

Lunar

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

1.1. Product identifier

Product form :
Product name : Lunar

MSDS Code : 008498

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

1.2.1. Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : For professional use only
Use of the substance/mixture : Toilet, washroom and shower room cleaner

1.2.2. Uses advised against

This product is not recommended for any industrial, professional or consumer use other than the identified uses above.

1.3. Details of the supplier of the safety data sheet

ANACHEM 55 SCHOOL ROAD, BALLYMARTIN, KILKEEL, COUNTY DOWN, N. IRELAND, BT34 4UP, NORTHERN IRELAND
Tel: 028 437 67111 Fax: 028 437 68080 Email: leon.hanna@btconnect.com

1.4. Emergency telephone number

Emergency number : Mon to Fri 8.30am to 5.00pm - 028 437 67111

SECTION 2: Hazards identification


2.1. Classification of the substance or mixture

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

Eye Irrit 2B – H320
Skin Irrit 2 – H315

2.2. Label elements

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

Pictogram  H315 + H320: Causes skin and eye irritation R36/38
H335: May cause respiratory irritation R37
P280 : Wear protective gloves/eye protection
P260 : Do not breathe spray
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P302 + P350: IF ON SKIN: Gently wash with plenty of soap and water

Signal word Warning

2.3. Other hazards

This product contains no substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.1. Substance

3.2. Mixture

Hydrochloric Acid 28% >60		1,3-dibutyl-2-thiourea 0-1%	
CAS number: 7647-1-0 Classification	EC number: 231-595-7	CAS number: 109-46-6 Classification	EC number: 203-674-6
Met Corr 1 – H290	H290 : May be corrosive to metals	Acute Tox 4 - H302	H302: Harmful if swallowed R22
Skin Corr 1 B – H314	H314: Causes severe skin burns and eye damage R35	Aquatic Chronic 3 - H412	H412: Harmful to aquatic life with long lasting effects R52/53
STOT SE 3 - H336	H336: May cause drowsiness or dizziness R67		

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Full text of R- and H-phrases: see section 16

SECTION 4: First aid measures**4.1. Description of first aid measures****Inhalation**

Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

Ingestion

Remove affected person from source of contamination. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues.

Skin

Remove affected person from source of contamination. Remove contaminated clothing. Rinse immediately with plenty of water. Use suitable lotion to moisturise skin. Get medical attention if any discomfort continues.

Eyes

Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

Coughing, chest tightness, feeling of chest pressure.

Ingestion

May cause discomfort if swallowed. May cause stomach pain or vomiting.

Skin

Prolonged contact may cause redness, irritation and dry skin.

Eyes

Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

4.3. Indication of any immediate medical attention and special treatment needed**Notes for the doctor**

Treatment should be symptomatic. Show the label to medical personnel if possible.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

This product is not flammable. Fire extinguishing media should be selected according to the nature of surrounding materials.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition or combustion may liberate toxic gases or vapours. If involved in a fire, vapours may include oxides/compounds of the following : Carbon. Hydrogen. Nitrogen.

5.3. Advice for firefighters

Stay up-wind to avoid breathing fumes or vapours. Keep run-off water out of sewers and watercourses. If there is risk of water pollution, notify appropriate authorities. Use self-contained breathing apparatus, gloves and protective goggles. Use full protective clothing appropriate for surrounding materials.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****6.1.1. For non-emergency personnel**

Protective equipment required: respiratory protection, protective gloves, goggles, clothing and footwear. See section 8.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

6.2. Environmental precautions

Do not discharge into water courses. Place container with damaged side up. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY notified to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Wear suitable protective clothing. Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Flush remaining spilled material to

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foul sewer if local regulations permit. For waste disposal, see section 13.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Read and follow manufacturer's recommendations. Observe good chemical hygiene and handling practices. Refer to section 6.1 for personal protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

- Hygiene measures : Do not eat, drink or smoke when using this product.
- Technical measures : Does not require any specific or particular technical measures.
- Storage conditions : Keep container closed when not in use.
- Incompatible products : Keep away from heat, sparks and open flames.

7.3. Specific end use(s)

Please see section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Statutory and derived exposure data for Hydrochloric Acid 28%

Workplace Exposure Limits (WEL)			
TWA - 8hr		STEL -15 mins	
1 ppm	2 mg/m3	5 ppm	8 mg/m3

Derived and predicted exposure parameters			
DNEL No Data Available		PNEC	
Inhalation Short Term	15.0000	STP	0.0360 mg/l
Inhalation Long Term	8.0000	Fresh water	0.0360 mg/l
		Marine Water	0.0360 mg/l

8.2. Exposure controls

Protective Equipment



Appropriate engineering controls

No specific ventilation requirements. If this product is used in such a way as to generate spray mist, additional ventilation may be required.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Face shield and chemical splash goggles conforming to ANSI Z87.1.

Hand protection

Protection against this substance requires special consideration. Use protective gloves, complying with an approved standard (EN374), made of the following material: PVC or Nitrile. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Frequent change is advisable.

Other skin and body protection

Wear appropriate protective clothing to prevent any possibility of skin contact. Provide eyewash station.

Hygiene measures

Provide eye wash station and suitable hand cleaning/hand care facilities. When using do not eat, drink or smoke. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated.

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Respiratory protection

Respiratory protection may be required if the usage method generates excessive levels of mist/dust. If necessary, wear a mask fitted with a cartridge P2/P3 suitable for mist/dust.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	: Thick Blue Liquid
Odour	: Sharp Acidic.
Odour threshold	: No data available
pH (Concentrate), pH (10%)	: 1,2
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: 0°C
Boiling point	: 100°C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density (air = 1)	: No data available
Relative density at 20 °C	: 1.04
Solubility Water	: Soluble in all proportions
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity**10.1. Reactivity**

No Data Available

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Reaction with alkalis will generate heat.

10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Strong oxidisers. Bleach (generates toxic gas).

10.6. Hazardous decomposition products

Product does not decompose under normal conditions.

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

Acute toxicity - oral (Calculated from raw material data. This product is not tested on animals)	ATE oral (mg/kg) 954
Skin corrosion/irritation (Human skin model test Reserve)	Scientifically unjustified
General	Prolonged and repeated contact with solvents over a long period may lead to permanent health problems
Inhalation	Spray mist will severely irritate respiratory membranes. Prolonged inhalation of spray mist may damage respiratory system.
Ingestion	May cause burns to mouth, throat and stomach if swallowed.
Skin contact	Prolonged contact may cause defatting and dryness.
Eye contact	Severely irritating to eyes. Contact with concentrated chemical may very rapidly cause severe eye damage, possibly loss of sight.
Route of entry	Inhalation. Ingestion. Skin. Eyes.
Medical symptoms	Symptoms following overexposure may include the following: Severe skin irritation or burns. Respiratory system irritation. Severe Irritation/damage to eyes and mucous membranes.
Medical considerations	Symptoms following overexposure may include the following: Headache. Fatigue. Nausea. Vomiting.

Hydrochloric Acid 28%

LD50	oral	rat	700	mg/kg
LD50	dermal	rat	>5010	mg/kg

1,3-dibutyl-2-thiourea

LD50	oral	rat	950	mg/kg
LC50	dermal	rabbit	1060	Mg/l

SECTION 12: Ecological information

Dangerous for the environment. The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms. The product does not contain organically bound halogen.

12.1. Toxicity**Acute aquatic toxicity**

Details shown in section 08, when applicable.

12.2. Persistence and degradability

The surfactants contained in this product comply with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them at their direct request, or at the request of a detergent manufacturer.

The product is biodegradable but it must not be discharged into drains without permission from the relevant authorities.

12.3. Bioaccumulative potential

This product is not expected to bioaccumulate

12.4. Mobility in soil

The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces. The product is partly miscible with water and may spread in the aquatic environment.

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12.5. Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

When handling waste, the safety precautions applying to handling of the product should be considered. The packaging must be empty (drop-free when inverted).

Disposal methods

Packaging should be reused, recycled or laundered via a licensed operator wherever possible.

Avoid the spillage or runoff entering watercourses. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (ADR) :
Proper Shipping Name (IMDG) :
Proper Shipping Name (ICAO) :
Proper Shipping Name (ADN) :

14.3. Transport hazard class(es) / labels

ADR/RID

Transport hazard class(es) (ADR)

IMDG

Transport hazard class(es) (IMDG) :

IATA

Transport hazard class(es) (ICAO) :

14.4. Packing group

Packing group (ADR) :
Packing group (IMDG) :
Packing group (IATA) :

14.5. Environmental hazards

Other information : No supplementary information available

14.6. Special precautions for user

- Emergency Action Code

- Tunnel Restriction Code

-Hazard Identification No

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

Not applicable

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Dangerous Preparations Directive 1999/45/EC. 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) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

15.1.2. National regulations

Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

For use by trained personnel only. Read the product label and follow instructions carefully. This product should only be used on the surfaces described on the product

Do not use or rinse this product in such a way as to generate excessive product mist, as this can cause unnecessary inhalation hazard.

When using this product, ensure that other unprotected personnel, or members of the public, are not exposed. Where necessary, unprotected persons should be excluded from any area where the product is being used.

All users should have access to, and be familiar with the contents of, this data sheet.

If this product is decanted into other containers, ensure that they are suitable, clean and correctly labelled.

Product spills may be very slippery - ensure that spillages are cleaned up immediately and that adequate warnings are given to other personnel. This product should NOT be used in the home.

SDS EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be

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