

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 26.01.2009

Revision: 26.01.2009

1 Identification of the substance/preparation and of the company/undertaking

- **Product details**

- **Trade name:** *teslanol Polarin Forte "t71" 200ml/400 ml*

- **Application of the substance / the preparation**

Cooling Spray

Cold Detection Spray

- **Manufacturer/Supplier:**

wentronic - Electronic Components Handels GmbH

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- **Further information obtainable from:**

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- **Information in case of emergency:**

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2 Hazards identification

- **Hazard description:**



F+ 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.

Warning! Pressurized container.

R 12 Extremely flammable.

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 sufficient ventilation formation of explosive mixtures may be possible.

Keep out of the reach of children

- **Classification system:**

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

3 Composition/information on ingredients

- **Chemical characterization**

- **Description:** *Mixture of substances listed below with nonhazardous additions.*

- **Dangerous components:**

| | | | |
|------------------------------------|---------|-----------------|----------------|
| CAS: 106-97-8 EINECS: 203-448-7 | butane | <i>F+; R 12</i> | <i>50-100%</i> |
| CAS: 74-98-6 EINECS: 200-827-9 | propane | <i>F+; R 12</i> | <i>10-25%</i> |

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Trade name: teslanol Polarine Forte "t71" 200ml/400 ml

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CAS: 75-28-5
EINECS: 200-857-2

isobutane

 F+; R 12

2.5-10%

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

4 First aid measures

· **General information:**

Take affected persons out into the fresh air.

Do not leave affected persons unattended.

· **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 opened eye for several minutes under running water.

· **After swallowing:** If symptoms persist consult doctor.

5 Fire-fighting measures

· **Suitable extinguishing agents:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· **Special hazards caused by the substance, its products of combustion or resulting gases:**

Risk of bursting in case of fire heat

· **Protective equipment:** Mouth respiratory protective device.

· **Additional information:** Cool endangered receptacles with water spray.

6 Accidental release measures

· **Person-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources.

· **Measures for environmental protection:** No special measures required.

· **Measures for cleaning/collecting:**

Ensure adequate ventilation.

Let volatiles evaporate. Keep off any handling equipment with engines (source of ignition)

7 Handling and storage

· **Handling:**

· **Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

· **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.

· **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 oxidizing agents.

· **Further information about storage conditions:**

Store in cool, dry conditions in well sealed receptacles.

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- Protect from heat and direct sunlight.
- **Recommended storage temperature:** 15 - 35°C, max. 50°C

8 Exposure controls/personal protection

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

- **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) |

- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:** Do not inhale gases / fumes / aerosols.
- **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**
- **Material of gloves:** Strong material gloves
- **Penetration time of glove material:** not applicable
- **Eye protection:** Not required.

9 Physical and chemical properties

- **General Information**

| | |
|----------------|--------------|
| Form: | Aerosol |
| Colour: | Colourless |
| Odour: | Recognizable |

- **Change in condition**

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: -44°C

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

- **Ignition temperature:** 365°C

- **Self-igniting:** Product is not selfigniting.

- **Danger of explosion:** Risk of bursting at temperatures > 50°C. Damage of the container may lead to the formation of explosive mixtures of gas/vapors with air.

- **Explosion limits:**

| | |
|------------------------|---------------|
| Lower: | 1.5 Vol % |
| Upper: | 10.9 Vol % |
| Pressure (20°C) | 4,0 - 5,5 bar |

- **Density at 20°C:** 0.56 g/cm³

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

- **Solvent content:**

Organic solvents: 0.0 %

- **Additional information:** Vapors are heavier than air.

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** Risk of bursting at temperatures >50°C.

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- **Dangerous reactions** By use or incidental release the fprmation of explosuve vapor/air mixtures is possible.
- **Dangerous decomposition products:** No dangerous decomposition products known.
- **Additional information:** Stable for a storage time of min. 24 months

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Freezing of the skin may occur by contact with the liquid gas.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

12 Ecological information

- **General notes:** Generally not hazardous for water

13 Disposal considerations

- **Product:**
- **Recommendation**
empty cans: material recycling
filled cans: remove in accordance with local regulations

- **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 |

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 2 5F Gases.
- **Danger code (Kemler):** -
- **UN-Number:** 1950
- **Packaging group:** -
- **Hazard label:** 2.1
- **Description of goods:** 1950 AEROSOLS
- **Remarks:** Transportation as "LIMITED QUANTITIES" (LQ2) according 3.4 ADR possible.
Sole marking: UN 1950 (rhombe)
Entry in the transportation document: Transportation according chapter 3.4 ADR

- **Maritime transport IMDG:**



- **IMDG Class:** 2.1

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- **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 Regulatory information

- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

- **Code letter and hazard designation of product:**

F+ Extremely flammable

- **Risk phrases:**

12 Extremely flammable.

- **Safety phrases:**

23 Do not breathe aerosol.

51 Use only in well-ventilated areas.

56 Dispose of this material and its container to hazardous or special waste collection point.

- **Special labelling of certain preparations:**

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 sufficient ventilation formation of explosive mixtures may be possible.

Keep out of the reach of children

- **National regulations:**

- **Information about limitation of use:**

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

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.

- **Relevant R-phrases**

12 Extremely flammable.