Safety data sheet
according to 1907/2006/EC, Article 31

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**
· Trade name: **Triple Effect**

· Article number: 10846, 11853, 11893
· UFI: CKT1-Q0MP-500F-RMGN
· **1.2 Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
· Application of the substance / the mixture Protective impregnation

· **1.3 Details of the supplier of the safety data sheet**
· Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH
Lechstrasse 28
D 90451 Nürnberg
Tel. +49(0)911-642960
Fax. +49(0)911-644456
e-mail info@akemi.de

· Further information obtainable from: Laboratory
· **1.4 Emergency telephone number:** Product Safety Department AKEMI chemisch technische Spezialfabrik GmbH
Tel. +49(0)911-64296-59
Reachable during the following office hours:
Monday – Thursday from 07:30 a.m. to 16:30 p.m.
Friday from 07:30 a.m. to 13:30 p.m.

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· Classification according to Regulation (EC) No 1272/2008
Eye Irrit. 2 H319 Causes serious eye irritation.

· **2.2 Label elements**
· Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation.
· Hazard pictograms

GHS07

· Signal word Warning

· Hazard-determining components of labelling: Not applicable.
· Hazard statements H319 Causes serious eye irritation.
· Precautionary statements
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read carefully and follow all instructions.
P280 Wear eye protection / face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
· Additional information: Contains 2-methyl-2H-isothiazol-3-one. May produce an allergic reaction.
· **2.3 Other hazards**
· Results of PBT and vPvB assessment
· PBT: Not applicable.
· vPvB: Not applicable.

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SECTION 3: Composition/information on ingredients

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

· Dangerous components:

67-63-0	propan-2-ol Flam. Liq. 2, H225 Eye Irrit. 2, H319; STOT SE 3, H336	<12.5%
2682-20-4	2-methyl-2H-isothiazol-3-one Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 2, H330 Skin Corr. 1B, H314; Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=1) Skin Sens. 1A, H317; STOT SE 3, H335 EUH071 Specific concentration limit: Skin Sens. 1A; H317: C ≥ 0.0015 %	<1%

· Regulation (EC) No 648/2004 on detergents / Labelling for contents

perfumes, preservation agents (BENZISOTHIAZOLINONE, METHYLISOTHIAZOLINONE), 4-tert-butylcyclohexyl acetate	<5%

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

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· General information: No special measures required.
· 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. Then consult a doctor.
· After swallowing: If symptoms persist consult doctor.
· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
· **5.3 Advice for firefighters**
· Protective equipment: No special measures required.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
· **6.2 Environmental precautions:** Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.

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· **6.3 Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
· **6.4 Reference to other sections** No dangerous substances are released.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling** No special measures required.
· Information about fire - and explosion protection: No special measures required.

· **7.2 Conditions for safe storage, including any incompatibilities**
· Storage:
· Requirements to be met by storerooms and receptacles: No special requirements.
· Information about storage in one common storage facility: Not required.
· Further information about storage conditions: Protect from frost.
· Storage class: 10
· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**
· Ingredients with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· DNELs

67-63-0 propan-2-ol		
Oral	DNEL (Langzeit-wiederholt)	26 mg/kg bw/day (BEV)
Dermal	DNEL (Langzeit-wiederholt)	888 mg/kg bw/day (ARB)
		319 mg/kg bw/day (BEV)
Inhalative	DNEL (Langzeit-wiederholt)	500 mg/m³ Air (ARB)
		89 mg/m³ Air (BEV)

· PNECs

67-63-0 propan-2-ol	
PNEC (wässrig)	2,251 mg/l (KA)
	140.9 mg/l (MW)
	140.9 mg/l (SW)
	140.9 mg/l (WAS)
PNEC (fest)	28 mg/kg Trockengew (BO)
	552 mg/kg Trockengew (MWS)
	552 mg/kg Trockengew (SWS)

· Additional information: The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· Appropriate engineering controls No further data; see item 7.
· Individual protection measures, such as personal protective equipment
· General protective and hygienic measures: Do not eat, drink, smoke or sniff while working.

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Use skin protection cream for skin protection.
Clean skin thoroughly immediately after handling the product.

· Respiratory protection: Not necessary if room is well-ventilated.

· Hand protection
Preventive skin protection by use of skin-protecting agents is recommended.
After use of gloves apply skin-cleaning agents and skin cosmetics.
Skin protection agent recommendation for preventive skin shelter without use of protective gloves:
STOKODERM(http://www.stoko.com)
Skin protection agent recommendation for preventive skin shelter in application and combination of protective gloves:
STOKO EMULSION (http://www.stoko.com)
Skin protection recommendation for skin cleaning after product handling:
FRAPANTOL (http://www.stoko.com)
Skin protection agent recommendation for skin aftercare:
STOKO VITAN (http://www.stoko.com)
The protection gloves to be used have to comply with the specifications of the directive 89/686/EC and the directive derived decree EN374, respectively, e.g. the above listed protection glove type. The mentioned permeation times´ data were generated and verified with material samples of the recommended protection glove type in the scope of laboratory anylyses of the company KCL GmbH in compliance with EN374.
This recommendation refers exclusively to the material safety data sheet referenced product delivered by Akemi and the indicated field of application. In case of product dilution or in case of mixture with different substances or chemicals, and in condition of EN374 deviation the producer of CE-approved protection gloves must be contacted for detailed information (e.g., KCL GmbH, Germany, 36124 Eichenzell, internet: http://www.kcl.de).
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
Fluorocarbon rubber (Viton)
Butyl rubber, BR
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
Value for the permeation: Level $\leq$ 6, 480 min
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· For the permanent contact gloves made of the following materials are suitable:
Fluorocarbon rubber (Viton)
Vitoject (KCL, Art_No. 890)
Butyl rubber, BR
Butoject (KCL, Art_No. 897, 898)

· As protection from splashes gloves made of the following materials are suitable:
Fluorocarbon rubber (Viton)
Vitoject (KCL, Art_No. 890)
Butyl rubber, BR
Butoject (KCL, Art_No. 897, 898)
Nitrile rubber, NBR
Camatril (KCL, 730, 731, 732, 733)

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· Not suitable are gloves made of the following materials:	Leather gloves Strong material gloves
· Eye/face protection	Goggles recommended during refilling
· Body protection:	Apron

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· General Information	
· Colour:	Light yellow
· Odour:	Characteristic
· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	82 °C
· Lower and upper explosion limit	
· Lower:	2 Vol %
· Upper:	12 Vol %
· Flash point:	>55 °C
· Ignition temperature:	425 °C
· pH at 20 °C	7
· Viscosity:	
· Kinematic viscosity at 20 °C	11 s (DIN 53211/4)
· Dynamic:	Not determined.
· Solubility	
· water:	Fully miscible.
· Vapour pressure at 20 °C:	43 hPa
· Density and/or relative density	
· Density at 20 °C:	0.99 g/cm³

· **9.2 Other information**	
· Appearance:	
· Form:	Fluid
· Important information on protection of health and environment, and on safety.	
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Solvent content:	
· Organic solvents:	10.0 %
· Water:	85.7 %

· Information with regard to physical hazard classes
· Explosives
Void
· Flammable gases
Void
· Aerosols
Void
· Oxidising gases
Void
· Gases under pressure
Void

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· Flammable liquids

Void

· 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

· Desensitised explosives

Void

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.
· **10.2 Chemical stability**
· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions** No dangerous reactions known.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

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SECTION 11: Toxicological information

· **11.1 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:

67-63-0 propan-2-ol		
Oral	LD50	>2,000 mg/kg (rabbit)
		5,840 mg/kg (rat) (OECD 401)
	NOAEL-Werte	400 mg/kg (rat)
Dermal	LD50	13,900 mg/kg (rabbit) (OECD 402)
Inhalative	LC50/8h	47.5 ppm (rat)
	LC50/4 h	>25 mg/l (rat)
	LC50	25,000 mg/m3 (rat)
	LC50/48h	>100 mg/l (Leuciscus idus)
2682-20-4 2-methyl-2H-isothiazol-3-one		
Oral	LD50	120 mg/kg (rat)
Dermal	LD50	242 mg/kg (rat)
Inhalative	LC50/4 h	0.11 mg/l (rat)

· Skin corrosion/irritation Based on available data, the classification criteria are not met.
· Serious eye damage/irritation Causes serious eye irritation.
· Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
· Germ cell mutagenicity Based on available data, the classification criteria are not met.
· Carcinogenicity Based on available data, the classification criteria are not met.
· Reproductive toxicity Based on available data, the classification criteria are not met.
· STOT-single exposure Based on available data, the classification criteria are not met.
· STOT-repeated exposure Based on available data, the classification criteria are not met.
· Aspiration hazard Based on available data, the classification criteria are not met.

· **11.2 Information on other hazards**

· Endocrine disrupting properties

118-58-1	benzyl salicylate	List II

SECTION 12: Ecological information

· **12.1 Toxicity**

· Aquatic toxicity:

67-63-0 propan-2-ol	
EC50/24h	9,714 mg/l (daphnia magna)
EC50	>1,000 mg/l (BES)
LC50/24h	9,714 mg/l (daphnia magna)
EC50/15min	22,000 mg/l (Photobac. phosphoreum)
IC50/72h	>1,000 mg/l (Desmodesmus subspicatus)
EC10/18h	5,175 mg/l (pseudomonas putida) (DIN 38412)
EC50/48h	13,299 mg/l (daphnia magna)
EC50/72h	>1,000 mg/l (green alge)
	>100 mg/l (Scenedesmus subspicatus)
LC50/96h	6,550 mg/l (piscis)
	9,640 mg/l (Pimephales promelas)

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2682-20-4 2-methyl-2H-isothiazol-3-one	
EC50	34.6 mg/l (BES) (DIN 38412-3)
EC50/48h	0.93-1.9 mg/l (daphnia magna)
ErC50/72h	0.1 mg/l (Skeletonema costatum (Kieselalge))
EC50/16h	2.3 mg/l (pseudomonas putida)
EC20/3h	2.8 mg/l (BES) (DIN 38412-3)
NOEC/21d	0.04 mg/l (daphnia magna)
EC50/72h	0.157 mg/l (Pseudokirchneriella subcapitata)
LC50/96h	4.77-6 mg/l (rainbow trout)

· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **12.5 Results of PBT and vPvB assessment**
· PBT: Not applicable.
· vPvB: Not applicable.
· **12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.
· **12.7 Other adverse effects**
· Additional ecological information:
· General notes: Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· Recommendation Smaller quantities can be disposed of with household waste.

· European waste catalogue	
08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 04 00	wastes from MFSU of adhesives and sealants (including waterproofing products)
08 04 15*	aqueous liquid waste containing adhesives or sealants containing organic solvents or other hazardous substances

· Uncleaned packaging:
· Recommendation: Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.
· Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· **14.1 UN number or ID number**
· ADR, ADN, IMDG, IATA Void

· **14.2 UN proper shipping name**
· ADR, ADN, IMDG, IATA Void

· **14.3 Transport hazard class(es)**
· ADR, ADN, IMDG, IATA
· Class Void

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· **14.4 Packing group**	
· ADR, IMDG, IATA	Void
· **14.5 Environmental hazards:**	
· Marine pollutant:	No
· **14.6 Special precautions for user**	Not applicable.
· **14.7 Maritime transport in bulk according to IMO instruments**	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Void

SECTION 15: Regulatory information

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

· Directive 2012/18/EU
· Named dangerous substances - ANNEX I: None of the ingredients is listed.
· REGULATION (EC) No 1907/2006 ANNEX XVII: Conditions of restriction: 3

· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

· REGULATION (EU) 2019/1148

· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

· National regulations:

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

· Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is listed.

· VOC EU 107.3 g/l
· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 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: Laboratory
· Date of previous version: 24.08.2022
· Version number of previous version: 2

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· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
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
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
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)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 2: Acute toxicity – Category 2
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1A: Skin sensitisation – Category 1A
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1