

According to 1907/2006/EG,
Article 31

Date of issue: 13.06.2014

Printing date: 13.06.2014

HinriScan-Spray Basic







1. Identification of the substance / Preparation and Company:

Identification of the substance or preparation:

Commercial product name: HinriScan-Spray Basic – Auxiliary for dental technology

Company / Manufacturer: ERNST HINRICHS GmbH
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2. Composition / Information on Ingredients:

2.1	Chemical characterization:	Mixture.		
	Description:	Mixture of substances listed below with non-hazardous additions.		
2.2	Dangerous components:			
	CAS: 106-97-8 EINECS: 203-448-7	butane	 F+, R 12  Flam. Gas 1, H220; Press. Gas, H280	50-100%
		propane	 F+, R 12  Flam. Gas 1, H220; Press. Gas, H280	25-50%
	CAS: 64-17-5 EINECS: 200-578-6	ethanol	 F R11  Flam. Liq. 2, H225	2.5-10%
2.3	Additional information: For the wording of the listed risk phrases refer to section 16.			

3. Hazards Identification:

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



GHS02 flame

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

3.2 Classification according to Directive 67/548/EEC or Directive 1999/45/EC



F+ Extremely flammable

R 12 Extremely flammable.

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C.

Do not pierce or burn, even after use.

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

3.4 Label elements:
Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.

3.5 Hazard pictograms:



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3.6 Signal word: Danger.

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3.7 Hazard statements:

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P251 Do not pierce or burn, even after use.

P211 Do not spray on an open flame or other ignition source.

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

3.8 Additional information:

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

3.9 Other hazards:

Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

4. First aid measures:

4.1 After inhalation: Supply fresh air; consult doctor in case of complaints.

4.2 After skin contact: Generally the product does not irritate the skin.

4.3 After eye contact: Rinse open eye for several minutes under running water.

4.4 After swallowing: If symptoms persist consult doctor.

5. Fire Fighting measures:

5.1 Suitable extinguishing agents: CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 For safety reasons unsuitable extinguishing agents: Water with full jet.

5.3 Special hazards arising from the substance or mixture: No further relevant information available.

5.4 Protective equipment: No special measures required.

6. Accidental release measures:

6.1 Person-related safety precautions: Wear protective equipment. Keep unprotected persons away.

6.2 Measures for environmental protection: Do not allow to enter sewers / surface or ground water.

6.3 Measures for cleaning / collecting: Ensure adequate ventilation.

7. Handling and Storage:

7.1 Handling:

Information for safe handling: Open and handle receptacle with care.
Keep away from heat and direct sunlight.
Use only in well ventilated areas.

Information about fire- and explosion protection: Keep ignition sources away – Do not smoke.

Protect against electrostatic charges.

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

7.2 Storage:

Requirements to be met by storerooms and receptacles: Store in a cool location.

Observe official regulations on storing packagings with pressurized containers.

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

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Further information about storage conditions:

Keep container tightly sealed.
Do not seal receptacle gas tight.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.

8. Exposure controls / Personal protection:

Additional information about design of technical facilities: No further data; see item 7.

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

106-97-8 butane	
WEL	Short-term value: 1810 mg/m ³ , 750 ppm Long-term value: 1450 mg/m ³ , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
64-17-5 ethanol	
WEL	Long-term value: 1920 mg/m ³ , 1000 ppm

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

8.2 Personal protective equipment:
General protective and hygienic measures:

Wash hands before breaks and at the end of work.

Respiratory protection:
Protection of hands:

Not required.

The glove material has to be impermeable and resistant to the product / the substance / the preparation. Due to missing tests no recommendation to the glove material can be given for the product / the preparation / the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves:

The selection of suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

As protection from splashes gloves made of the following materials are suitable:

Nitrile rubber, NBR.
Butyl rubber, BR
Natural rubber, NR

Eye protection:



Tightly sealed goggles.

9. Physical and chemical properties:

9.1 General information:

Form: Compressed liquefied gas
Colour: Colourless
Odour: Light
Odour threshold: Not determined.
pH-value: Not applicable.

9.2 Change in condition:

Melting point / Melting range: Undetermined.
Boiling point / Boiling range: -48 °C
Flash point: -80 °C
Flammability (solid, gaseous): Not applicable.
Ignition temperature: 365 °C



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Self-igniting:	Product is not self-igniting.
Danger of explosion:	Product is not explosive. However, formations of explosive air/vapour mixtures are possible.
Explosion limits:	
Lower:	1.5 Vol %
Upper:	10.9 Vol %
Vapour pressure at 20°C:	8300 hPa
Density at 20°C:	0.64 g/cm ³
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/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	98.0 %
VOC (EC)	97 %
Solids content:	2 %

10. Stability and Reactivity:

10.1 Thermal decomposition / conditions to be avoided:	No decomposition if used according to specifications.
10.2 Dangerous reactions:	No dangerous reactions known.
10.3 Conditions to avoid	No further relevant information available.
10.4 Incompatible materials:	No further relevant information available.
10.5 Dangerous decomposition products:	No dangerous decomposition products known.

11. Toxicological Information:

11.1 Information on toxicological effects:

Acute toxicity:

LD/LC50 values relevant for classification:

106-97-8 butane

Inhalative	LC50/4 h	658 mg/l (rat)
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64-17-5 ethanol

Oral	LD50	7060 mg/kg (rat)
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Inhalative	LC50/4 h	20000 mg/l (rat)
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Primary irritant effect:

On the skin: No irritant effect.

On the eye: No irritating effect.

Sensitization: No sensitizing effects known.

12. Ecological Information:

12.1 Aquatic toxicity:	No further relevant information available.
12.2 Persistence and degradability	The single components are biodegradable
Behaviour in environmental systems:	
Bioaccumulative potential	No further relevant information available.
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.

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Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

13. Disposal Considerations:



13.1 Product - Recommendation: Must not be disposed together with the household garbage. Do not allow product to reach sewage system.

13.2 European waste catalogue:

16 00 00	WASTES NOT OTHERWISE SPECIFIED IN THE LIST.
16 05 00	Gases in pressure containers and discarded chemicals.
16 05 04	Gases in pressure containers (including halons) containing dangerous substances.

13.3 Uncleaned packaging – Recommendation: Disposal must be made according to official regulations.

14. Transport Information:

UN-Number ADR, IMDG, IATA	UN1950
UN proper shipping name ADR IMDG IATA	1950 AEROSOLS AEROSOLS AEROSOLS, flammable
Transport hazard class(es) ADR	
Class: Label:	2 5F Gases 2.1
IMDG, IATA	
Class: Label:	2.1 2.1
Packaging group: ADR, IMDG, IATA	Void.
Environmental hazards: Marine pollutant:	No.
Special precautions for user Danger code (Kemler): EMS Number:	Warning: Gases. - F-D,S-U
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information: ADR	
Exempted quantities (EQ): Limited quantities (LQ) Transport category Tunnel restriction code	E0 1L 2 D
UN "Model Regulation":	UN1950, AEROSOLS, 2.1

15. Regulatory Information:

15.1 Labelling according to Regulation (EC) No 1272/2008: The product is classified and labelled according to the CLP regulation.

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15.2 Hazard pictograms:



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15.3 Signal word: Danger.

15.4 Hazard statements:

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15.5 Precautionary statements:

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P251 | Do not pierce or burn, even after use.

P211 | Do not spray on an open flame or other ignition source.

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

15.6 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. Further 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.

16.1 Relevant phrases:

H220 | Extremely flammable gas.

H225 | Highly flammable liquid and vapour.

H280 | Contains gas under pressure; may explode if heated.

R11 | Highly flammable.

R12 | Extremely flammable.

16.2 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.

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

ICAO: International Civil Aviation Organization.

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

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.