



SAFETY DATA SHEET

KLM017 DESTIX MedN fluid

SDS according to Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex II-EU

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

Date issued 03.02.2015

1.1. Product identifier

Product name KLM017 DESTIX MedN fluid
 Article no. L03000000159
 Brand DESTIX MedN DX3210, DX3220, DX3230

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

Product group Disinfectant.
 Relevant identified uses SU20 Health services
 SU21 Consumer uses: Private households (= general public = consumers)
 SU22 Professional uses: publicly accessible (administration, education, entertainment, services, craftsmen)
 PC8 Biocidal Products (e.g. Disinfectants, pest control)
 PROC10 Roller application or brushing
 ERC11B Wide dispersive indoor use of long-life articles and materials with high or intended release (including abrasive processing)
 Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Company name Kleinmann GmbH
 Postal address Am Trieb 13
 Postcode D-72820
 City Sonnenbuehl
 Country Germany
 Tel +49(0)7128/9292-15
 Fax +49(0)7128/9292-415
 E-mail chemie@kleinmann.net
 Website <http://www.kleinmann.net>
 Enterprise no. DE 146 487

1.4. Emergency telephone number

Emergency telephone 8-12, Mo.-Fr.:+49(0)7128/9292-15

SECTION 2: Hazards identification

2.1. Classification of substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP/GHS] Flam. Liq. 3;H226;
 Eye Irrit. 2;H319;

2.2. Label elements

Hazard Pictograms (CLP)



Composition on the label	Ethanol:40 g, Propan-2-ol:9,5 g, Butan-1-ol:2 g, / 100 g
Signal word	Warning
Hazard statements	H226 Flammable liquid and vapour. H319 Causes serious eye irritation.
Precautionary statements	P102 Keep out of reach of children. P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P280 Wear protective gloves/protective clothing/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. P310 Immediately call a POISON CENTER or doctor/physician.

2.3. Other hazards

Description of hazard	The product is flammable, and heating may generate vapours which may form explosive vapour/air mixtures. Irritating to eyes.
Environmental effects	This product does not contain any PBT or vPvB substances.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents
Ethanol	CAS no.: 64-17-5 EC no.: 200-578-6 Index no.: 603-002-00-5 Synonyms: Ethanol	Flam. Liq. 2; H225	30 - 50 %
Propan-2-ol	CAS no.: 67-63-0 EC no.: 200-661-7 Index no.: 603-117-00-0 Synonyms: Propan-2-ol	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	5 - 10 %
Butan-1-ol	CAS no.: 71-36-3 EC no.: 200-751-6 Index no.: 603-004-00-6 Synonyms: Butan-1-ol	Flam. Liq. 3; H226 Acute tox. 4; H302 STOT SE 3; H335 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H336	1 - 5 %
Didecyldimethylammonium chloride	CAS no.: 7173-51-5 EC no.: 230-525-2 Index no.: 612-131-00-6	Acute tox. 4; H302 Skin Corr. 1B; H314	< 1 %
Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chloride	CAS no.: 85409-23-0 EC no.: 287-090-7	C,N; R22,R34,R50 Acute tox. 4;H302; Skin Corr 1B;H314; Aquatic Acute 1;H400;	< 1 %
Quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides	CAS no.: 63449-41-2 EC no.: 264-151-6 Index no.: 612-140-00-5	Acute tox. 4; H312 Acute tox. 4; H302 Skin Corr. 1B; H314 Aquatic Acute 1; H400	< 1 %
Substance comments	>30%: Disinfectant <5%: cationic surfactants		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Remove affected person from source of contamination.
Inhalation	Fresh air. Get medical attention if any discomfort continues.
Skin contact	Rinse with water.
Eye contact	Important! Immediately rinse with water for at least 15 minutes. May cause permanent damage if eye is not immediately irrigated. Make sure to remove any contact lenses from the eyes before rinsing. Immediately transport to hospital or eye specialist. Continue flushing during transport to hospital.
Ingestion	Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Get medical attention if any discomfort continues.
Recommended personal protective equipment for first aid responders	Wear necessary protective equipment. For personal protection, see section 8.

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

Acute symptoms and effects	As described in section 2.2 and 2.3.
Delayed symptoms and effects	Inhalation of high vapour concentrations may cause symptoms such as mild irritation, headache, dizziness, fatigue, nausea and in serious cases unconsciousness.

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

Other Information	In case of unconsciousness or eye contact: Immediately call a doctor / ambulance. Show this safety data sheet.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Improper extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	The product is flammable, and heating may generate vapours which may form explosive vapour/air mixtures. Closed containers can burst violently when heated, due to excess pressure build-up. During fire, gases hazardous to health may be formed.
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5.3. Advice for firefighters

Personal protective equipment	Wear necessary protective equipment. For personal protection, see section 8.
Fire fighting procedures	Reference is made to the company fire procedure. If risk of water pollution occurs, notify appropriate authorities. Water spray may be used to flush spills away from exposures and dilute spills to non-flammable mixtures. Containers close to fire should be removed immediately or cooled with water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures	Wear necessary protective equipment. For personal protection, see section 8. Do not smoke, use open fire or other sources of ignition.
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6.2. Environmental precautions

Environmental precautionary measures	Avoid discharge into water courses or onto the ground. Contact local authorities in case of spillage to drain/aquatic environment.
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6.3. Methods and material for containment and cleaning up

Cleaning method	Absorb spillage with non-combustible, absorbent material. Wash contaminated area with water.
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6.4. Reference to other sections

Other instructions	See section 8 and section 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling Avoid inhalation of vapours/spray and contact with skin and eyes. Keep away from heat, sparks and open flame.

7.2. Conditions for safe storage, including any incompatibilities

Storage Store in tightly closed original container in a well-ventilated place. Do not store near heat sources or expose to high temperatures.

Other Information Follow rules for flammable liquids. Lagerklasse: 3A

Conditions for safe storage

Storage Temperature Value: -5-25 °C.

Storage Stability Durability: 24 months.

7.3. Specific end use(s)

Specific use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure limit values

Substance	Identification	Value	TWA Year
Ethanol	CAS no.: 64-17-5	8-hour TWA: 1000 ppm	2011
	EC no.: 200-578-6	8-hour TWA: 1920 mg/m ³	
	Index no.: 603-002-00-5		
	Synonyms: Ethanol		
Propan-2-ol	CAS no.: 67-63-0	8-hour TWA: 400 ppm	2011
	EC no.: 200-661-7	8-hour TWA: 999 mg/m ³	
	Index no.: 603-117-00-0	15 min.: 500 ppm	
	Synonyms: Propan-2-ol	15 min.: 1250 mg/m ³	
Butan-1-ol	CAS no.: 71-36-3	15 min.: 50 ppm	2011
	EC no.: 200-751-6	15 min.: 154 mg/m ³	
	Index no.: 603-004-00-6		
	Synonyms: Butan-1-ol		

DNEL / PNEC

Summary of risk management measures, human Data lacking.

Summary of risk management measures, environment Data lacking.

8.2. Exposure controls

Recommended monitoring procedures Not known.

Limitation of exposure on workplace Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Safety signs



Respiratory protection

Respiratory protection If ventilation is insufficient, use a respirator with type A (EN 141) gas filter.

Hand protection

Hand protection	Chemical resistant gloves required for prolonged or repeated contact.
Eye / face protection	
Eye protection	Wear approved chemical safety goggles where eye exposure is reasonably probable.
Skin protection	
Skin protection (except hands)	No special precautions.
Thermal hazards	
Thermal hazards	See section 5.
Appropriate environmental exposure control	
Environmental exposure controls	See section 6.
Other Information	
Other Information	DO NOT SMOKE IN WORK AREA!

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Fluid.
Colour	Colourless.
Odour	Odour of alcohol.
Comments, Odour limit	No data recorded.
pH (as supplied)	Value: ~ 8,0
Comments, pH (aqueous solution)	Not relevant.
Comments, Melting point / melting range	Not relevant.
Comments, Boiling point / boiling range	No data recorded.
Flash point	Value: 24 °C
Comments, Evaporation rate	No data recorded.
Flammability (solid, gas)	No data recorded.
Comments, Explosion limit	No data recorded.
Comments, Vapour pressure	No data recorded.
Comments, Vapour density	No data recorded.
Specific gravity	Value: ~ 0,9 kg/l.
Solubility description	Completely soluble in water.
Comments, Partition coefficient: n-octanol / water	No data recorded.
Comments, Spontaneous combustability	No data recorded.
Comments, Viscosity	Not relevant.
Explosive properties	Not explosive.
Oxidising properties	Does not meet the criteria for oxidising.

9.2. Other information

Physical hazards

Comments, Permeation rate	Not relevant.
Comments, Pour point	Not relevant.
Comments, Particle size	Not relevant.
Comments, Critical pressure	Not relevant.
Comments, Expansion coefficient	Not relevant.
Comments, Redox potential	Not relevant.
Comments, Radical formation potential	Not relevant.
Comments, Photocatalytic properties	Not relevant.

Other physical and chemical properties

Comments No data recorded.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions See section 10.4 and section 10.5.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid No information required.

10.6. Hazardous decomposition products

Hazardous decomposition products During fire, toxic gases (CO, CO₂) are formed.

Other information

Other Information No data recorded.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological Information:

Other toxicological data Toxicological tests on the product has not been performed.

Toxicological data for substances

Substance No data available for ingredient(s).

LD50 oral Value: - -
Animal test species: -
Duration: -
Comments: -

Other information regarding health hazards

General No information about adverse effects due to exposure.

Potential acute effects

Inhalation In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects. Aerosols irritate the respiratory system, and may cause coughing and difficulties in breathing.

Skin contact Prolonged or repeated skin contact may cause cracked and dry skin.

Eye contact May cause permanent damage to eyes, especially if the product is not washed away IMMEDIATELY.

Ingestion Ingestion may cause irritation of the gastrointestinal tract, vomiting and diarrhoea.

Symptoms of Exposure

Symptoms of overexposure High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting.

SECTION 12: Ecological information

12.1. Toxicity

Aquatic, comments No data available for the product.

Toxicological data for substances

Substance No data available for ingredient(s).

Aquatic, comments -

12.2. Persistence and degradability

Persistence and degradability The product is expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility Not regarded as dangerous for the environment. The product is miscible with water. May spread in water systems.

12.5. Results of PBT and vPvB assessment

PBT assessment results Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Other adverse effects / Remarks Water hazard classification 1

Environmental details, summation For this product no classification is required for environmental hazards.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal Dispose of waste and residues in accordance with local authority requirements.

Product classified as hazardous waste Yes

Packaging classified as hazardous waste Yes

EWC waste code EWC: 0706 wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics

Other Information When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste code applies to product remnants in pure form.

SECTION 14: Transport information

14.1. UN number

ADR 1987

RID 1987

IMDG 1987

ICAO/IATA 1987

14.2. UN proper shipping name

ADR ALCOHOLS, N.O.S.

RID ALCOHOLS, N.O.S.

IMDG ALCOHOLS, N.O.S.

ICAO/IATA ALCOHOLS, N.O.S.

14.3. Transport hazard class(es)

ADR 3

Hazard no. 33

RID 3

IMDG 3

ICAO/IATA 3

14.4. Packing group

ADR II

RID II

IMDG II

ICAO/IATA II

14.5. Environmental hazards

14.6. Special precautions for user

EmS F-E, S-D

Special safety precautions for user Not relevant.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Additional information.

Additional information. Not relevant.

SECTION 15: Regulatory information

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

EEC-directive	Dangerous Preparations Directive 1999/45/EC. Dangerous Substance Directive 67/548/EEC.
Legislation and regulations	The Management of Health and Safety at Work Regulations 1999 (SI 1999 No. 3242). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895). The Cosmetic Products (Safety) Regulations 2003 (S.I 2003 No. 835).

15.2. Chemical safety assessment

Chemical safety assessment performed	No
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SECTION 16: Other information

Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]	Flam. Liq. 3; H226; Eye Irrit. 2; H319;
List of relevant R-phrases (under headings 2 and 3).	R34 Causes burns. R50 Very toxic to aquatic organisms. R22 Harmful if swallowed.
List of relevant H-phrases (Section 2 and 3).	H318 Causes Serious eye damage. H302 Harmful if swallowed. H226 Flammable liquid and vapour. H336 May cause drowsiness or dizziness. H400 Very toxic to aquatic life. H315 Causes skin irritation. H335 May cause respiratory irritation. H314 Causes severe skin burns and eye damage. H312 Harmful in contact with skin. H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation.
Training advice	No particular training or education is required but the user must be familiar with this SDS. Users must be carefully instructed in the proper work procedure, the dangerous properties of the product and the necessary safety instructions.
Information which has been added, deleted or revised	New safety data sheet.
Version	2
Responsible for safety data sheet	Kleinmann GmbH