

According to 1907/2006/EG,

Article 31

Date of issue: 13.06.2014 Printing date: 21.09.2015

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 Dental GmbH

Borsigstr. 1 D - 38644 Goslar 0 53 21 / 5 06 24 0 53 21 / 5 08 81

info@hinrichs-dental.de / www.hinrichs-dental.de

2. Hazards Identification:

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



2.2

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.

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

2.4 Label elements:

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

2.5 Hazard pictograms:



GHS02

2.6 Signal word: Danger.

2.7 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.

2.8 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



According to 1907/2006/EG,

Article 31

Date of issue: 13.06.2014 Printing date: 21.09.2015

HinriScan-Spray Basic

2.9 Other hazards:

Results of PBT and vPvB assessment:

PBT: Not applicable. vPvB: Not applicable.

Composition/information on ingredients

Chemical characterization: Mixtures

3.2 Description: Mixture of substances listed below with non-hazardous additions.

Dangerous components

CAS: 106-97-8 50-100% Butane EINECS: 203-448-7

F+ R12

Flam. Gas 1, H220; Press. Gas, H280 CAS: 74-98-6 Propane 25-50%

EINECS: 200-827-9

F+ R12

Flam. Gas 1, H220; Press. Gas, H280

CAS: 64-17-5 Ethanol 2.5-10% EINECS: 200-578-6

F R11

Flam. Lig. 2, H225

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

First aid measures:

Description of first aid measures 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 open eye for several minutes under running water.

After swallowing: If symptoms persist consult doctor.

4.2 Information for doctor:

> Most important symptoms and effects, No further relevant information available.

both acute and delayed Indication of any immediate medical No further relevant information available.

attention and special treatment needed

Firefighting measures:

Extinguishing media Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or

alcohol resistant foam.

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

5.3 Special hazards arising from the No further relevant information available.

substance or mixture:



According to 1907/2006/EG,

Article 31

Date of issue: 13.06.2014 Printing date: 21.09.2015

HinriScan-Spray Basic

5.4 Advice for firefighters Protective equipment:

No special measures required.

6. Accidental release measures:

6.1 Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

6.3 Methods and material for containment

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

and cleaning up:
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 Handling:

Precautions for safe handling: Keep away from heat and direct sunlight.

Use only in well ventilated areas.

Open and handle receptacle with care.

Information about fire- and explosion

protection:

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

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.

7.2 Conditions for safe storage, including any incompatibilities

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.

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.

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:

106-97-8 butane

WEL Short-term value: 1810 mg/m³, 750 ppm

Long-term value: 1450 mg/m³, 600 ppm Carc (if more than 0.1% of buta-1.3-diene)

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:



According to 1907/2006/EG,

Article 31

Date of issue: 13.06.2014 Printing date: 21.09.2015

HinriScan-Spray Basic

Personal protective equipment:

General protective and hygienic

measures:

Respiratory protection: Not required.

Use suitable respiratory protective device in case of insufficient

Wash hands before breaks and at the end of work.

ventilation.

Protection of hands:

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:

Eye protection:

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

Tightly sealed goggles.

9. Physical and chemical properties:

9.1 Information on basic physical and chemical properties

General information:

Appearance:

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):

Ignition temperature:

Not applicable.
365 °C

Decomposition temperature: Not determined.

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:

Relative density:

Vapour density:

Vaporation rate:

0.64 g/cm³

Not determined.

Not applicable.

Solubility in / Miscibility with water: Not miscible or difficult to mix.



According to 1907/2006/EG,

Article 31

Date of issue: 13.06.2014 Printing date: 21.09.2015

HinriScan-Spray Basic

Partition coefficient (n-octanol/water): Not determined.

Viscosity:

Dynamic: Not determined. Kinematic: Not determined.

Solvent content:

98.0 % Organic solvents: VOC (EC) 97 % Solids content: 2 %

9.3 Other information No further relevant information available.

Stability and Reactivity:

10.1 Reactivity

10.2 Chemical stability

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

10.4 Possibility of hazardous reactions No dangerous reactions known.

10.5 Incompatible materials: No further relevant information available. 10.6 Hazardous decomposition products: No dangerous decomposition products known.

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)			
64-17-5 ethanol					
Oral	LD50	7060 mg/kg (rat)			
Inhalative	LC50/4 h	20000 mg/l (rat)			

Primary irritant effect:

On the skin: No irritant effect. On the eve: No irritating effect.

Sensitization: No sensitizing effects known.

Ecological Information:

12.1 Toxicity

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. No further relevant information available.

Mobility in soil

Additional ecological information:

Water hazard class 1 (German Regulation) (Self-assessment): General notes:

slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage

system.

12.3 Results of PBT and vPvB assessment:

PBT: Not applicable. Not applicable. vPvB:

No further relevant information available. 12.4 Other adverse effects

Disposal Considerations:

13.1 Waste treatment methods

Recommendation Must not be disposed together with household garbage. Do not

allow product to reach sewage system.



According to 1907/2006/EG,

Article 31

Date of issue: 13.06.2014 Printing date: 21.09.2015

HinriScan-Spray Basic

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	1950 AEROSOLS			
IMDG	AEROSOLS			
IATA	AEROSOLS, flammable			
Transport hazard class(es)				
ADR				
3				
Class:	2 5F Gases			
Label:	2.1			
IMDG, IATA				
3				
Class:	2.1			
Label:	2.1			
Packaging group:				
ADR, IMDG, IATA	Void.			
Environmental hazards:				
Marine pollutant:	No.			
Special precautions for user	Warning: Gases.			
Danger code (Kemler):	-			
EMS Number:	F-D,S-U			
Transport in bulk according to Annex II				
of MARPOL73/78 and the IBC Code	Not applicable.			
Transport/Additional information:				
ADR				
Excepted quantities (EQ):	E0			
Limited quantities (LQ)	1L			
Transport category	2			
Tunnel restriction code	D			
UN "Model Regulation":	UN1950, AEROSOLS, 2.1			
	,,			

Regulatory Information:

Safety, health and environmental regulations/legislation specific for the substance or mixture Labelling according to Regulation (EC) The product is classified and labelled according to the CLP No 1272/2008 regulation.

15.2 Hazard pictograms:



15.3 Signal word: Danger.



According to 1907/2006/EG,

Article 31

Date of issue: 13.06.2014 Printing date: 21.09.2015

HinriScan-Spray Basic

15.4 Hazard statements:

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

15.5 Precautionary statements:

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

smoking.

Do not pierce or burn, even after use. P251

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

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. A Chemical Safety Assessment has not been carried out.

15.6 Chemical safety assessment:

Further Information: 16.

> 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:

IMDG:

Extremely flammable gas. H220

H225 Highly flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

Highly flammable. R11 Extremely flammable. R12

16.2 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)

ATA-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)

International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

European Inventory of Existing Commercial Chemical Substances **EINECS:**

European List of Notified Chemical Substances **ELINCS:**

Chemical Abstracts Service (division of the American Chemical Society) CAS:

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

Lethal dose, 50 percent LD50:

^{*} Data compared to the previous version altered.