



安全データシート JIS Z 7253:2019 による

Printing date 01.06.2023

Version number 4.8 (replaces version 4.7)

Revision: 01.06.2023

SECTION 1: 化学品及び会社情報

- **Product identifier**
- **Trade name:** Verduenner V 100
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Technical function** soldering
- **Application of the substance / the mixture** Thinner, Diluent
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Stannol GmbH & Co. KG
Haberstrasse 24
D-42551 Velbert

+49 (0) 2051 3120 332
sdb@stannol.de
- **Further information obtainable from:** Product Safety Department
- **Emergency telephone number:** 8:00 am - 5:00 pm (CET) +49 (0) 2051 3120 332

SECTION 2: 危険有害性の要約

- **Classification of the substance or mixture**
Flam. Liq. 2 H225 Highly flammable liquid and vapour.
Serious eye damage/irritation – Category 2A H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.
- **Label elements**
- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS02 GHS07

- **Signal word** Danger
- **Hazard statements**
Highly flammable liquid and vapour.
Causes serious eye irritation.
May cause drowsiness or dizziness.
- **Precautionary statements**
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Keep container tightly closed.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only outdoors or in a well-ventilated area.
Wear protective gloves / eye protection.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
If eye irritation persists: Get medical advice/attention.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.



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SECTION 3: 組成及び成分情報

· Mixtures**· Description:** Mixture of substances listed below with nonhazardous additions.**· Dangerous components:**

CAS: 67-63-0 propan-2-ol

80 - 100%

SECTION 4: 応急措置

· 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 opened eye for several minutes under running water. If symptoms persist, consult a doctor.**· After swallowing:** If symptoms persist consult 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.

SECTION 5: 火災時の措置

· Extinguishing media**· 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 arising from the substance or mixture** No further relevant information available.**· Advice for firefighters****· Protective equipment:** No special measures required.

SECTION 6: 漏出時の措置

· Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Wear protective clothing.

· Environmental precautions: Do not allow to enter sewers/ surface or ground water.**· Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

· 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.

SECTION 7: 取扱い及び保管上の注意

· Precautions for safe handling No special precautions are necessary if used correctly.**· Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

· Conditions for safe storage, including any incompatibilities**· Storage:****· Requirements to be met by storerooms and receptacles:** Store in a cool location.**· Information about storage in one common storage facility:** Not required.**· Further information about storage conditions:**

Keep container tightly sealed.

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- Store in cool, dry conditions in well sealed receptacles.
- **Storage class:** 3
- **Specific end use(s)** No further relevant information available.

SECTION 8: ばく露防止及び保護措置

- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
CAS: 67-63-0 propan-2-ol
OEL Ceiling limit: 980 mg/m³, 400 ppm
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as 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.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
Not necessary if room is well-ventilated.
Use suitable respiratory protective device in case of insufficient ventilation.
Filter A
- **Hand protection**



Protective gloves

Solvent resistant gloves
Rubber gloves
Synthetic rubber gloves

To avoid skin problems reduce the wearing of gloves to the required minimum.

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**

Nitrile rubber, NBR

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.

- **Penetration time of glove material**

The determined penetration times according to EN 16523-1:2015 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/face protection** Safety glasses

SECTION 9: 物理的及び化学的性質

- **Information on basic physical and chemical properties**

- **General Information**

- **Physical state**

Fluid

- **Colour:**

Clear

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· Odour:	Alcohol-like
· Odour threshold:	Not determined.
· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	50.8 °C
· Flammability	Highly flammable.
· Lower and upper explosion limit	
· Lower:	Not determined.
· Upper:	Not determined.
· Flash point:	14.1 °C
· Decomposition temperature:	Not determined.
· pH	Not determined.
· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic:	Not determined.
· Solubility	
· water:	Not miscible or difficult to mix.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not determined.
· Density and/or relative density	
· Density:	Not determined.
· Relative density	Not determined.
· Vapour density	Not determined.
· Other information	
· Appearance:	
· Form:	Fluid
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Solvent content:	
· Organic solvents:	99.0 %
· Water:	1.0 %
· VOC (EC)	99.01 %
· Change in condition	
· Evaporation rate	Not determined.
· Information with regard to physical hazard classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Highly flammable liquid and vapour.
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void

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- **Desensitised explosives** Void

SECTION 10: 安定性及び反応性

- **Reactivity** No further relevant information available.
- **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.
- **Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: 有害性情報

- **Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **LD/LC50 values relevant for classification:**
CAS: 67-63-0 propan-2-ol

Oral	LD50	5,045 mg/kg (rat)
Dermal	LD50	12,800 mg/kg (rabbit)
Inhalative	LC50/4 h	30 mg/l (rat)
- **Serious eye damage/irritation** Causes serious eye irritation.
- **STOT-single exposure** May cause drowsiness or dizziness.
- **Mistake of harm** No further relevant information available.
- **Information on other hazards**
- **Endocrine disrupting properties**
None of the ingredients is listed.

SECTION 12: 環境影響情報

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- **Hazardous to the ozone layer** No further relevant information available.
- **Other adverse effects**
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (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.

SECTION 13: 廃棄上の注意

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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- **Uncleaned packaging:**
- **Recommendation:** Packagings that may not be cleansed are to be disposed of in the same manner as the product.

SECTION 14: 輸送上の注意

- **UN number or ID number**
- **ADR, IMDG, IATA** UN1219
- **UN proper shipping name**
- **ADR** 1219 ISOPROPANOL (ISOPROPYL ALCOHOL) solution
- **IMDG, IATA** ISOPROPANOL (ISOPROPYL ALCOHOL) solution
- **Transport hazard class(es)**
- **ADR, IMDG, IATA**



- **Class** 3 Flammable liquids.
- **Label** 3
- **Packing group**
- **ADR, IMDG, IATA** II
- **Environmental hazards:** Not applicable.
- **Special precautions for user** Warning: Flammable liquids.
- **Hazard identification number (Kemler code):** 33
- **EMS Number:** F-E,S-D
- **Stowage Category** B
- **Maritime transport in bulk according to IMO instruments** Not applicable.
- **Transport/Additional information:**
- **ADR**
- **Limited quantities (LQ)** 1L
- **Excepted quantities (EQ)** Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml
- **Transport category** 2
- **Tunnel restriction code** D/E
- **IMDG**
- **Limited quantities (LQ)** 1L
- **Excepted quantities (EQ)** Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml
- **UN "Model Regulation":** UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL) SOLUTION, 3, II

SECTION 15: 適用法令

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Chemical Substance Control Law**
- **Existing Chemical Substances**
CAS: 67-63-0 propan-2-ol

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- **Specified Chemical Substances**
None of the ingredients is listed.
- **Monitoring /Type II Monitoring (before amendment) /Type III Monitoring (before amendment) Chemical Substances**
None of the ingredients is listed.
- **Priority Assessment Chemical Substances**
CAS: 67-63-0 propan-2-ol
- **Chemical Substances Relating to a Public Notice Pursuant to The Provisions of Paragraph 4 of Article 4 of the Former Act**
None of the ingredients is listed.
- **Biodegradation and Bioconcentration of Existing Chemical Substances**
CAS: 67-63-0 propan-2-ol
- **Toxicity Tests Results**
None of the ingredients is listed.
- **PRTR Class I Designated Chemical Substances (Provision of SDS after 2023)**
None of the ingredients is listed.
- **PRTR Specified Class I Designated Chemical Substances (Provision of SDS after 2023)**
None of the ingredients is listed.
- **PRTR Class II Designated Chemical Substances (Provision of SDS after 2023)**
None of the ingredients is listed.
- **Poisonous and Deleterious Substances Control Act - Deleterious Substances**
None of the ingredients is listed.
- **Poisonous and Deleterious Substances Control Act - Deleterious Substances Exception**
None of the ingredients is listed.
- **Poisonous and Deleterious Substances Control Act - Poisonous Substances**
None of the ingredients is listed.
- **Poisonous and Deleterious Substances Control Act - Specified Poisonous Substances**
None of the ingredients is listed.
- **Industrial Safety and Health Act**
- **Dangerous substances**
- **Explosive substances (Enforcement Ordinance Appendix 1 No. 1)**
None of the ingredients is listed.
- **Combustible substances (Enforcement Ordinance Appendix 1 No. 2)**
None of the ingredients is listed.
- **Oxidizing substances (Enforcement Ordinance Appendix 1 No. 3)**
None of the ingredients is listed.
- **Inflammable substances (Enforcement Ordinance Appendix 1 No. 4)**
None of the ingredients is listed.
- **Combustible gases (Enforcement Ordinance Appendix 1 No. 5)**
None of the ingredients is listed.
- **Specified Chemical Substances**
- **Group-1 substances**
None of the ingredients is listed.
- **Group-2 substances**
None of the ingredients is listed.
- **Group-3 substances**
None of the ingredients is listed.

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- **Hazardous Materials Requiring Notification (Appendix 9)**
CAS: 67-63-0 propan-2-ol 494
- **Manufacturing licence—substances**
None of the ingredients is listed.
- **Ordinance on Prevention of Lead Poisoning (Enforcement Ordinance Appendix 4)**
None of the ingredients is listed.
- **Ordinance on Prevention of Tetraalkyl Lead Poisoning (Enforcement Ordinance Appendix 5)**
None of the ingredients is listed.
- **Organic Solvent Poisoning Prevention Regulations (Enforcement Ordinance Appendix 6-2)**
- **First-class organic solvents, etc.**
None of the ingredients is listed.
- **Second-class organic solvents, etc.**
CAS: 67-63-0 propan-2-ol
- **Third-class organic solvents, etc.**
None of the ingredients is listed.
- **Strong Mutagenic Chemical Substances**
None of the ingredients is listed.
- **Fire Service Act**
CAS: 67-63-0 propan-2-ol
- **Marine Pollution Control Law**
CAS: 67-63-0 propan-2-ol
- **Act on the Protection of the Ozone Layer through the Control and Other Measures on Specified Substances and Other Substances**
- **Alternative substances**
None of the ingredients is listed.
- **Specified substances**
None of the ingredients is listed.
- **Air Pollution Control Law**
None of the ingredients is listed.
- **Water Pollution Control Act:**
- **Harmful substances**
None of the ingredients is listed.
- **Designated substances**
None of the ingredients is listed.
- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS02



GHS07

- **Signal word** Danger
- **Hazard statements**
Highly flammable liquid and vapour.
Causes serious eye irritation.
May cause drowsiness or dizziness.
- **Precautionary statements**
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Keep container tightly closed.

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Use explosion-proof electrical/ventilating/lighting equipment.

Use only outdoors or in a well-ventilated area.

Wear protective gloves / eye protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Store in a well-ventilated place. Keep cool.

Store locked up.

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

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category P5c** FLAMMABLE LIQUIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 t
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: その他の情報

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:** Product Safety Department
- **Contact:** Hr. Dörr
- **Abbreviations and acronyms:**
 - ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 - IMDG: International Maritime Code for Dangerous Goods
 - IATA: International Air Transport Association
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - ELINCS: European List of Notified Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - VOC: Volatile Organic Compounds (USA, EU)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - Flam. Liq. 2: Flammable liquids – Category 2
 - Serious eye damage/irritation – Category 2A: Serious eye damage/eye irritation – Category 2A
 - STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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