

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 09-Feb-2015

Print date: 05-Jan-2018

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

1.1. Product identifier

Trade name/designation:

Actoderm®

Article No.:

06.2501.

Additional information:

E-mail (competent person): info@actogmbh.com;

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

Use of the substance/mixture:

Hand and Skin Disinfectant

Relevant identified uses:

Sector of uses [SU]

SU 20: Health services

Product Categories [PC]

PC 8: Biocidal product

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

ACTO GmbH

Quality Management

Büchnerstr. 11

38118 Braunschweig

Germany

Telephone: (+49) (0) 531-239 508-0

Telefax: (+49) (0) 531-239 508-11

E-mail: info@actogmbh.com

Website: http://www.actogmbh.com

1.4. Emergency telephone number

No data available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]:

Hazard classes and hazard categories	Hazard statements	Classification procedure
flammable liquids (<i>Flam. Liq. 2</i>)	H225: Highly flammable liquid and vapour.	
Serious eye damage/eye irritation (<i>Eye Irrit. 2</i>)	H319: Causes serious eye irritation.	
STOT-single exposure (<i>STOT SE 3</i>)	H336: May cause drowsiness or dizziness.	

Additional information:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:



GHS02
Flame



GHS07
Exclamation mark

Signal word: Danger

Hazard components for labelling:

Isopropanol

hazard statements for physical hazards

H225	Highly flammable liquid and vapour.
------	-------------------------------------

hazard statements for health hazards

H319	Causes serious eye irritation.
------	--------------------------------

H336	May cause drowsiness or dizziness.
------	------------------------------------

Precautionary statements

P102	Keep out of reach of children.
------	--------------------------------

Precautionary statements Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
------	--

P211	Do not spray on an open flame or other ignition source.
------	---

P233	Keep container tightly closed.
------	--------------------------------

Precautionary statements Response

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
--------------------	--

P312	Call a POISON CENTER/doctor/... if you feel unwell.
------	---

P337 + P313	If eye irritation persists: Get medical advice/attention.
-------------	---

Precautionary statements Disposal

P501	Dispose of contents/container to
------	---------------------------------------

2.3. Other hazards

Adverse physicochemical effects:

Gases/vapours, flammable

Adverse human health effects and symptoms:

May cause sensitisation especially in sensitive humans.

Other adverse effects:

No information available.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Description:

Aqueous solution

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Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 67-63-0 EC No.: 200-661-7 REACH No.: 01-2119457558-25-0000	propan-2-ol STOT SE 3, Flam. Liq. 2, Eye Irrit. 2 Danger H225-H319-H336	62.8 Wt %
CAS No.: 112-34-5 EC No.: 203-961-6	2-(2-butoxyethoxy)ethanol Eye Irrit. 2 Warning H319	0.12 Wt %

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Following inhalation:

Remove casualty to fresh air and keep warm and at rest. If unconscious place in recovery position and seek medical advice. In case of irregular breathing or respiratory arrest provide artificial respiration.

In case of skin contact:

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. In case of skin irritation, consult a physician.

IF ON CLOTHING: Take off contaminated clothing.

After eye contact:

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion:

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Caution if victim vomits: Risk of aspiration!

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

Drowsiness Made worse through the drinking of alcohol beverages In rare cases the product can cause temporary erythema of the skin.

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

You can refer to data sources in section 16 to find detailed toxicity information of each component.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Carbon dioxide (CO₂) Dry sand Water spray Water mist alcohol resistant foam Extinguishing powder

Unsuitable extinguishing media:

Strong water jet

5.2. Special hazards arising from the substance or mixture

Carbon monoxide Carbon dioxide (CO₂)

5.3. Advice for firefighters

Standard procedure for chemical fires. In case of fire and/or explosion do not breathe fumes. Use appropriate respiratory protection.

5.4. Additional information

Move undamaged containers from immediate hazard area if it can be done safely. Heating causes rise in pressure with risk of bursting. Fight fire with normal precautions from a reasonable distance. .

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Remove all sources of ignition. Provide adequate ventilation.

6.1.2. For emergency responders

Personal protection equipment:

Wear suitable protective clothing, gloves and eye/face protection.

6.2. Environmental precautions

Eliminate leaks immediately.

6.3. Methods and material for containment and cleaning up

For cleaning up:

Make sure spills can be contained, e.g. in sump pallets or kerbed areas. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Wipe up with absorbent material (eg. cloth, fleece). Collect in closed containers for disposal.

6.4. Reference to other sections

No data available

6.5. Additional information

See protective measures under point 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Provide eye shower and label its location conspicuously. Handle in accordance with good industrial hygiene and safety practice.

Fire prevent measures:

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. When using do not smoke.

Fire class: B

Temperature class: T2

Explosion group: II A

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels:

Keep container tightly closed and in a well-ventilated place. Recommended storage temperature +5 - +30 °C. Keep away from sources of ignition - No smoking.

Hints on storage assembly:

Keep away from food, drink and animal feedingstuffs. Do not store together with: Oxidising agent, Radioactive substances, Explosive Stoffe.

Storage class: 3 - Flammable liquids

Further information on storage conditions:

Protect against direct sunlight.

Storage class: 3A

7.3. Specific end use(s)

Recommendation:

Biocides (e.g. disinfectants and parasiticide)

Hand and Skin Disinfectant

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① long-term occupational exposure limit value ② short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
TRGS 900 (DE)	propan-2-ol CAS No.: 67-63-0	① 200 ppm (500 mg/m ³) ② 400 ppm (1,000 mg/m ³)
TRGS 900 (DE)	2-(2-butoxyethoxy)ethanol CAS No.: 112-34-5	① 10 ppm (67 mg/m ³) ② 15 ppm (100.5 mg/m ³)
IOELV (EU)	2-(2-butoxyethoxy)ethanol CAS No.: 112-34-5	① 10 ppm (67.5 mg/m ³) ② 15 ppm (101.2 mg/m ³)

8.1.2. Biological limit values

Limit value type (country of origin)	Substance name	Limit value	① parameter ② Test material ③ Time of sampling ④ Remark
TRGS 903 (DE)	propan-2-ol CAS No.: 67-63-0	25 mg/L	① Aceton ② Urin ③ Expositionsende bzw. Schichtende
TRGS 903 (DE)	propan-2-ol CAS No.: 67-63-0	25 mg/L	① Aceton ② Blut ③ Expositionsende bzw. Schichtende

8.1.3. DNEL-/PNEC-values

No data available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Technical ventilation of workplace

8.2.2. Personal protection equipment

Eye/face protection:

Avoid contact with eyes. Suitable eye protection: Eye glasses Berufsgenossenschaftliche Regeln (BGR) 192

Skin protection:

Hand protection: Hand protection: not required.

Respiratory protection:

With correct and proper use, and under normal conditions, breathing protection is not required.

Other protection measures:

Protective clothing: lab coat

General health and safety measures: Do not eat, drink or smoke when using this product. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

8.2.3. Environmental exposure controls

Avoid release to the environment.

8.3. Additional information

No data available

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid

Colour: light blue

Odour: characteristic Alcohol

Safety relevant basis data

parameter		at °C	Method	Remark
pH	6 - 8	25 °C	gemessen mittels Glaselektrode. Die Prüfung erfolgte gemäß den Standardmethoden der DGHM zur Prüfung chemischer Desinfektionsverfahren (Stand 01. Sept. 2001) mhp Verlag GmbH.	
Melting point	<i>not determined</i>			von '-21 °C' bis '19'
Freezing point	<i>not determined</i>			
Initial boiling point and boiling range	<i>not determined</i>			von '80 °C' bis '85'
Decomposition temperature (°C):	<i>not determined</i>			
Flash point	18 - 20 °C			
Evaporation rate	<i>not determined</i>			
Ignition temperature in °C	<i>not determined</i>			von '>425 °C' bis ''
Upper/lower flammability or explosive limits	50 - 300 g/m ³			
Vapour pressure	40 - 42 hPa	20 °C		
Vapour density	<i>not determined</i>			
Relative density	0.85 - 0.9 g/cm ³	20 °C		
Bulk density	<i>not determined</i>			
Water solubility (g/L)	<i>not determined</i>			von '100%' bis ''
Partition coefficient: n-octanol/water	0.5			
Dynamic viscosity	9 mPa*s	20 °C		
Kinematic viscosity	<i>not determined</i>			

9.2. Other information

no data available

SECTION 10: Stability and reactivity

10.1. Reactivity

There is no dangerous reactions known when use as prescribed and with proper storage.

10.2. Chemical stability

There is no stability problems observed when use as prescribed and with proper storage.

10.3. Possibility of hazardous reactions

Reacts with : Oxidising agent, strong

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect against direct sunlight.

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10.5. Incompatible materials

Strong acid, Oxidising agent, strong

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

CAS No.	Substance name	Toxicological information
112-34-5	2-(2-butoxyethoxy)ethanol	LD₅₀ oral: 5,660 mg/kg (Ratte) LD₅₀ dermal: 2,700 mg/kg (Kaninchen)
67-63-0	propan-2-ol	LD₅₀ oral: ≥5,050 mg/kg (Ratte) OECD LD₅₀ dermal: ≥12,800 mg/kg (Kaninchen) OECD LC₅₀ inhalative: ≥4 mg/l (Ratte)

Acute oral toxicity:

The product has not been tested. The statement is derived from the properties of the single components.

Exposure route Inhalation, accidental ingestion and Eye contact.

Acute dermal toxicity:

The product has not been tested. The statement is derived from the properties of the single components.

Exposure route Inhalation, accidental ingestion and Eye contact.

Acute inhalation toxicity:

The product has not been tested. The statement is derived from the properties of the single components.

Exposure route Inhalation, accidental ingestion and Eye contact.

Respiratory or skin sensitisation:

In rare cases the product can cause temporary erythema of the skin.

Additional information:

Other information: Ingestion causes nausea, weakness and central nervous system effects. May cause sensitization by inhalation. Following inhalation: Headache Nausea

SECTION 12: Ecological information

12.1. Toxicity

CAS No.	Substance name	Toxicological information
67-63-0	propan-2-ol	LC₅₀: ≥9,640 mg/l 4 d (Fische) OECD 202 (Daphnien, Immobilisierung) EC₅₀: ≥1,400 mg/l 2 d (Daphnien) EC₅₀: ≥1,000 mg/l 4 d (Algen)

Aquatic toxicity:

Practically non-toxic

Terrestrial toxicity:

Practically non-toxic

12.2. Persistence and degradability

CAS No.	Substance name	Biodegradation	Remark
67-63-0	propan-2-ol	Yes, rapidly	

Additional information:

Further ecological information: Isopropanol Readily biodegradable (according to OECD criteria).

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12.3. Bioaccumulative potential

Partition coefficient: n-octanol/water:

0.5

Accumulation / Evaluation:

no data available

12.4. Mobility in soil

If product enters soil, it will be mobile and may contaminate groundwater.

12.5. Results of PBT and vPvB assessment

CAS No.	Substance name	Results of PBT and vPvB assessment
112-34-5	2-(2-butoxyethoxy)ethanol	—
67-63-0	propan-2-ol	—

This substance does not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

Further ecological information: slightly hazardous to water (WGK 1) Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Consult the appropriate local waste disposal expert about waste disposal. Material recycling possible.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product:

07 06 99 Wastes not otherwise specified

Waste code packaging:

15 01 10 packaging containing residues of or contaminated by dangerous substances

Waste treatment options

Appropriate disposal / Product:

Dispose of waste according to applicable legislation.





Appropriate disposal / Package:

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal. Completely emptied packages can be recycled.

13.2. Additional information

No data available

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN-No.			
UN 1219	UN 1219	UN 1219	UN 1219
14.2. UN proper shipping name			
ISOPROPANOL (ISOPROPYL ALCOHOL)	ISOPROPANOL (ISOPROPYL ALCOHOL)	ISOPROPANOL (ISOPROPYL ALCOHOL)	ISOPROPANOL (ISOPROPYL ALCOHOL)
14.3. Transport hazard class(es)			
 3	 3	 3	 3

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Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.4. Packing group			
II	II	II	II
14.5. Environmental hazards			
No	No	No	No
14.6. Special precautions for user			
Special provisions: Limited quantity (LQ): 1L-E2 Hazard identification number (Kemler No.): 3 Classification code: F1 tunnel restriction code: (D/E) Remark: ADR-Packing instructions: P001, IBC02, R001, MP19	Special provisions: Limited quantity (LQ): 1L-E2 Classification code: F1 Remark: Hazard label(s) 3	Special provisions: Limited quantity (LQ): 1L-E2; Packing instructions: P001, IBC02 EmS-No.: F-E; S-D Remark: Hazard label(s) 3	Special provisions: Limited quantity (LQ): Limited quantity (LQ) Y341 / 1L (Passenger) IATA-Packing instructions - Passenger 353 IATA-Maximum amount - Passenger: 5L IATA-Packing instructions - Cargo: 364 IATA-Maximum amount - Cargo: 60L Remark: Hazard label(s) 3

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

No data available

Additional information:

Disinfectant

SECTION 15: Regulatory information

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

15.1.1. EU legislation

Authorisations:

Regulation (EU) No. 528/2012 on biocides Registration number according to "Biozid-Meldeverordnung": N-55694

Other regulations (EU):

Classification according to Regulation (EC) No 1272/2008 [CLP], according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 453/2010). Classification according to Directive 67/548/EEC or 1999/45/EC Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

15.1.2. National regulations

[DE] National regulations

Restrictions of occupation

5 MuSchRiv. 22 JArbSchG. 4 MuSchRiv. TRGS 401 "Risks resulting from skin contact - identification, assessment, measures" TRGS 510 "Storage of hazardous substances in non-stationary containers" TRGS 903 TRGS 900 Minimum protective measures according to TRGS 500. Berufsgenossenschaftliche Informationen (BGI): 536, 564, 595, 621, 623 & 660. Berufsgenossenschaftliche Vorschriften (BGV). Berufsgenossenschaftliche Regeln (BGR): 180, 189, 190, 192, 195 & 197.

Annex Chemikalien-Verbotsverordnung (ChemVerbotsV)

Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work

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Störfallverordnung

Remark:

To follow: 12. BImSchV (Störfallverordnung)

Betriebsicherheitsverordnung (BetrSichV)

Highly flammable

Technische Anleitung Luft (TA-Luft)

Klasse 1:

III

Ziffer 1:

5.2.5

Remark:

TA-Luft Anteil 1: <75 %

Water hazard class (WGK)

WGK:

1 - Mildly water-hazardous

Source:

Anh. 4, Nr. 3

15.2. Chemical Safety Assessment

For this substance a chemical safety assessment has not been carried out.

15.3. Additional information

No further relevant information available

SECTION 16: Other information

16.1. Indication of changes

No data available

16.2. Abbreviations and acronyms

No data available

16.3. Key literature references and sources for data

You can refer to data sources below to find detailed toxicity information of each component.

<http://www.baua.de/>

<http://gestis.itrust.de/>

<http://www.gefahrstoff-info.de/>

<http://esis.jrc.ec.europa.eu/>

<http://www.echemportal.org/>

<http://www.gischem.de>

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

Classification according to Regulation (EC) No 1272/2008 [CLP]:

Hazard classes and hazard categories	Hazard statements	Classification procedure
flammable liquids (<i>Flam. Liq. 2</i>)	H225: Highly flammable liquid and vapour.	
Serious eye damage/eye irritation (<i>Eye Irrit. 2</i>)	H319: Causes serious eye irritation.	
STOT-single exposure (<i>STOT SE 3</i>)	H336: May cause drowsiness or dizziness.	

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

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

16.6. Training advice

Use biocides safely. Always read the label and product information before use.

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16.7. Additional information

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