

Printing date 25.04.2014 Version number 1 Revision: 25.04.2014

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

· 1.1 Product identifier

· Trade name: BlueSpray

• 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

Spray rich in contrast for intra-oral optic scans, excellent scanning

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Dreve Dentamid GmbH Max-Planck-Straße 31 59423 Unna / Germany Tel.: ++49 2303 /8807-0

Tel.: ++49 2303 /8807-0 Fax.: ++49 2303 / 8807-55

· Further information obtainable from:

Department Research & Development

Fax.: ++49 2303 / 8807-562

Email: sicherheitsdatenblatt@dreve.de
• 1.4 Emergency telephone number:

Tel.: ++ 49 211 / 797-3350 Plant Fire Department Henkel

#### 2 Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

The product is not classified according to the CLP regulation.

- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
- · Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurized container.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Additional information:

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

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

#### 3 Composition/information on ingredients

· 3.2 Chemical characterization: Mixtures

· Description: Not flammable gas propellant

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2.5-10%

· Dangerous components:

CAS: 64-17-5 ethanol EINECS: 200-578-6

F R11

Flam. Liq. 2, H225

· Additional information: For the wording of the listed risk phrases refer to section 16.

#### 4 First aid measures

- · 4.1 Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · 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 Treat symptomatically

### 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.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 5.2 Special hazards arising from the substance or mixture Hydrogen fluoride (HF)
- · 5.3 Advice for firefighters
- Protective equipment: Wear self-contained respiratory protective device.

#### 6 Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Wear protective clothing.

Avoid contact with eyes.

· 6.2 Environmental precautions:

Dispose according to local regulations.

Do not allow to enter sewers/ surface or ground water.

· 6.3 Methods and material for containment and cleaning up:

Absorb liquid components with liquid-binding material.

· 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.

### 7 Handling and storage

· 7.1 Precautions for safe handling

Use only in well ventilated areas.

Keep away from heat and direct sunlight.

When using do not eat, drink or smoke.

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· Information about fire - and explosion protection:

Do not spray onto a naked flame or any incandescent material.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Protect from heat and direct sunlight.

Store at max. 50 °C.

Keep at a well ventilated place.

Observe official regulations on storing packagings with pressurized containers.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Store in a cool place.
- · Storage class: LGK 2B
- · 7.3 Specific end use(s) No further relevant information available.

### 8 Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

64-17-5 ethanol

WEL Long-term value: 1920 mg/m³, 1000 ppm

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- Personal protective equipment:
- · General protective and hygienic measures: Do not eat, drink, smoke or sniff while working.
- · Respiratory protection: Not required.
- · Protection of hands: Not required.
- · Material of gloves Not applicable.
- · Penetration time of glove material Not applicable.
- · Eye protection: Not required.
- · Body protection: Protective work clothing

#### 9 Physical and chemical properties

<ul> <li>9.1 Information on basic pl</li> </ul>	vsical and chemica	properties
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- · General Information
- · Appearance:

Form: Compressed liquefied gas

Colour: Blue

Odour: Alcohol-like
Odour threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: Undetermined.

**Boiling point/Boiling range:** Not applicable, as aerosol.

· Flash point: Not applicable, as aerosol.

· Flammability (solid, gaseous): Not applicable.

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· Ignition temperature:	425 °C
· Decomposition temperature:	Not determined.
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	3.5 Vol %
Upper:	15.0 Vol %
· Oxidizing properties	Not determined
· Vapour pressure at 20 °C:	59 hPa
· Density at 20 °C:	1.35 g/cm <sup>3</sup>
Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/wa	ater): Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	8.5 %
Solids content:	5.0 %
· 9.2 Other information	No further relevant information available.

# 10 Stability and reactivity

- 10.1 Reactivity No dangerous reactions if used according to specifications.
- 10.2 Chemical stability Stable if used according to specifications.
- · Thermal decomposition / conditions to be avoided: Protect from heat and direct sunlight.
- 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.
- · 10.6 Hazardous decomposition products: Hydrogen fluoride

# 11 Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Cooling effect
- · on the eye: Irritating effect possible
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

Vapours have narcotic effect.

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The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

# 12 Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 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.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- 12.5 Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

### 13 Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation Disposal must be made according to official regulations.
- · Waste disposal key: 160504
- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

# 14 Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	UN1950
<ul> <li>14.2 UN proper shipping name</li> <li>ADR</li> </ul>	1950 DRUCKGASPACKUNGEN
IMDO	4 ED0001 0

IMDGIATAAEROSOLS, non-flammable

- · 14.3 Transport hazard class(es)
- · ADR



· Class 2 5A Gases.

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· Label	2.2	
· IMDG		
· Class · Label	2 Gases. 2, see SP63	
·IATA		
· Class	2.2	
· Label	2.2	
· 14.4 Packing group · ADR, IMDG, IATA	Void	
· 14.5 Environmental hazards: · Marine pollutant: · Special marking (IATA):	No A98 A145 A167 A802	
· 14.6 Special precautions for user	Warning: Gases.	
· Danger code (Kemler): · EMS Number:	- F-D,S-U	
<ul> <li>14.7 Transport in bulk according to Al of MARPOL73/78 and the IBC Code</li> </ul>	nnex II Not applicable.	
· Transport/Additional information:		
· ADR · Limited quantities (LQ) · Transport category · Tunnel restriction code	1L 3 E	
· UN "Model Regulation":	UN1950, AEROSOLS, 2.2	

# 15 Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · National regulations:
- · Technical instructions (air):

Class	Share in %
NK	2,5-10

- · Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.



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#### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H225 Highly flammable liquid and vapour.

R11 Highly flammable.

- · Department issuing MSDS: Department Research & Development
- · Contact: Dr. Thomas Veit, Lothar Sutor
- · Abbreviations and acronyms:

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

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

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 (division of the American Chemical Society)

- GB