

Material Safety Data Sheet

According to 91/155 EEC

Printing date 23.01.2007

Reviewed on 23.01.2007

* 1 Identification of substance

. **Product details**

. **Trade name** T1 Spray

. **Application of the substance / the preparation** Attachment for dental instruments

. **Manufacturer/Supplier:** Supplier: SIRONA Dental System GmbH
Fabrikstraße 31
D-64625 Bensheim

<http://www.sirona.de>

Telefon: +49(0)6251/16-3440

Telefax: +49(0)6251/16-2935

Manufacturer: Graichen Produktions-und Vertriebs-GmbH
Darmstädterstraße 127-129
D-64625 Bensheim

. **Informing department:** Environment protection department

. **Emergency information:** Advice centre for poisoning university Mainz phone +49(0)6131/19240
or poison information: +49(0)700/GIFTINFO

* 2 Composition/Data on components:

. **Chemical characterization**

. **Description:** Active substance with propellant.

Additional information:

Active substance: Synthetic hydrogencarbon-oil, esteroil 67,5 - 25 %
no dangerous components

. **Dangerous components:**

EINECS: 265-151-9 Spezialbenzin 10-25%
Xn, Xi, F, N; R 11-38-51/53-65-67

CAS: 106-97-8 butane (containing ≤ 0,1 % butadiene (106-99-0)) 10-25%
EINECS: 203-448-7 F+; R 12

CAS: 74-98-6 propane 10-25%
EINECS: 200-827-9 F+; R 12

CAS: 75-28-5 isobutane (containing ≤ 0,1 % butadiene (106-99-0)) 2.5-10%
EINECS: 200-857-2 F+; R 12

* 3 Hazards identification

. **Hazard designation:** Xi Irritant
F+ 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.

R 12 Extremely flammable.

R 38 Irritating to skin.

R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 67 Vapours may cause drowsiness and dizziness.

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.

Buildup of explosive mixtures possible without sufficient ventilation.

Keep out of the reach of children

. **Classification system**

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

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- . 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.
Without adequate ventilation formation of explosive mixtures may be possible.*

* 4 First aid measures

- . General information:** *Personal protection for the First Aider.*
- . After inhalation:** *In case of unconsciousness bring patient into stable side position for transport.
Supply fresh air; consult doctor in case of symptoms.*
- . After skin contact:** *Instantly wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.*
- . After eye contact:** *Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.*
- . After swallowing:** *Seek immediate medical advice.
A person vomiting while lying on their back should be turned onto their side.*

* 5 Fire fighting measures

- . Suitable extinguishing agents:** *CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.*
- . For safety reasons unsuitable extinguishing agents** *Water with a full water jet.*
- . Special hazards caused by the material, its products of combustion or flue gases:** *Can be released in case of fire
Carbon monoxide (CO)
Carbondioxid (CO₂)*
- . Protective equipment:** *Wear self-contained breathing apparatus.*
- . Additional information** *Cool endangered containers with water spray jet.*

* 6 Accidental release measures

- . Person-related safety precautions:** *Keep away from ignition sources*
- . Measures for environmental protection:** *Do not allow product to reach sewage system or water bodies.
Inform respective authorities in case product reaches water or sewage system.*
- . Measures for cleaning/collecting:** *Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.*

* 7 Handling and storage

- . Handling**
- . Information for safe handling:** *Open and handle container with care.
No special precautions necessary if used correctly.*
- . Information about protection against explosions and fires:** *Keep away from ignition sources - Do not smoke.
Protect against electrostatic charges.
Beware: Container is pressurized. Keep away from direct sun exposure and temperatures over 50°C. Do not open by force or throw into fire even after use.
Do not spray on flames or red-hot objects.*
- . Storage**
- . Requirements to be met by storerooms and containers:** *Store in cool location.
Observe official regulations on storing packagings with pressurized containers.*
- . Information about storage in one single storage facility:** *Store away from food.*

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Further information about storage conditions:

Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Protect from heat and direct sunlight.

* **8 Exposure controls and personal protection**

Additional information about design of technical systems:

No further data; see item 7.

Components with critical values that require monitoring at the workplace:

EINECS: 265-151-9 Naphhta (petroleum), hydrotreated light
OES 600 mg/m³, 170ml/m³

106-97-8 butane (containing ≤0,1 % butadiene (106-99-0))

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

Long-term value: 1450 mg/m³, 600 ppm

74-98-6 propane

OES Asphyxiant

Additional information:

The lists that were valid during the compilation were used as basis.

Personal protective equipment

General protective and hygienic measures

Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.

Breathing equipment:

Use breathing protection in case of insufficient ventilation.

Protection of hands:

Solvent resistant gloves

Material of gloves

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0,7 mm

Penetration time of glove material

Value for the permeation: Level ≥ 0,7 mm 480 min (8h)EN 374

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

Eye protection:

Tightly sealed safety glasses.

* **9 Physical and chemical properties:**

General Information

Form: Aerosol
Colour: Colourless
Smell: Characteristic

Change in condition

Melting point/Melting range: Not determined
Boiling point/Boiling range: -44°C

Flash point: -97°C

Ignition temperature: 200°C

Self-inflammability: Product is not selfigniting.

Danger of explosion:

Product is not explosive. However, formation of explosive air/steam mixtures is possible.

Critical values for explosion:

Lower: 1.1 Vol %
Upper: 10.9 Vol %

Steam pressure at 20°C: 8300 hPa

Density at 20°C 0.69259 g/cm³

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- . **Solubility in / Miscibility with Water:** Not miscible or difficult to mix

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 composition:** No dangerous decomposition products known

* 11 Toxicological information

- . **Acute toxicity:**
 . **LD/LC50 values that are relevant for classification:**
Spezialbenzin
 Oral LD50 > 2000 mg/kg (rat)
 Dermal LD50 > 2000 mg/kg (rabbit)
 Inhalative LC50/4 h > 20 mg/l (rat)
 . **Primary irritant effect:**
 . **on the skin:** Irritant for skin and mucous membranes.
 . **on the eye:** Irritant effect.
 . **Sensitization:** No sensitizing effect known.
 . **Additional toxicological information:** The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:
 Irritant

* 12 Ecological information:

- . **Ecotoxicological effects:**
 . **Remark:** Harmful to fish
 . **General notes:** 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 bodies or sewage system.
 Harmful to aquatic organisms

* 13 Disposal considerations

- . **Product:**
 . **Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
 . **European waste catalogue**
 14 00 00 WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (except 07 and 08)
 14 06 00 waste organic solvents, refrigerants and foam/aerosol propellants
 14 06 03 other solvents and solvent mixtures
 . **Uncleaned packagings:**
 . **Recommendation:** Disposal must be made according to official regulations.

* 14 Transport information

- . **Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**
 . **ADR/RID-GGVS/E Class:** 2 5F Gases.
 . **Kemler Number:** -
 . **UN-Number:** 1950
 . **Packaging group:** -
 . **Label** 2.1

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. Designation of goods:	1950 AEROSOLS
. Maritime transport IMDG/GGVSea:	
. IMDG/GGVSea Class:	2.1
. UN Number:	1950
. Label	2.1
. Packaging group:	-
. EMS Number:	F-D,S-U
. Marine pollutant:	No
. Correct technical name:	AEROSOLS
. Air transport ICAO-TI and IATA-DGR:	
. ICAO/IATA Class:	2.1
. UN/ID Number:	1950
. Label	2.1
. Packaging group:	-
. Correct technical name:	AEROSOLS, flammable

* 15 Regulatory information

. Designation according to EC guidelines:	The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)
. Code letter and hazard designation of product:	Xi Irritant F+ Extremely flammable
. Risk phrases:	12 Extremely flammable. 38 Irritating to skin. 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. 67 Vapours may cause drowsiness and dizziness.
. Safety phrases:	2 Keep out of the reach of children. 3 Keep in a cool place. 9 Keep container in a well-ventilated place. 23 Do not breathe fumes/aerosol. 29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. 46 If swallowed, seek medical advice immediately and show this container or label. 51 Use only in well-ventilated areas.
. Special designation of certain preparations:	Identification as aerosol under § 6(3) Ordinance on Hazardous Materials (GefStoffV): Keep away from sources of ignition. No smoking. Keep out of the reach of children. Without adequate ventilation formation of explosive mixtures may be possible. 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. Buildup of explosive mixtures possible without sufficient ventilation. Keep out of the reach of children
. National regulations	Class Share in % III 25-50
. Water hazard class:	Water hazard class 1 (Self-assessment): slightly hazardous for water.

16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

. Department issuing data specification sheet:	Environment protection department.
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Contact:

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*** Data compared to the previous
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