

CHEMGENE HLD₄D DISINFECTANT

Rebreather Cleaning Instructions & Safety Data Sheet – V.09.2018

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

Chemgene HLD₄D Disinfectant has been chosen for its ability to destroy a wide variety of bacteria, viruses and fungi including Legionella, Tuberculosis and HIV.

Chemgene HLD₄D is supplied in a handy, 1 litre bottle. Simply remove the lid and squeeze the container until the required liquid volume fills the chamber at the top of the bottle. Use the scale on either side of the liquid chamber to measure out the desired amount of concentrate solution. Dilute the concentrate solution with the required amount of cold potable water for pouring, spraying or soaking the equipment.

Recommended dilution ratios for cleaning a rebreather:

Situation	Component	Dilution Ratio Water:Chemgene	Suggested Cleaning Method
Switching User	All	20:1	Soak for 10 mins & rinse through
Cleaning vomit, blood or excessive mucus	All	20:1	Soak for 10 mins & rinse through
End of days diving	Mouthpiece (including hoses)	100:1	Soak for 10 mins & rinse through
After 6 hours of use	All	100:1	Soak for 10 mins & rinse through
Prior to long term storage	All	100:1	Soak for 10 mins & rinse through
General surface cleaning	All	100:1	Wipe with soaked cloth

IMPORTANT: After disinfecting, always rinse with plenty of cold, potable water until all the disinfectant has been removed and allow to dry naturally.



Unit 2C, Water-Ma-Trout Industrial Estate, Helston, Cornwall, TR13 0LW
Tel: 00 (44) 1326 563834 Email: info@apdiving.com

SAFETY DATA SHEET

CHEMGENE HLD4D

Page: 1

Compilation date: 13/09/2018

Revision No: 1

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

1.1. Product identifier

Product name: CHEMGENE HLD4D

Product code: APXTM305

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

Use of substance / mixture: Specialised cleaner and disinfectant.

1.3. Details of the supplier of the safety data sheet

Company name: Ambient Pressure Diving Ltd

Water-Ma-Trout Ind. Est.

Helston

TR13 0LW

United Kingdom

Tel: +44 (0) 1326 568834

Email: info@apdiving.com

1.4. Emergency telephone number

Emergency tel: +44 (0) 1326 568834 (office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Aquatic Chronic 3: H412; Skin Corr. 1B: H314

Most important adverse effects: Causes severe skin burns and eye damage. Harmful to aquatic life with long lasting effects

2.2 Label Elements

Label elements:

Hazard Statements: H314: Causes severe skin burns and eye damage.

H412: Harmful to aquatic life with long lasting effects.

Hazard Pictograms: GHS05: Corrosion



Signal Words: Danger

Precautionary Statements: P102: Keep out of reach of children.

P260: Do not breathe spray.

P273: Avoid release to the environment.

P280: Wear protective gloves and eye protection.

SAFETY DATA SHEET
CHEMGENE HLD4D

Page: 2
[cont..]

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P313: Get medical advice/attention.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-14 (EVEN-NUMBERED)-ALKYLDIMETHYL, CHLORIDES

EINECS	CAS	PBT / WEL	CLP Classification	Percent
270-325-2	68424-85-1	-	Acute Tox. 4: H302; Skin Corr. 1B: H314; Aquatic Acute 1: H400	1-5%

BIS (3-AMINOPROPYL) DODECYLAMINE

-	2372-82-9	-	Skin Corr. 1B: H314; STOT RE 2: H373; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Acute Tox. 4: H302	1-5%
---	-----------	---	--	------

DIDECYLDIMETHYLAMMONIUM CHLORIDE

230-525-2	7173-51-5	-	Acute Tox. 4: H302; Skin Corr. 1B: H314	1-5%
-----------	-----------	---	---	------

ALCOHOLS C9-C11 ETHOXYLATED

-	68439-46-3	-	Acute Tox. 4: H302; Eye Dam. 1: H318	1-5%
---	------------	---	--------------------------------------	------

CHLORHEXIDINE DIGLUCONATE

-	18472-51-0	-	Aquatic Chronic 1: H410; Eye Dam. 1: H318	<1%
---	------------	---	---	-----

Contains: Benzalkonium chloride

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water. Take off immediately all contaminated clothing and wash before reuse. If irritation develops seek medical advice.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Rinse mouth and then drink plenty of water. Do not induce vomiting. Seek medical advice.

SAFETY DATA SHEET
CHEMGENE HLD4D

Page: 3

Inhalation: Remove victim to fresh air and seek medical attention if symptoms occur.

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

Skin contact: Blistering may occur. There may be mild irritation at the site of contact.

Eye contact: There may be pain and redness. The eyes may water profusely. There may be severe pain. May cause permanent damage.

Ingestion: Blistering may occur. There may be irritation and redness at the site of contact.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment: Eye bathing equipment should be available on the premises.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Not applicable.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Do not attempt to take action without suitable protective clothing - see section 8 of SDS.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Wash the spillage site with large amounts of water.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

7.3. Specific end use(s)

Specific end use(s): No data available.

SAFETY DATA SHEET
CHEMGENE HLD4D

Page: 4

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Respiratory protection not required. Use in a well ventilated area.

Hand protection: Nitrile gloves.

Eye protection: Safety glasses. Ensure eye bath is to hand.

Skin protection: Not applicable.

Environmental: No special requirement.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Colourless

Odour: Odourless

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: No data available.

Viscosity: No data available.

Boiling point/range°C: No data available.

Melting point/range°C: No data available.

Flammability limits %: lower: No data available.

upper: No data available.

Flash point°C: No data available.

Part.coeff. n-octanol/water: No data available.

Autoflammability°C: No data available.

Vapour pressure: No data available.

Relative density: No data available.

pH: 7-8

VOC g/l: No data available.

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

SAFETY DATA SHEET
CHEMGENE HLD4D

Page: 5

Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: No data available.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

DIDECYLDIMETHYLAMMONIUM CHLORIDE

IPR	RAT	LD50	45	mg/kg
ORL	MUS	LD50	268	mg/kg

Relevant hazards for product:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: Blistering may occur. There may be mild irritation at the site of contact.

Eye contact: There may be pain and redness. The eyes may water profusely. There may be severe pain. May cause permanent damage.

Ingestion: Blistering may occur. There may be irritation and redness at the site of contact.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

SAFETY DATA SHEET
CHEMGENE HLD4D

Page: 6

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Disposal of packaging: Dispose of as normal industrial waste.

NB: The user's attention is drawn to the possible existence of regional or national

Section 14: Transport information

14.1. UN number

UN number: UN1760

14.2. UN proper shipping name

Shipping name: CORROSIVE LIQUID, N.O.S. (Quaternary Ammonium Compounds)

14.3. Transport hazard class(es)

Transport class: 8

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E Transport
category: 3

Section 15: Regulatory information

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

Specific regulations: Not applicable.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

* indicates text in the SDS which has changed since the last revision.

SAFETY DATA SHEET

CHEMGENE HLD4D

Page: 7

Phrases used in s.2 and s.3: H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.
H373: May cause damage to organs through prolonged or repeated exposure. State route of exposure if it is conclusively proven that no other routes of exposure cause the hazard
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.
H412: Harmful to aquatic life with long lasting effects.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product