signal word Danger

- · 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.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

## · Directive 2012/18/EU

- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category P3a FLAMMABLE AEROSOLS
- $\cdot$  Qualifying quantity (tonnes) for the application of lower-tier requirements 150 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Printing date 22.11.2023

Version number 5 (replaces version 4)

Revision: 22.11.2023

# Trade name: smart Kältespray Orange

(Contd. of page 8)

<b>SECTION 16: Other inf</b>	
	n our present knowledge. However, this shall not constitute a guarantee for a shall not establish a legally valid contractual relationship.
Relevant phrases	
H220 Extremely flammable ga	
H225 Highly flammable liquid	l and vapour.
H226 Flammable liquid and v	
H280 Contains gas under pres	
H304 May be fatal if swallowe	
H315 Causes skin irritation.	za una emers un ways.
	1
H317 May cause an allergic s	
H411 Toxic to aquatic life with	h long lasting effects.
Department issuing SDS: Abi	teilung Produktsicherheit
Contact: Hr. Dr. Metz	
Abbreviations and acronyms:	
RID: Règlement international conc	ernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning t
International Transport of Dangerou	is Goods by Rail)
	lations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation C	
	he "International Civil Aviation Organisation" (ICAO)
	ernational des marchandises dangereuses par route (European Agreement Concerning the Internation
Carriage of Dangerous Goods by Ro	
IMDG: International Maritime Code	
IATA: International Air Transport As	
	of Classification and Labelling of Chemicals Sting Commercial Chemical Substances
ELINCS: European List of Notified C	
	vision of the American Chemical Society)
VOC: Volatile Organic Compounds (	
LC50: Lethal concentration, 50 perce	
LD50: Lethal dose, 50 percent	
PBT: Persistent, Bioaccumulative and	d Toxic
vPvB: very Persistent and very Bioac	
Flam. Gas 1: Flammable gases - Can	tegory 1
Aerosol 1: Aerosols – Category 1	
: Aerosols – Category 3	
Press. Gas (Comp.): Gases under pre	
Flam. Liq. 2: Flammable liquids – Co	
Flam. Liq. 3: Flammable liquids – Co	
Skin Irrit. 2: Skin corrosion/irritation	
Skin Sens. 1: Skin sensitisation – Cat Asp. Tox. 1: Aspiration hazard – Cat	egory 1
	egory 1 2 aquatic environment - long-term aquatic hazard – Category 2
Aquatic Chronic 2. Hazardous to the	

\*