

Product: actisolve® intrusafe eco

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) Article 31, Annex II as amended

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name: actisolve® intrusafe eco
UFI: 56YW-H8DS-9000-UQ30
Substance type: Mixture
Use of the substance/mixture: Instrument disinfectant

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

Identified uses: actisolve® intrusafe eco is an economical concentrate for the manual disinfection of medical and dental instruments made of stainless steel, tungsten carbide, diamond grit, titanium, silicon carbide, and silicone. Also suitable for alcohol-sensitive rotary instruments. actisolve® intrusafe eco is free of aldehydes, phenols and chlorine.

Uses advised against: Do not use for purposes other than those prescribed.

Recommended restrictions on use: For professional use only.

1.3 Details of the supplier of the safety data sheet

Manufacturer

Address: United Disinfectant Manufacturers AG
Dr. Grass-Strasse 12
9490 Vaduz
Liechtenstein

Telephone: +423 237 15 03

Email: info@udm.li

Website: www.udm.li

Downstream user/importer/distributor

Address: United Disinfectant Manufacturers AG
Dr. Grass-Strasse 12
9490 Vaduz
Liechtenstein

Telephone: +423 237 15 03

Email: info@udm.li

Website: www.udm.li

Person responsible for preparing the SDS

Lee Moi Wong | Research & Development | Chief Research Officer (CRO)
Telephone: +423 237 15 03
Email: info@udm.li

1.4 Emergency telephone number

Emergency telephone number: +49 30 192 40

* Please check the above numbers regularly

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SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Hazard type	Hazard category	Hazard statement code(s)	Classification procedure
Health hazard	Skin Corr. 1C	H314	Harmonised (legal) classification.
Health hazard	Eye Dam. 1	H318	Harmonised (legal) classification.
Health hazard	STOT RE 2	H373	Harmonised (legal) classification.
Environmental hazard	Aquatic Acute 1	H400	Harmonised (legal) classification.
Environmental hazard	Aquatic Chronic 2	H411	Harmonised (legal) classification.

The full text for all H-statements is displayed in section 16.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms:



GHS05



GHS08



GHS09

Signal word:	Danger	
Hazard statements:	H314	Causes severe skin burns and eye damage.
	H373	

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

See below.

3.2 Mixtures

Classification according to Regulation (EC) No 1272/2008

Substance name	Identification	Classification	SCL, M-factor, ATE	Concentration
N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine	CAS no.: 2372-82-9 EC no.: 219-145-8 Index no.: No data available. REACH no.: 01-2119980592-29-0000	Acute Tox. 3, H301 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Skin Corr. 1B, H314 STOT RE 2, H373	M = 10	2.5% - < 5%
2-Amino-2-methylpropanol	CAS no.: 124-68-5 EC no.: 204-709-8 Index no.: 603-070-00-6 REACH no.: 01-2119475788-16-0000	Aquatic Chronic 3, H412 Eye Irrit. 2, H319 Skin Irrit. 2, H315	No data available.	1% - < 2.5%
Didecyltrimethylammonium chloride	CAS no.: 7173-51-5 EC no.: 230-525-2 Index no.: 612-131-00-6 REACH no.: 01-2119945987-15-0000	Acute Tox. 4, H302 Skin Corr. 1B, H314	No data available.	1% - < 2.5%

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SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Carbon dioxide. Dry chemical powder. Water spray. Alcohol resistant foam.
Unsuitable extinguishing media: Full water jet.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting: In case of a fire toxic gases can be generated; do not inhale gases/smoke.
Hazardous combustion products: No data available.

5.3 Advice for firefighters

Special protective equipment for firefighters: Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (BS EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (BS EN 137).
Additional information: In case of fire or heating do not breathe fumes/vapours. No action shall be taken involving any personal risk or without suitable training. Contaminated firefighting water and fire residues must be disposed of in accordance with the local regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Use personal protective equipment (section 8). Ensure adequate ventilation. No action shall be taken involving any personal risk or without suitable training. Prevent access to unprotected personnel. Evacuate the danger zone. Do not breathe vapour or mist. Avoid contact with skin, eyes and clothing.
Advice for emergency responders: Use personal protective equipment.

6.2 Environmental precautions

Do not allow to enter drains or waterways. Prevent product from getting into subsoil/soil.

6.3 Methods and material for containment and cleaning up

Stem the spill if this does not pose risks. Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor. Prevent release into the sewer, water, basements or confined areas. Ventilate the premises

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fire and explosion:

Advice on general occupational hygiene:

Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Do not breathe vapours/mist. Avoid contact with skin, eyes and clothes. Remove contaminated clothes and wash them before reuse. Wear suitable protective equipment; see section 8.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage room and containers:

Close opened containers after use. Put the containers upright to prevent from leaking. Do not store in unlabelled containers.

Further information about storage conditions:

Keep in a cool, dry and well ventilated place. Keep away from food, drink and animal feeding stuffs. Store only in original container.

Stocking with different products:

Store separately from beverages, food and feed. Store separately from strong acids, bases and oxidation agents.

7.3 Specific end use(s)

See identified uses in section 1.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limits

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

Biological limit values

No biological exposure limits noted for the ingredient(s).

DNEL values

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2-Amino-2-methylpropanol CAS no.:124-68-5	Fresh water	188 µg/L
	Marine water	18.8 µg/L
	Intermittent release (fresh water)	1.88 mg/L
	Sewage treatment plant	10 mg/L
	Sediment (fresh water)	710 µg/kg dw
	Sediment (marine water)	71 µg/kg dw
	Soil	30 µg/kg dw
Didecyltrimethylammonium chloride CAS no.:7173-51-5	Fresh water	1.1 µg/L
	Marine water	110 ng/L
	Intermittent release (fresh water)	210 ng/L
	Intermittent release (marine water)	21 ng/L
	Sewage treatment plant	140 µg/L
	Sediment (fresh water)	61.86 mg/kg dw
	Sediment (marine water)	6.186 mg/kg dw
	Soil	1.4 mg/kg dw

8.2 Exposure controls

Appropriate engineering controls

See section 7. No additional measures necessary.

Individual protection measures

Eye/face protection:	Wear protective glasses (EN 166) during refilling and/or preparation of working solution and during use.
Hand protection:	Short-term contact: Gloves with Protection Index of at least Class

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Lower explosion limit:	Not applicable.
Upper explosion limit:	Not applicable.
Flash point:	No data available.
Auto-ignition temperature:	Not self-igniting.
Decomposition temperature:	No data available.
pH-value (undiluted product):	11.0 - 12.5
pH-value (diluted product):	10.0 - 11.5 (2%)
Kinematic viscosity:	No data available.
Solubility:	Completely miscible with water.
Partition coefficient n-octanol/water:	Not applicable.
Vapour pressure at 50 °C:	No data available.
Density:	1.00 g/cm ³
Relative density:	1.00
Relative vapour density at 20 °C:	No data available.

9.2 Other information

Oxidising properties:	Not oxidising.
Explosive properties:	Product is not explosive.
Evaporation rate:	No data available.
Miscibility:	Completely miscible with water.
Other information:	No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

The mixture is not reactive.

10.2 Chemical stability

Stable at normal temperatures and pressure at least up to the expiry date printed on the container. Slight changes in colour or in odour, which do not influence product properties, may appear close to the expiry date.

10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

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11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Inhalation:	Information on effects are given below.
Skin contact:	Information on effects are given below.
Eye contact:	Information on effects are given below.
Ingestion:	Information on effects are given below.

Acute toxicity

Mixture:	ATEmix: LD50 (rat, ingestion) > 2000 mg/kg
Component:	No data available.

Skin corrosion/irritation

Mixture:	Causes burns.
Component:	No data available.

Serious eye damage/irritation

Mixture:	Causes serious eye damage.
Component:	No data available.

Respiratory or skin sensitization

Mixture:	The product is not classified as sensitising.
Component:	No data available.

Germ cell mutagenicity

Mixture:	Not a mutagen. Does not contain ingredients with known mutagenic properties.
Component:	No data available.

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Component: No data available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

The release of the diluted ready-to-use solution of this product is not expected to have any ecotoxic effects. The concentrated solution can have prolonged and widespread toxic effects on aquatic and terrestrial organisms. The release of concentrated solution may negatively affect the function of sewage treatment plants. There is no data available from ecotoxicological tests regarding the entire product. The ecotoxicological risk has been estimated based on available data on product ingredients and concentrations, where available.

12.2 Persistence and degradability

The product ingredients possess good biodegradation properties. The surfactants included in the product comply with the requirements for the biological decomposition of Regulation (EC) No. 648/2004 on detergents. Based on available data, the biodegradability in sewage treatment plants can be categorized as high. High product concentrations can affect the biodegradability potential of the activated sludge. Obtain the consent of the local authorities before discharging the concentrated solution to wastewater treatment plants.

Substance name	Biodegradation	Basis	Remark
N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine	>70%	OECD 301 D	No data available.
2-Amino-2-methylpropanol	Ca. 50%	OECD 301 B, 28 D	No data available.
Didecyltrimethylammonium chloride	Ca. 60%	OECD 301 D	Readily biodegradable.

12.3 Bioaccumulative potential

Mixture: Based on available data, no product ingredient is expected to exhibit bioaccumulative potential.

Component: No data available.

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SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal methods:

Dispose of this product according to national and regional provisions. Waste code EWC Nr: 070699 (Group: waste material of MFSU from fats, lubricants, soaps, detergents, disinfectants and personal protection products). The correctly diluted ready-to-use solution of this product can be disposed of via the sewage system. Small amounts of the product (up to about 100 ml per day) can be disposed of via the sewage system after dilution 1:30 with tap water.

Contaminated packaging:

Empty packaging can be treated like household waste. Handle the packaging containing the product in the same way as the product itself. Where available, references to local regulations regarding disposal are given in section 15 of the SDS. The user has sole responsibility for acquaintance and compliance with the applicable regulations.

SECTION 14: TRANSPORT INFORMATION

Land transport (ADR/ADN/RID)

14.1 UN number

UN 1903

14.2 UN proper shipping name

DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine, Didecyldimethylammonium chloride)

14.3 Transport hazard class(es)

8

14.4 Packing group

III | Danger label: 8 | LQ: 5 L

14.5 Environmental hazards

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14.4 Packing group

III | Danger label: 8 | LQ: 5 L

14.5 Environmental hazards

Environmental hazards: Yes
Marine pollutant: Yes

14.6 Special precautions for user

See sections 6 to 8.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

Air transport (IATA)

14.1 UN number

UN 1903

14.2 UN proper shipping name

DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine, Didecyltrimethylammonium chloride)

14.3 Transport hazard class(es)

8

14.4 Packing group

III | Danger label: 8 | LQ: 5 L

14.5 Environmental hazards

Environmental hazards: Yes

14.6 Special precautions for user

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Indication of changes

1.3 Details of the supplier of the safety data sheet - Updated.

Abbreviations and acronyms

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
ASTM - American Society for Testing and Materials
AwSV - Ordinance on facilities for handling substances that are hazardous to water
BOD - Biochemical Oxygen Demand
c.c. - Closed cup
CAS - Chemical Abstract Services
CESIO - European Committee of Organic Surfactants and their Intermediates
COD - Chemical Oxygen Demand
DMEL - Derived Minimum Effect Level
DNEL - Derived No Effect Level
EbC50 - Median concentration in terms of reduction of growth
EC - Effective concentration
EINECS - European Inventory of Existing Commercial Chemical Substances
EN - European Norm
ErC50 - Median concentration in terms of reduction of growth rate
GGVSEB - German ordinance for road, rail and inland waterway transportation of dangerous goods
GGVSee - German ordinance for sea transportation of dangerous goods
GLP - Good Laboratory Practice
GMO - Genetic Modified Organism
IATA - International Air Transport Association
ICAO - International Civil Aviation Organization
IMDG - International Maritime Dangerous Goods
ISO - International Organization For Standardization
LD/LC - Lethal dose/concentration
LOAEL - Lowest Observed Adverse Effect Level
LOEL - Lowest Observed Effect Level
LQ - Limited Quantity
M-Factor - Multiplying factor
NOAEL - No Observed Adverse Effect Level
NOEC - No Observed Effect Concentration
NOEL - No Observed Effect Level
o.c. - Open cup
OECD - Organisation for Economic Cooperation and Development
OEL - Occupational Exposure Limit
PBT - Persistent, bioaccumulative, toxic
PNEC - Predicted No Effect Concentration
REACH - REACH registration
RID - Convention concerning International Carriage by Rail
SVHC - Substances of Very High Concern
TA - Technical Instructions
TRGS - Technical Rules for Hazardous Substances
vPvB - Very persistent, very bioaccumulative
WGK - Water Hazard Class

Key literature references and sources for data

No data available.

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Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard category	Hazard statement code(s)	Classification procedure
Skin Corr. 1C	H314	Harmonised (legal) classification.
Eye Dam. 1	H318	Harmonised (legal) classification.
STOT RE 2	H373	Harmonised (legal) classification.
Aquatic Acute 1	H400	Harmonised (legal) classification.
Aquatic Chronic 2	H411	Harmonised (legal) classification.

List of relevant phrases

- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

Training information

Comply with national laws regulating employee instruction.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.