

**Section: 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier**

Product name : TUKLAR  
UFI : JSHQ-UN5N-700V-2P1R  
Product code : 100617E  
Use of the Substance/Mixture : Floor care product  
Substance type: : Mixture

**For professional users only.**

Product dilution information : No dilution information provided.

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

Identified uses : Polish / impregnating agent. Manual process  
Recommended restrictions on use : Reserved for industrial and professional use.

**1.3 Details of the supplier of the safety data sheet**

Company : Ecolab Deutschland GmbH  
Ecolab-Allee 1  
40789 Monheim am Rhein, Germany +49 (0)2173 599 0  
OfficeService.DEDUS@ecolab.com

**1.4 Emergency telephone number**

Emergency telephone number : +4932221096286  
+32-(0)3-575-5555 Trans-European  
Poison Information Centre telephone number : +49 (0)551 38318854

Date of Compilation/Revision : 21.10.2020  
Version : 2.0

**Section: 2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**

|| Eye irritation, Category 2 H319  
|| Skin sensitization, Category 1 H317

**2.2 Label elements****Labelling (REGULATION (EC) No 1272/2008)**

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Hazard pictograms



Signal Word

: Warning

Hazard Statements

: H317  
H319May cause an allergic skin reaction.  
Causes serious eye irritation.

Precautionary Statements

: **Prevention:**  
P280

Wear protective gloves/ eye protection/ face protection.

Hazardous components which must be listed on the label:  
2-Methyl-4-isothiazolin-3-one

**2.3 Other hazards**

None known.

**Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures****Hazardous components**

Chemical Name	CAS-No. EC-No. REACH No.	Classification REGULATION (EC) No 1272/2008	Concentration: [%]
Waxes	28263-96-9	Flammable liquids Category 2; H225 Eye irritation Category 2; H319 Specific target organ toxicity - single exposure Category 3; H336	>= 10 - < 20
2-Methyl-4-isothiazolin-3-one	2682-20-4 220-239-6	Acute toxicity Category 3; H301 Acute toxicity Category 2; H330 Acute toxicity Category 3; H311 Skin corrosion Sub-category 1B; H314 Serious eye damage Category 1; H318 Skin sensitization Sub-category 1A; H317 Acute aquatic toxicity Category 1; H400 Chronic aquatic toxicity Category 1; H410	>= 0.0015 - < 0.1
<b>Substances with a workplace exposure limit :</b>			
2-(2-ethoxyethoxy)ethanol	111-90-0 203-919-7 01-2119475105-42	Not Classified;	>= 1 - < 2.5

For the full text of the H-Statements mentioned in this Section, see Section 16.

**Section: 4. FIRST AID MEASURES****4.1 Description of first aid measures**

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes.

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Use a mild soap if available. Wash clothing before reuse.  
Thoroughly clean shoes before reuse. Get medical attention.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

**4.2 Most important symptoms and effects, both acute and delayed**

See Section 11 for more detailed information on health effects and symptoms.

**4.3 Indication of immediate medical attention and special treatment needed**

Treatment : Treat symptomatically.

**Section: 5. FIREFIGHTING MEASURES**

**5.1 Extinguishing media**

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : None known.

**5.2 Special hazards arising from the substance or mixture**

Specific hazards during firefighting : Not flammable or combustible.

Hazardous combustion products : Depending on combustion properties, decomposition products may include following materials:  
Carbon oxides  
Oxides of phosphorus

**5.3 Advice for firefighters**

Special protective equipment for firefighters : Use personal protective equipment.

Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

**Section: 6. ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel : Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Advice for emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.

**6.2 Environmental precautions**

Environmental precautions : Do not allow contact with soil, surface or ground water.

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**6.3 Methods and materials for containment and cleaning up**

Methods for cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

**6.4 Reference to other sections**

See Section 1 for emergency contact information.  
For personal protection see section 8.  
See Section 13 for additional waste treatment information.

**Section: 7. HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

Advice on safe handling : Avoid contact with skin and eyes. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation. Wash hands thoroughly after handling. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling.

**7.2 Conditions for safe storage, including any incompatibilities**

Requirements for storage areas and containers : Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

Storage temperature : 5 °C to 30 °C

**7.3 Specific end uses**

Specific use(s) : Polish / impregnating agent. Manual process

**Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters**

**Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
2-(2-ethoxyethoxy)ethanol	111-90-0	AGW (Vapour and aerosols)	6 ppm 35 mg/m3	TRGS 900
Further information	AGS	Commission for dangerous substances		
	11	Sum of vapor and aerosols.		
	Y	When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child		

**DNEL**

2-(2-ethoxyethoxy)ethanol : End Use: Workers

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	<p>Exposure routes: Dermal                  Potential health effects: Long-term systemic effects                  Value: 83 mg/cm<sup>2</sup></p> <p>End Use: Workers                  Exposure routes: Inhalation                  Potential health effects: Long-term systemic effects                  Value: 61 mg/m<sup>3</sup></p> <p>End Use: Workers                  Exposure routes: Inhalation                  Potential health effects: Long-term local effects                  Value: 30 mg/m<sup>3</sup></p> <p>End Use: Consumers                  Exposure routes: Dermal                  Potential health effects: Long-term systemic effects                  Value: 25 mg/cm<sup>2</sup></p> <p>End Use: Consumers                  Exposure routes: Inhalation                  Potential health effects: Long-term systemic effects                  Value: 37 mg/m<sup>3</sup></p> <p>End Use: Consumers                  Exposure routes: Ingestion                  Potential health effects: Long-term systemic effects                  Value: 50 ppm</p> <p>End Use: Consumers                  Exposure routes: Inhalation                  Potential health effects: Long-term local effects                  Value: 18 mg/m<sup>3</sup></p>
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**PNEC**

<p>2-(2-ethoxyethoxy)ethanol</p>	<p>: Fresh water                  Value: 19.8 mg/l</p> <p>Marine water                  Value: 0.198 mg/l</p> <p>Soil                  Value: 0.34 mg/kg</p> <p>Fresh water sediment                  Value: 7.32 mg/kg</p> <p>Marine sediment                  Value: 0.732 mg/kg</p> <p>Sewage treatment plant                  Value: 500 mg/l</p> <p>Oral                  Value: 444 mg/kg</p>
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**8.2 Exposure controls**

**Appropriate engineering controls**

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

**Individual protection measures**

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling.

Eye/face protection (EN 166) : Safety glasses with side-shields

Hand protection (EN 374) : Recommended preventive skin protection  
Gloves  
Nitrile rubber  
butyl-rubber  
Breakthrough time: 1 – 4 hours  
Minimum thickness for butyl-rubber 0.7 mm for nitrile rubber 0.4 mm or equivalent (please refer to the gloves manufacturer/distributor for advise).  
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin and body protection (EN 14605) : No special protective equipment required.

Respiratory protection (EN 143, 14387) : None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Use certified respiratory protection equipment meeting EU requirements(89/656/EEC, (EU) 2016/425), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization.

**Environmental exposure controls**

General advice : Consider the provision of containment around storage vessels.

**Section: 9. PHYSICAL AND CHEMICAL PROPERTIES**

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

Appearance : liquid  
Colour : white  
Odour : Perfumes, fragrances  
pH : 8.6, 100 %  
Flash point : Not applicable.  
Odour Threshold : Not applicable and/or not determined for the mixture  
Melting point/freezing point : Not applicable and/or not determined for the mixture

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Initial boiling point and boiling range	: Not applicable and/or not determined for the mixture
Evaporation rate	: Not applicable and/or not determined for the mixture
Flammability (solid, gas)	: Not applicable and/or not determined for the mixture
Upper explosion limit	: Not applicable and/or not determined for the mixture
Lower explosion limit	: Not applicable and/or not determined for the mixture
Vapour pressure	: Not applicable and/or not determined for the mixture
Relative vapour density	: Not applicable and/or not determined for the mixture
Relative density	: 1.018
Water solubility	: Not applicable and/or not determined for the mixture
Solubility in other solvents	: Not applicable and/or not determined for the mixture
Partition coefficient: n-octanol/water	: Not applicable and/or not determined for the mixture
Auto-ignition temperature	: Not applicable and/or not determined for the mixture
Thermal decomposition	: Not applicable and/or not determined for the mixture
Viscosity, kinematic	: Not applicable and/or not determined for the mixture
Explosive properties	: Not applicable and/or not determined for the mixture
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

**9.2 Other information**

Not applicable and/or not determined for the mixture

**Section: 10. STABILITY AND REACTIVITY**

**10.1 Reactivity**

No dangerous reaction known under conditions of normal use.

**10.2 Chemical stability**

Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

No dangerous reaction known under conditions of normal use.

**10.4 Conditions to avoid**

None known.

**10.5 Incompatible materials**

None known.

**10.6 Hazardous decomposition products**

Depending on combustion properties, decomposition products may include following materials:  
Carbon oxides  
Oxides of phosphorus

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**Section: 11. TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

**Product**

Acute oral toxicity : There is no data available for this product.

Acute inhalation toxicity : There is no data available for this product.

Acute dermal toxicity : There is no data available for this product.

Skin corrosion/irritation : There is no data available for this product.

Serious eye damage/eye irritation : There is no data available for this product.

Respiratory or skin sensitization : There is no data available for this product.

Carcinogenicity : There is no data available for this product.

Reproductive effects : There is no data available for this product.

Germ cell mutagenicity : There is no data available for this product.

Teratogenicity : There is no data available for this product.

STOT - single exposure : There is no data available for this product.

STOT - repeated exposure : There is no data available for this product.

Aspiration toxicity : There is no data available for this product.

**Components**

Acute oral toxicity : 2-Methyl-4-isothiazolin-3-one  
LD50 rat: 105 mg/kg

2-(2-ethoxyethoxy)ethanol  
LD50 rat: 5,600 mg/kg

**Components**

Acute inhalation toxicity : 2-Methyl-4-isothiazolin-3-one  
4 h LC50 rat: 0.33 mg/l  
Test atmosphere: dust/mist

**Components**

Acute dermal toxicity : 2-Methyl-4-isothiazolin-3-one  
LD50 rabbit: 200 mg/kg

2-(2-ethoxyethoxy)ethanol  
LD50 rabbit: 8,476 mg/kg



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**Potential Health Effects**

- Eyes : Causes serious eye irritation.
- Skin : May cause allergic skin reaction.
- Ingestion : Health injuries are not known or expected under normal use.
- Inhalation : Health injuries are not known or expected under normal use.
- Chronic Exposure : Health injuries are not known or expected under normal use.

**Experience with human exposure**

- Eye contact : Redness, Pain, Irritation
- Skin contact : Redness, Irritation, Allergic reactions
- Ingestion : No symptoms known or expected.
- Inhalation : No symptoms known or expected.

**Section: 12. ECOLOGICAL INFORMATION**

**12.1 Ecotoxicity**

- Environmental Effects : This product has no known ecotoxicological effects.

**Product**

- Toxicity to fish : no data available
- Toxicity to daphnia and other aquatic invertebrates : no data available
- Toxicity to algae : no data available

**Components**

- Toxicity to fish : 2-Methyl-4-isothiazolin-3-one  
96 h LC50 *Oncorhynchus mykiss* (rainbow trout): 4.77 mg/l
- 2-(2-ethoxyethoxy)ethanol  
96 h LC50 *Ictalurus punctatus* (channel catfish): 6,010 mg/l

**Components**

- Toxicity to daphnia and other aquatic invertebrates : 2-Methyl-4-isothiazolin-3-one  
48 h EC50 *Daphnia magna* (Water flea): 0.934 mg/l
- 2-(2-ethoxyethoxy)ethanol  
48 h LC50 *Daphnia magna* (Water flea): 1,982 mg/l

**Components**

- Toxicity to algae : 2-(2-ethoxyethoxy)ethanol  
96 h EC50 *Desmodesmus subspicatus* (green algae): > 100 mg/l  
Test substance: Information given is based on data obtained from similar substances.  
96 h NOEC *Desmodesmus subspicatus* (green algae): > 100 mg/l  
Test substance: Information given is based on data obtained from

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similar substances.

**12.2 Persistence and degradability**

**Product**

no data available

**Components**

Biodegradability : 2-Methyl-4-isothiazolin-3-one  
Result: Biodegradable

2-(2-ethoxyethoxy)ethanol  
Result: Readily biodegradable.

**12.3 Bioaccumulative potential**

no data available

**12.4 Mobility in soil**

no data available

**12.5 Results of PBT and vPvB assessment**

**Product**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6 Other adverse effects**

no data available

**Section: 13. DISPOSAL CONSIDERATIONS**

Dispose of in accordance with the European Directives on waste and hazardous waste. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

**13.1 Waste treatment methods**

Product : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Contaminated packaging : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

Guidance for Waste Code selection : Organic wastes containing dangerous substances. If this product is used in any further processes, the final user must redefine and assign the most appropriate European Waste Catalogue Code. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to

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determine the proper waste identification and disposal methods in compliance with applicable European (EU Directive 2008/98/EC) and local regulations.

**Section: 14. TRANSPORT INFORMATION**

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

**Land transport (ADR/ADN/RID)**

- 14.1 UN number : Not dangerous goods
- 14.2 UN proper shipping name : Not dangerous goods
- 14.3 Transport hazard class(es) : Not dangerous goods
- 14.4 Packing group : Not dangerous goods
- 14.5 Environmental hazards : Not dangerous goods
- 14.6 Special precautions for user : Not dangerous goods

**Air transport (IATA)**

- 14.1 UN number : Not dangerous goods
- 14.2 UN proper shipping name : Not dangerous goods
- 14.3 Transport hazard class(es) : Not dangerous goods
- 14.4 Packing group : Not dangerous goods
- 14.5 Environmental hazards : Not dangerous goods
- 14.6 Special precautions for user : Not dangerous goods

**Sea transport (IMDG/IMO)**

- 14.1 UN number : Not dangerous goods
- 14.2 UN proper shipping name : Not dangerous goods
- 14.3 Transport hazard class(es) : Not dangerous goods
- 14.4 Packing group : Not dangerous goods
- 14.5 Environmental hazards : Not dangerous goods
- 14.6 Special precautions for user : Not dangerous goods
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not dangerous goods

**Section: 15. REGULATORY INFORMATION**

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

**National Regulations**

**Take note of Dir 94/33/EC on the protection of young people at work.**

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Hazard class for water : WGK 1  
Classification according to AwSV, Annex 1

German storage class : 12

**15.2 Chemical Safety Assessment**

No Chemical Safety Assessment has been carried out on the product.

**Section: 16. OTHER INFORMATION**

**Procedure used to derive the classification according to REGULATION (EC) No 1272/2008**

Classification	Justification
Eye irritation 2, H319	Calculation method
Skin sensitization 1, H317	Calculation method

**Full text of H-Statements**

H225 Highly flammable liquid and vapour.  
H301 Toxic if swallowed.  
H311 Toxic in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H330 Fatal if inhaled.  
H336 May cause drowsiness or dizziness.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

**Full text of other abbreviations**

ADN – European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS – Australian Inventory of Chemical Substances; ASTM – American Society for the Testing of Materials; bw – Body weight; CLP – Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR – Carcinogen, Mutagen or Reproductive Toxicant; DIN – Standard of the German Institute for Standardisation; DSL – Domestic Substances List (Canada); ECHA – European Chemicals Agency; EC-Number – European Community number; ECx – Concentration associated with x% response; ELx – Loading rate associated with x% response; EmS – Emergency Schedule; ENCS – Existing and New Chemical Substances (Japan); ErCx – Concentration associated with x% growth rate response; GHS – Globally Harmonized System; GLP – Good Laboratory Practice; IARC – International Agency for Research on Cancer; IATA – International Air Transport Association; IBC – International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 – Half maximal inhibitory concentration; ICAO – International Civil Aviation Organization; IECSC – Inventory of Existing Chemical Substances in China; IMDG – International Maritime Dangerous Goods; IMO – International Maritime Organization; ISHL – Industrial Safety and Health Law (Japan); ISO – International Organisation for Standardization; KECI – Korea Existing Chemicals Inventory; LC50 – Lethal Concentration to 50 % of a test population; LD50 – Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL – International Convention for the Prevention of Pollution from Ships; n.o.s. – Not Otherwise Specified; NO(A)EC – No Observed (Adverse) Effect Concentration; NO(A)EL – No Observed (Adverse) Effect Level; NOELR – No Observable Effect Loading Rate; NZIoC – New Zealand Inventory of Chemicals; OECD – Organization for Economic Co-operation and Development; OPPTS – Office of Chemical Safety and Pollution Prevention; PBT – Persistent, Bioaccumulative and Toxic substance; PICCS – Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR – (Quantitative)

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Structure Activity Relationship; REACH – Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID – Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT – Self-Accelerating Decomposition Temperature; SDS – Safety Data Sheet; TCSI – Taiwan Chemical Substance Inventory; TRGS – Technical Rule for Hazardous Substances; TSCA – Toxic Substances Control Act (United States); UN – United Nations; vPvB – Very Persistent and Very Bioaccumulative

Prepared by : Regulatory Affairs

Numbers quoted in the MSDS are given in the format: 1,000,000 = 1 million and 1,000 = 1 thousand. 0.1 = 1 tenth and 0.001 = 1 thousandth

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Annex: Exposure Scenarios**

**Exposure Scenario: Polish / impregnating agent. Manual process**

Life Cycle Stage : Widespread use by professional workers  
Product category : **PC31** Polishes and wax blends

**Contributing scenario controlling environmental exposure for:**

Environmental release category : **ERC8a** Wide dispersive indoor use of processing aids in open systems  
Daily amount per site : 7.5 kg  
Type of Sewage Treatment Plant : Municipal sewage treatment plant

**Contributing scenario controlling worker exposure for:**

Process category : **PROC10** Roller application or brushing  
Exposure duration : 480 min  
Operational conditions and risk management measures : Indoor

Local Exhaust Ventilation is not required

General ventilation Ventilation rate per hour 1

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Skin Protection : see section 8

Respiratory Protection : see section 8