

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/27/2010

Reviewed on 01/27/2010

1 Identification of substance

· Product details

· **Trade name:** ZENOTEC Scan Spray

· **Application of the substance / the preparation** Auxiliary for manufacture of dental prothesis

· **Manufacturer/Supplier:**

Wieland Dental + Technik GmbH & Co.KG

Schwenninger Str. 13

75179 Pforzheim

Telefon + 49 (07231)-37050, Telefax + 49 (07231)-357959

· **Information department:**

Abteilung Umweltschutz

Marcus.Mueller@wieland-dental.de

· **Emergency information:**

+49 (07231)-37050

(Be kindly advised that this number can only be contacted at usual office hours.)

2 Composition/Data on components

· **Chemical characterization**

· **Description:** Active substance with propellant

· **Dangerous components:**

106-97-8	butane	50-100%
67-63-0	propan-2-ol	10-25%
74-98-6	propane	10-25%

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

3 Hazards identification

· **Hazard description:**



Irritant
Extremely flammable

· **Information pertaining to particular dangers for man 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.

Warning! Pressurized container.

Has a narcotizing effect.

Extremely flammable.

Irritating to eyes.

Vapours may cause drowsiness and dizziness

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.

Keep out of the reach of children.

· **Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· **NFPA ratings (scale 0 - 4)**



Health = 1
Fire = 0
Reactivity = 3

(Contd. on page 2)

USA

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/27/2010

Reviewed on 01/27/2010

Trade name: ZENOTEC Scan Spray

(Contd. of page 1)

· WHMIS-ratings (scale 0 - 4)

HEALTH	1	Health = 1
FIRE	0	Fire = 0
REACTIVITY	3	Reactivity = 3

4 First aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Rinse with warm water.
- **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.

5 Fire fighting measures

- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:**
Ensure adequate ventilation
Keep away from ignition sources
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Allow to evaporate.
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Keep away from heat and direct sunlight.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about protection against explosions and fires:**
Do not spray on a naked flame or any incandescent material.
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.
Keep ignition sources away - Do not smoke.
- **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 storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Protect from frost.
Protect from heat and direct sunlight.

USA

(Contd. on page 3)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/27/2010

Reviewed on 01/27/2010

Trade name: ZENOTEC Scan Spray

(Contd. of page 2)

8 Exposure controls and personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Components with limit values that require monitoring at the workplace:**

106-97-8 butane

REL	1900 mg/m ³ , 800 ppm
TLV	Varies mg/m ³ , 1000 ppm

67-63-0 propan-2-ol

PEL	980 mg/m ³ , 400 ppm
REL	Short-term value: 1225 mg/m ³ , 500 ppm Long-term value: 980 mg/m ³ , 400 ppm
TLV	Short-term value: 984 mg/m ³ , 400 ppm Long-term value: 492 mg/m ³ , 200 ppm
BEI	

74-98-6 propane

PEL	1800 mg/m ³ , 1000 ppm
REL	1800 mg/m ³ , 1000 ppm
TLV	Varies mg/m ³ , 1000 ppm

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

· **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.

· **Protection of hands:** Not required.

· **Material of gloves -**

· **Penetration time of glove material** Void

· **Eye protection:** Safety glasses

· **Body protection:** Void

9 Physical and chemical properties

· **General Information**

Form:	Aerosol
Color:	White
Odor:	Alcohol-like

· **Change in condition**

Melting point/Melting range: Undetermined.

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

· **Flash point:** Not applicable, as aerosol.

· **Ignition temperature:** 365°C (689°F)

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** In use, may form flammable/explosive vapour-air mixture.

· **Explosion limits:**

Lower:	1.5 Vol %
Upper:	12.0 Vol %

· **Vapor pressure at 20°C (68°F):** 2900 hPa (2175 mm Hg)

· **Density at 20°C (68°F):** 0.72 g/cm³

(Contd. on page 4)

USA

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/27/2010

Reviewed on 01/27/2010

Trade name: ZENOTEC Scan Spray

(Contd. of page 3)

- | | |
|---|-----------------|
| · Solubility in / Miscibility with Water: | Partly soluble. |
| · pH-value: | Not applicable |
| · Solvent content: | |
| Organic solvents: | 100.0 % |

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

67-63-0 propan-2-ol

Oral	LD50	4570 mg/kg (Ratte)
Dermal	LD50	13400 mg/kg (rab)
Inhalative	LC50/4 h	30 mg/l (Ratte)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

12 Ecological information

- **Information about elimination (persistence and degradability):**
- **Other information:** The product is easily biodegradable.
- **General notes:**
Generally not hazardous for water
Water hazard class 1 (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.

13 Disposal considerations

- **Product:**
- **Recommendation:** Must be specially treated adhering to official regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

USA

(Contd. on page 5)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/27/2010

Reviewed on 01/27/2010

Trade name: ZENOTEC Scan Spray

(Contd. of page 4)

14 Transport information

· DOT regulations:



- Hazard class: 2.1
- Identification number: UN1950
- Packing group: -
- Proper shipping name (technical name): AEROSOLS, flammable
- Label: 2.1

· Land transport ADR/RID (cross-border):



- ADR/RID class: 2 5F Gases
- Danger code (Kemler): -
- UN-Number: 1950
- Packaging group: -
- Description of goods: 1950 AEROSOLS

· Maritime transport IMDG:



- IMDG Class: 2.1
- UN Number: 1950
- Label: 2.1
- Packaging group: -
- EMS Number: F-D,S-U
- Marine pollutant: No
- Proper shipping name: AEROSOLS

· Air transport ICAO-TI and IATA-DGR:



- ICAO/IATA Class: 2.1
- UN/ID Number: 1950
- Label: 2.1
- Packaging group: -
- Proper shipping name: AEROSOLS, flammable

15 Regulations

· Sara

· Section 355 (extremely hazardous substances):

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

67-63-0 | propan-2-ol

(Contd. on page 6)

USA

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/27/2010

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Trade name: ZENOTEC Scan Spray

(Contd. of page 5)

· TSCA (Toxic Substances Control Act):
All ingredients are listed.

· Proposition 65

· Chemicals known to cause cancer:
None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:
None of the ingredients is listed.

· Carcinogenicity categories

· EPA (Environmental Protection Agency)
None of the ingredients is listed.

· IARC (International Agency for Research on Cancer)	
67-63-0 propan-2-ol	3

· NTP (National Toxicology Program)
None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)	
67-63-0 propan-2-ol	A4

· MAK (German Maximum Workplace Concentration)
None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.

· Product related hazard informations:
The product has been classified and marked in accordance with directives on hazardous materials.

· Hazard symbols:
Irritant
Extremely flammable

· Risk phrases:
Extremely flammable.
Irritating to eyes.
Vapours may cause drowsiness and dizziness

· Safety phrases:
Keep away from sources of ignition - No smoking.
Do not breathe gas/fumes/vapour/spray.
Avoid contact with skin and eyes.
Use only in well-ventilated areas.
This material and its container must be disposed of as hazardous waste.

· Special labeling of certain preparations:
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.
Keep out of the reach of children.

(Contd. on page 7)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/27/2010

Reviewed on 01/27/2010

Trade name: ZENOTEC Scan Spray

(Contd. of page 6)

- **National regulations:**
- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

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.

- **Department issuing MSDS:** Abteilung Umweltschutz
- **Contact:** Herr Marcus Müller
- *** Data compared to the previous version altered.**

USA