

SAFETY DATA SHEETS

This SDS packet was issued with item:

075601497

N/A

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/05/2015

Reviewed on 02/05/2015

1 Identification

Product identifier

- Trade name: **T1 Spray**
- Article number: 5140-0969
- Relevant identified uses of the substance or mixture and uses advised against: No further relevant information available.
- Application of the substance / the mixture: Grinding auxiliary product

Details of the supplier of the safety data sheet

- Manufacturer/Supplier: Supplier::SIRONA Dental Systems 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
- Information department: Environment protection department
- Emergency telephone number: Advice centre for poisoning university Mainz phone +49(0)6131/19240
or poison information:+49(0)700/GIFTINFO

2 Hazard(s) identification

Classification of the substance or mixture



Flame

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



Health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



Skin Irrit. 2 H315 Causes skin irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

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



Xi; Irritant

R38: Irritating to skin.



F+; Extremely flammable

R12: Extremely flammable.
R52/53-67: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Vapours may cause drowsiness and dizziness.

Information concerning particular hazards for human and environment:

The product has to be labeled due to the calculation procedure of international guidelines.
Warning! Pressurized container.
Has a narcotizing effect.
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

Label elements

GHS label elements

Hazard pictograms



GHS02 GHS07 GHS08

Signal word

Danger

Hazard-determining components of labeling:

Kohlenwasserstoffe, C6, Isoalkane, <5% n-Hexan, Naphtha (Erdöl), mit Wasserstoff behandelte leichte
Extremely flammable aerosol. Pressurized container: May burst if heated.
Causes skin irritation.
May cause drowsiness or dizziness.

Hazard statements

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Precautionary statements

May be fatal if swallowed and enters airways.
Harmful to aquatic life with long lasting effects.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Do not spray on an open flame or other ignition source.
Pressurized container: Do not pierce or burn, even after use.
If swallowed: Immediately call a poison center/doctor.
Do NOT induce vomiting.
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Dispose of contents/container in accordance with local/regional/national/international regulations.

NFPA ratings (scale 0 - 4)



Health = 1
Fire = 4
Reactivity = 3

HMIS-ratings (scale 0 - 4)



Health = 1
Fire = 4
Reactivity = 3

Other hazards

Results of PBT and vPvB assessment

PBT:

Not applicable.

vPvB:

Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Synthetische Kohlenwasserstoff-Öl, Esteröl

25-50%

Description:

Synthrtic hydrogencarbon-oil,esteroil
Active substance with propellant

Dangerous components:

	Kohlenwasserstoffe, C6, Isoalkane, <5% n-Hexan,Naphtha (Erdöl), mit Wasserstoff behandelte leichte R67 Xn R65; Xi R38; F R11; N R51/53 Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336; H401	10-25%
106-97-8	butane (containing ≤ 0,1 % butadiene (106-99-0)) F+ R12 Flam. Gas 1, H220; Press. Gas, H280	10-25%
74-98-6	propane F+ R12 Flam. Gas 1, H220; Press. Gas, H280	10-25%
75-28-5	isobutane (containing ≤ 0,1 % butadiene (106-99-0)) F+ R12 Flam. Gas 1, H220; Press. Gas, H280	2.5-10%

Additional information:

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

4 First-aid measures

Description of first aid measures

General information:

Personal protection for the First Aider.

After inhalation:

In case of unconsciousness place patient stably in side position for transportation.
Supply fresh air; consult doctor in case of complaints.

After skin contact:

If skin irritation continues, consult a doctor.
Immediately wash with water and soap and rinse thoroughly.

After eye contact:

Rinse opened eye for several minutes under running water.

After swallowing:

A person vomiting while lying on their back should be turned onto their side.

Information for doctor:

Most important symptoms and effects, both acute and delayed

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
CO2, sand, extinguishing powder. Do not use water.

For safety reasons unsuitable extinguishing agents:

Water
Water with full jet

Special hazards arising from the substance or mixture

In case of fire, the following can be released:
Carbon monoxide (CO)
Carbondioxid (CO2)

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Advice for firefighters

Protective equipment:

Additional information

Wear self-contained respiratory protective device.

Cool endangered receptacles with water spray.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Keep away from ignition sources

Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

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

Handling:

Precautions for safe handling

Open and handle receptacle with care.

Information about protection against explosions and fires:

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 on a naked flame or any incandescent material.

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 storage in one common storage facility:

Store away from foodstuffs.

Further information about storage conditions:

Protect from heat and direct sunlight.

Keep receptacle tightly sealed.

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 systems:

No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

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

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

REL Long-term value: 1900 mg/m³, 800 ppmTLV Short-term value: 2370 mg/m³, 1000 ppm

74-98-6 propane

PEL Long-term value: 1800 mg/m³, 1000 ppmREL Long-term value: 1800 mg/m³, 1000 ppm

TLV refer to Appendix F

75-28-5 isobutane (containing ≤ 0,1 % butadiene (106-99-0))

TLV Short-term value: 2370 mg/m³, 1000 ppm

Additional information:

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

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

Not required.

Breathing equipment:

Solvent resistant gloves

Protection of hands:

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- Protective gloves
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
Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.7 mm
The selection of the 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 can not be calculated in advance and has therefore to be checked prior to the application.
- . Material of gloves
- . Penetration time of glove material
Value for the permeation: Level $\leq 0,7$ mm 480min (8h) EN374
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.
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- . Eye protection:
Tightly sealed goggles

9 Physical and chemical properties

. Information on basic physical and chemical properties

. General Information

. Appearance:

- Form: Aerosol
Color: Colorless
Odor: Characteristic
Odour threshold: Not determined.
pH-value: Not determined.

. Change in condition

- Boiling point/Boiling range: -44 °C (-47 °F)

. Flash point: -97 °C (-143 °F)

. Flammability (solid, gaseous): Not applicable.

. Ignition temperature: 260 °C (500 °F)

. Decomposition temperature: Not determined.

. Auto igniting: Product is not selfigniting.

. Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

. Explosion limits:

- Lower: 1.0 Vol %
Upper: 10.9 Vol %

. Vapor pressure at 20 °C (68 °F): ~400 kPa

. Density at 20 °C (68 °F): 0.695 g/cm³ (5.8 lbs/gal)

. 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.

. Solvent content:

- VOC content: 65.1 %

. Other information: No further relevant information available.

10 Stability and reactivity

. Reactivity

. Chemical stability

. Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

. Possibility of hazardous reactions

No dangerous reactions known.

. Conditions to avoid

No further relevant information available.

. Incompatible materials:

No further relevant information available.

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Hazardous decomposition products: No dangerous decomposition products known.

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11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:

Kohlenwasserstoffe, C6, Isoalkane, <5% n-Hexan, Naphtha (Erdöl), mit Wasserstoff behandelte leichte

Oral	LD50	> 2000 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit)
Inhalative	LC50/4 h	> 20 mg/l (rat)

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

Inhalative	LC50/4 h	658 mg/l (rat)
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Primary irritant effect:

on the skin:

Irritant to skin and mucous membranes.

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

Carcinogenic categories

IARC (International Agency for Research on Cancer)

106-99-0	1,3-butadiene buta-1,3-diene	1
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NTP (National Toxicology Program)

106-99-0	1,3-butadiene buta-1,3-diene	K
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OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

Toxicity

Aquatic toxicity:

No further relevant information available.

Persistence and degradability

No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential

No further relevant information available.

Mobility in soil

No further relevant information available.

Ecotoxicological effects:

Remark:

Harmful to fish

Additional ecological information:

General notes:

Harmful to aquatic organisms
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.

Results of PBT and vPvB assessment

PBT:

Not applicable.

vPvB:

Not applicable.

Other adverse effects

No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation:

Disposal must be made according to official regulations.

14 Transport information

UN-Number

DOT, ADR, IMDG, IATA

UN1950

UN proper shipping name

DOT

Aerosols, flammable

ADR

1950 Aerosols

IMDG

AEROSOLS

IATA

AEROSOLS, flammable

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. Transport hazard class(es)

. DOT



. Class 2.1
. Label 2.1

. ADR



. Class 2 5F Gases
. Label 2.1

. IMDG, IATA



. Class 2.1
. Label 2.1

. Packing group

. DOT, 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) Code: E0
Not permitted as Excepted Quantity

. IMDG

. Limited quantities (LQ) 1L
. Excepted quantities (EQ) Code: E0
Not permitted as Excepted Quantity

. UN "Model Regulation": UN1950, Aerosols, 2.1

15 Regulatory information

. Safety, health and environmental regulations/legislation specific for the substance or mixture

. Sara

. Section 355 (extremely hazardous substances):

None of the ingredients is listed.

. Section 313 (Specific toxic chemical listings):

110-54-3 n-hexane

106-99-0 1,3-butadiene buta-1,3-diene

. TSCA (Toxic Substances Control Act):

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

74-98-6 propane

75-28-5 isobutane (containing ≤ 0,1 % butadiene (106-99-0))

110-54-3 n-hexane

106-99-0 1,3-butadiene buta-1,3-diene

7732-18-5 Wasser

. Proposition 65

. Chemicals known to cause cancer:

106-99-0 1,3-butadiene buta-1,3-diene

. 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.

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. Carcinogenic categories

. EPA (Environmental Protection Agency)

110-54-3	n-hexane	II
106-99-0	1,3-butadiene buta-1,3-diene	CaH

. TLV (Threshold Limit Value established by ACGIH)

106-99-0	1,3-butadiene buta-1,3-diene	A2
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. MAK (German Maximum Workplace Concentration)

106-99-0	1,3-butadiene buta-1,3-diene	1
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. NIOSH-Ca (National Institute for Occupational Safety and Health)

106-99-0	1,3-butadiene buta-1,3-diene	
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. GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

. Hazard pictograms



GHS02 GHS07 GHS08

. Signal word

Danger

. Hazard-determining components of labeling:

Kohlenwasserstoffe, C6, Isoalkane, <5% n-Hexan, Naphtha (Erdöl), mit Wasserstoff behandelte leichte

. Hazard statements

Extremely flammable aerosol. Pressurized container: May burst if heated.

Causes skin irritation.

May cause drowsiness or dizziness.

May be fatal if swallowed and enters airways.

Harmful to aquatic life with long lasting effects.

. Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

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

Pressurized container: Do not pierce or burn, even after use.

If swallowed: Immediately call a poison center/doctor.

Do NOT induce vomiting.

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

Dispose of contents/container in accordance with local/regional/national/international regulations.

. National regulations:

. Technical instructions (air):

Class	Share in %
NK	50-100

. Water hazard class:

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

. Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

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 SDS:

Environment protection department.

. Abbreviations and acronyms:

Flam. Gas 1: Flammable gases, Hazard Category 1

Flam. Aerosol 1: Flammable aerosols, Hazard Category 1

Press. Gas: Gases under pressure: Compressed gas

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

Asp. Tox. 1: Aspiration hazard, Hazard Category 1

: Hazardous to the aquatic environment - AcuteHazard, Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

* Data compared to the previous version altered.

USA