Wisatyp® TL 16

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

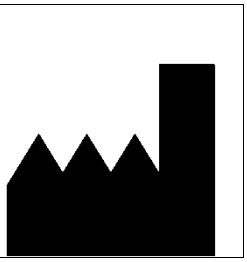
Trade Name	**Wisatyp TL 16**
Item number	TL 2016.1000 TL 2016.10.
BAG-Register number (CH)	CPID: 117910-30 UFI: AV90-J025-200S-430C

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Detergents
Uses advised against	All applications that are not explained in this technical data sheet.
Field for application [SU]	SU22 – Commercial use: Public domain (administration, education, entertainment, services, trade)

1.3 Details of the supplier of the safety data sheet

Supplier	**Wisabax AG** Kleb- und Dichtstoffe
Address	Grossmatte 21 / Postfach CH-6014 Luzern-Littau
Phone	+41 (0)41 250 18 18
Email	info@wisabax.ch
URL	www.wisabax.ch
Information contact	Technical Dept. - Mr B. Wicki Environment Dept. - Mrs E. Svets



1.4 Emergency telephone number

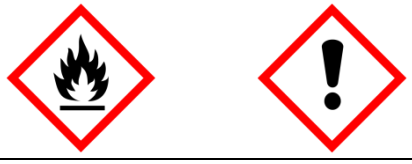
24h emergency number (just possible in switzerland)	**Tel. 145**	
Tox Info Suisse (ancient swiss toxicological infomations centre) **For emergencies from all the countries** 24h accessible in german, french, italian oder english. For not urgent cases see www.toxinfo.ch.	**Tel. +41 (0)44 251 51 51**	

2. Hazards identification

2.1 Classification of the substance or mixture according to (EC) Nr. 1272/2008 (CLP).

Hazard class	Hazard category	Hazard warnings
Flam. Liq.	2	H225 Highly flammable liquid and vapour.
Eye Irrit.	2	H319 Causes serious eye irritation.
STOT SE	3	H336 May cause drowsiness or dizziness.

2.2 Labelling according to Regulation (EC) Nr. 1272/2008 (CLP)

Pictograms(e)	
Signal word(s)	**Danger**
Hazard warning(s) [H-statements]	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

Safety instruction(s) [P-statements]	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P241 Use explosion-proof [electrical / ventilating / lighting /…] equipment. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. P405 Store locked up. P501 Dispose of contents / container to the special waste disposal.
Special marking(s) [EUH-Phrases]	omitted
Contains	-

2.3 Other hazards

Persons suffering from allergic reactions to this product should avoid contact with de product.

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006.
The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006.

3. Composition/information on ingredients

3.1 Substances

CAS No.: 67-63-0 EG No.: 200-661-7 Index No.: 603-117-00-0 Reg. No. (REACH): 01-2119457558-25-XXXX	**2-propanol** Further name(s): propan-2-ol SCL STOT SE 3, H336: C≥20% [25/Q905/5]	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336

Note: H-phrases and abbreviations are detailed in section 16.

3.2 Description of the mixture

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4. First aid measures

4.1 Description of first aid measures

General information	Observe the general rules of first aid measures. Refresh occasionally your knowledge. If medical advice is required, have this safety data sheet, the packaging or the label ready.
Following inhalation	Remove affected person from the danger area. Supply fresh air. Loosen restrictive clothing. Place in a resting position. Consult a doctor depending on the symptoms. If not breathing provide immediately artificial respiration and obtain medical treatment. In case of unconsciousness bring person in recovery position and take medical advice.
Following skin contact	Remove contaminated clothing immediately. Wash skin with much water and soap. Consult a doctor depending ond the symptoms, if possible, show this container or label.
Following eye contact	Remove contact lenses, if possible. Rinse thoroughly with water and consult a doctor. Present this safety data sheet or product label.
Following ingestion	Rinse mouth thoroughly with water. Keep airways free. Telephone the emergency number or consult a doctor. If it is possible, present this safety data sheet or product label.

4.2 Most important symptoms and effects, both acute and delayed
It may, in particular trough prolonged or repeated exposure the following symptoms may occur.
See section 11.

4.3 Indication of any immediate medical attention and special treatment needed
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5. Firefighting measures

5.1 Extinguishing media
Always adapt firefighting measures to the surroundings and the size of the fire.

Suitable extinguishing media: Water spray jet, Dry powder fire extinguishers, Alcohol-resistant foam, Carbon dioxide
Unsuitable extinguishing media: Full water jet

5.2 Special hazards arising from the substance or mixture
Combustible. Formation of explosive mixtures possible with air.
Formation of toxic gases is possible during heating or in case of fire:
Carbon oxide. Toxic gases.

5.3 Advice for fire-fighters
Do not inhale combustion gases. Wear breathing apparatus with own air supply. Wear full protection depending on fire class. Use water spray to cool endangered containers. Dispose contaminated fire extinguishing water according to official directives.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Keep away from sources of ignition. No smoking. Arrange for sufficient air supply. Avoid eye and skin contact as well as inhalation. Keep away unnecessary people from the scene of an accident; ideally contrary to the wind direction.

6.2 Environmental precautions
Do not empty into drains. Prevent surface and ground-water infiltration, as well as ground penetration. Eliminating a leak, if this can done safely. When accidental discharge into channelization has happened, inform the corresponding officials.

6.3 Methods and material for containment and cleaning up
Absorb bigger quantities with fluid-binding material (e.g. universal binder, sand, diatomaceous earth, sawdust) and dispose of according to section 13.

6.4 Reference to other sections
Personal protective equipment see section 8. Waste disposal see section 13.

7. Handling and storage

7.1 Precautions for safe handling
Keep away from sources of ignition – No smoking Avoid inhaling the vapors. Ensure good ventilation. If necessary suction measures at the workplace or on the processing machines required. Take measures against electrostatic charge. Avoid eye and skin contact. Open and handle receptacle with care. Eating, drinking, smoking, as well as food-storage, is prohibited in workspace. Notes note on the packaging and current technical data sheet. Use working methods according to operating instructions.
Wash contaminated clothing before reuse. General hygiene measures for the handling of chemicals are applicable. Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs. Take off contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities
To avoid the unauthorized and children and kept in a safe place. Store only in original container and keep locked up. Follow the particular storage conditions. Do not store together with oxidizing and self-igniting products. Protect them from direct sunlight and heat. Store in a dry place. Keep cool

7.3 Specific end uses
See section 1.2. - See technical data sheet and the product imprint.

8. Exposure controls/personal protection

8.1 Control parameters

Components with limit values that require monitoring at the workplace:

CAS No.: 67-63-0 EG No.: 200-661-7 Index No.: 603-117-00-0 Reg. No. (REACH): 01-2119457558-25-XXXX	**2-propanol** CH: MAC: 200 ppm (500 mg/m^3) CH: STEL: 400 ppm (1000 mg/m^3) CH: BLV: urine 25 mg/l end of exposure or end of shift CH: BLV: blood 25 mg/l end of exposure or end of shift [25/Q50/4]

MAK = Maximum Workplace Concentration (TLV = Threshold Limit Value)
CH It's a swiss limit, edited by SUVA. If there is no limit from SUVA it's a work place limit (AGW) from Germany or another European state.

CAS No.: 67-63-0 EG No.: 200-661-7 Index No.: 603-117-00-0 Reg. No. (REACH): 01-2119457558-25-XXXX	**2-propanol** employee: DNEL: 888 mg/kg/1d [dermal exposure route, long-term, systemic effects]; employee: DNEL: 500 mg/m^3 [inhalative, long-term, systemic effects]; consumer: DNEL: 319 mg/kg/1d [dermal exposure route, long-term, systemic effects]; consumer: DNEL: 89 mg/m^3 [inhalative, long-term, systemic effects]; consumer: DNEL: 26 mg/kg bw/d [oral, long-term, systemic effects]; environment: PNEC: 140.9 [freshwater (intermittent release)]; environment: PNEC: 2251 mg/l [microorganisms in wastewater treatment plants]; environment: PNEC:140.9 mg/l [fresh water]; environment: PNEC: 140.9 mg/l [sea water]; environment: PNEC: 552 mg/kg dw [sediment, fresh water]; environment: PNEC: 552 mg/kg dw [sediment, seawater]; environment: PNEC: 28 mg/kg dw [soil]; environment: PNEC: 160 mg/kg [predator] [24/Q2/1]

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation, e.g. by local suction, general exhaust air.
Comply with the workplace exposure limits.
If limits can't be adhered to, use appropriate respiratory protection.

8.2.2 Personal protective equipment

General data	Select personal protective equipment according to the CEN standards; discuss protective equipment with the supplier.
Eye/face protection	Safety glasses with side protection shield (EN 166).
Hand-/Body protection	Use chemical-resistant protective gloves according to EN 374.
Protective clothing	Wear solvent-resistant protective clothing according to EN ISO 20345.
Respiratory protection	In case of insufficient ventilation or if limit values cannot be complied, use air respirator. Filters type AXBEK in accordance with EN 14387. Follow the wear time limits for breathing apparatus.
Hygiene measures	Do not eat, drink or smoke while at work. Wash hands before breaks and after work.
Thermal hazards	Not applicable.

On the basis of the contents and our experience the following non-binding recommendations for the selection of the material of the protective gloves (minimum layer thickness: 0.4 mm):

Recommended glove material:	Flourinated rubber (FKM) Nitrile rubber/Nitrile latex (NBR)
Inappropriate glove material:	Textile Materials

The selection of suitable depends upon the material, and also upon the quality of the gloves. The degree of protection will vary from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the materials used for gloves cannot be predetermined; it is therefore necessary to check this before using the product.
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

8.2.3 Environmental exposure controls
More information that is detailed is not available yet.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Colour	colourless, transparent
Density	0,785 g/cm^3 (20°C)
Viscosity	2.43 mPas (20°C)
Odour	Characteristic of alcohols
Odour threshold	Not determined
pH-level	Not determined
Melting point/freezing point	-89.5°C
Initial boiling point/boiling range	82°C
Decomposition temperature	Not determined
Rate of evaporation	Not determined
Flashpoint	12°C
Auto-ignition temperature	425°C
Lower explosive limits	2 Vol.-%
Upper explosive limits	12 Vol.-%
Vapour pressure	43 hPa (20°C)
Vapour density (Air = 1)	Not determined
Explosive properties	The product is not explosive. In use, may form flammable/explosive vapour-air mixture.
Oxidising properties	No

9.2 Other information

Solubility in / Miscibility with water.	Well miscible with water
Solubility in / Miscibility in	Most of organic solvents
Partition coefficient n-Octanol/Water	Not determined
Conductivity	Not determined
VOC-content (EU)	100%
VOC-content (CH)	100%

10. Stability and reactivity

10.1 Reactivity
The product has not been tested.

10.2 Chemical stability
The product is stable when properly stored and handled.

10.3 Possibility of hazardous reactions
No effects are known if used as intended.

10.4 Conditions to avoid
No effects are known if used as intended.

10.5 Incompatible materials
None known.

10.6 Hazardous decomposition products
No decomposition if used according to specifications.
In case of fire or extreme heat, see section 5.2.

11. Toxicological information

11.1 Information on toxicological effects

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11.2. Toxicological information of hazardous ingredients

CAS No.: 67-63-0 EG No.: 200-661-7 Index No.: 603-117-00-0 Reg. No. (REACH): 01-2119457558-25-XXXX	**2-propanol** acute toxicity: LD50: 4390-5840 mg/kg [oral, rat, OECD 401]; acute toxicity: LD50: 12800-13900 mg/kg [dermal exposure route, rabbit, OECD 402]; acute toxicity: LC50: >25 mg/l/6h [inhalative, rat, males, female, OECD 403, vapours]; acute toxicity: LC50: 46600 mg/l/4h [inhalative, rat, aerosol]; corrosive/irritant effect on the skin: non-irritant [rabbit, OECD 404]; serious eye damage/irritation: [rabbit, Eye Irrit.2, OECD 405]; respiratory/skin sensitization: not sensitising (skin contact) [Guinea pig, OECD 406]; germ cell mutagenicity: negative [salmonella typhimurium, OECD 471]; germ cell mutagenicity: negative [mouse, OECD 474]; germ cell mutagenicity: negative [mouse, OECD 476]; germ cell mutagenicity: negative [salmonella typhimurium, Ames-Test]; carcinogenicity: negative; aspiration hazard: no; reproductive toxicity: negative; specific target organ toxicity - single exposure (STOT SE): [STOT SE 3, H336]; specific target organ toxicity - repeated exposure (STOT RE): [target organ(s): Leber]; symptoms: breathing difficulties, unconsciousness, vomiting, headaches, fatigue, dizziness, nausea, redness of the eyes, tearing of the eyes, central nervous system. may cause: drowsiness, drowsiness; specific target organ toxicity - repeated exposure (STOT RE): NOAEL: 900 mg/kg [oral, rat, OECD 408]; specific target organ toxicity - repeated exposure (STOT RE): NOAEL: 5000 ppm [inhalative, rat, OECD 451, vapours] [25/Q2,50,905/1,4,5]

12. Ecological information

12.1 Toxicity

The product is not classified as dangerous for the environment. The product/mixture is not classified as hazardous to the aquatic environment – chronic.	
Aquatic toxicity Germany (Self-classification)	WGK 1 Slightly hazardous to water

12.2 Persistence and degradability

No information is available.

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water	

12.4 Mobility in soil

No information is available.

12.5 Results of PBT and vPvB assessment

See section 2.3.

12.6 Other adverse effects

Do not allow product to reach ground water, water course or sewag system.

12.7 Additional ecotoxicological information

CAS No.: 67-63-0 EG No.: 200-661-7 Index No.: 603-117-00-0 Reg. No. (REACH): 01-2119457558-25-XXXX	**2-propanol** acute toxicity, fish: LC50: >100 mg/l/96h [Leuciscusidus]; acute toxicity, fish: LC50: 1400 mg/l/96h [Lepomis macrochirus]; acute toxicity, daphnia: EC50: 2285 mg/l/48h [Daphnia magna]; acute toxicity, daphnia: EC50: 141 mg/l/16d [Daphnia magna]; acute toxicity, algae: EC50: >100 mg/l/72h [Desmodesmus subspicatus]; persistence and degradability: 95%/21d, easily biodegradable [OECD 301 E, OECD D]; persistence and degradability: 99%, easily biodegradable [OECD 303 A]; bioaccumulative potential: BCF: 3.2, low; bioaccumulative potential: Log Pow: 0.05, low [OECD 107]; mobility in soil: Koc, 1.1 [expert judgement]; results of PBT and vPvB assessment: no PBT substance, no vPvB substance; acute bacteriotoxicity: EC50: >1000 mg/l [activated sludge]; acute bacteriotoxicity: EC10: 1050 mg/l/16h [Pseudomonas putida, DIN 38412]; water solubility: soluble; other information: [ThOD, 2.4 g/g; COD 96%; COD 2.4 g/g; BOD 1171 mg/g] [24/Q2/1]

13. Disposal considerations

13.1 Waste treatment methods

Waste disposal according to official state regulations.

Waste treatment options: 07 01 04 – other organic solvents, washing liquids and mother liquors 14 06 03 – other solvents and solvent mixtures
Contaminated packages: Disposal must be made according to official regulations. If possible empty packaging completely. Packagings that cannot be cleaned are to be disposed off in the same manner as the product. Uncontaminated and cleaned packaging can be recycled. Uncleaned container do not perforate, cut up or weld. Residues may cause an explosion hazard. 15 01 01 – paper and cardboard packaging. 15 01 04 – metallic packaging.
The waste code numbers mentioned are recommendations based on the probable use of the product. The particular application and local disposal situation obtaining for the user may lead to other waste codes being assigned as well.

14. Transport information

14.1 UN-Number:
ADR, RID, ADN, IMDG, IATA: **UN 1219**

14.2 UN proper shipping name
ADR, RID: UN 1291 ISOPROPYL
IMDG, IATA: ISOPROPANOL

14.3 Transport hazard class(es):

ADR, RID, ADN, IMDG, IATA: 3 Flammable liquids Flammable liquids	

14.4 Packing group:
ADR, RID, ADN, IMDG, IATA: II

14.5 Enviromental hazards:

Dangerous to the environment: No
Marine pollutant: No

14.6 Special precautions for user:

Kemmler number:	33
EMS number:	F-E, S-D

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable, because of general cargo and not bulk cargo.

14.8 Additional information:

ADR / RID: LQ – Limited Quantities:	1 L
ADR / RID: Tunnel restriction code:	D/E
UN "Model Regulation":	UN1291, ISOPROPANOL, 3, II

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substances or mixture

Classification and labelling see section 2.
Classification of the preparation has been done by calculation or based on studies/test on the product itself or experience with similar mixtures.

Further national and further regulations, limitations and legal requirements

Water hazard class (WGK) see section 12.1.
Observe employment restrictions for young people (CH: SR 822.115).
Chemicals regulation (ChemV), ordinance on chemicals risk reduction (ChemRRV), Luftreinhalte-Verordnung (LRV), Ordinance on protection against major accidents (StFV), professional association principles/industrial medicine regulations

15.2 Chemical Safety Assessment
A chemical safety assessment is not provided for mixtures.

16. Other information

Hazards used in the document (H-phrases):

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Other recommended sources for more information:
- Federal Office of Public Health (Switzerland): www.bag.admin.ch (German/French/Italian/English)

List of relevant abbreviations that may be used in the document:

Abbreviation	Full text / Meaning
ADR	Accord européen realtif au transport international des marchandises Dangereuses par Route (= European agreement concerning the international carriage of dangerouse goods by road)
AGW, Spb.-Üf.	AGW = Arbeitsplatzgrenzwert (occupational limit value), Spb.-Üf. = Spitzenbegrenzung (peak limit) – Überschreitungsfaktor (exceedance factor) (1 bis 8) and category (I, II) for short-term values (TRGS 900, germany)
AOEL	Acceptable Operator Exposure Level
Aquatic Acute	Hazardous to the aquatic environment - Acute
Aquatic Chronic	Hazardous to the aquatic environment – Chronic
Asp. Tox.	Aspiration hazard (Danger when inhaling)
ATE	Acute Toxicity Estimates
BAG	Office for health (Bundesamt für Gesundheit, Schweiz)
BAT	Biological tolerance values at the workplace (Biologische Arbeitsstofftoleranzwerte, Schweiz)
BG	Trade association (Berufsgenossenschaft)
BGR	Trade association regulations (Berufsgenossenschaftliche Regeln)
BGV	Trade association regulations (Berufsgenossenschaftliche Vorschrift)
Carz.	Carcinogenic substance
CAS-Nr.	Chemical Abstracts Service
CH	Swiss confederation (from the latin Confoederatio Helvetica)
CH: MAK:	Swiss limit of maximum allowable concentration, issued by the swiss accident insurance fund. (Schweizerischen Unfallversicherungsanstalt (SUVA)

CLP	Classification, Labelling and Packaing (REGULATION (EG) Nr. 1272/2008)
CPID	Chemical Product IDentification.
DMEL	Derived Minimum Effect Level
DNEL	Derived No Effect Level
EG-Nr.	Substances of the EC material inventory, consisting of 7 digits (Syntax: XXX-XXX-X). Comprises waste materials (EINECS), new substances (ELINCS) as well as the No-Longer-Polymers-Liste (NLP-Liste).
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
Eye Irrit.	Eye irritant, depending on the category Eye irritation possible to serious eye damage.
Flam. Gas	Flammable gas
Flam. Liq.	Flammable liquid
Flam. Sol.	Flammable solid
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IATA	International Air Transport Association
IMDG-Code	International Maritime Code for Dangerous Goods
Index-Nr.	Indexation of dangerous substances of appendix 5 in the VO(EG)1272/2008 (or annex I of directive 67/548/EWG) with the following syntax: XXX-XXX-XX-X
LC	Lethal concentration
LD	Lethal (fatal) dose
LD50	Lethal dose, 50%
Met. Corr.	On metal corrosive acting substance or mixture
Muta.	Substance with germ cell mutagenicity
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
NOEL	No Observed Effect Level
Ozone	Hazardous for the ozone layer
PBT	Persistent, bioaccumulative, and toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals (Verordnung (EG) Nr. 1907/2006 zur Registrierung, Bewertung, Zulassung und Beschränkung chemischer Stoffe)
Repr.	Reproductive toxicity
Resp. Sens.	Sensitising for respiratory tract
SCL	Specific concentration limits
Skin Irrit.	Skin irritant – corrosive/irritant to skin
Skin Sens.	Sensitising for the skin
STOT RE	Specific target organ toxicity – repeated exposure
STOT SE	Specific target organ toxicity – single exposure
TRGS	Technical rules on hazardous substances
VOC	Volatile organic compounds
VOCV	VOC-regulation (Swiss)
vPvB	Very persistent and very bioaccumulative

Department issuing data specification sheet: See section 1.3.
This safety data sheet replaces all previous versions.

Disclaimer: The specifications rest on the today's stand of our knowledge. It does not constitute a legally binding assurance of specific product properties.