

SAFETY DATA SHEET

AQUA-SOL POWER

According to EC Regulation 1907/2006/EC - revision 2015/830

Revision No. 4.3

Print Date 29/01/2019

Creation Date 15/12/2015

Revision Date 21/01/2019

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

1.1. Product identifier

Product Name AQUA-SOL POWER
Product Code 11004099X1 (CLP)

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

Recommended use

Water based degreaser.

1.3. Details of the supplier of the safety data sheet

NCH UK & Ireland, NCH House, Springvale Avenue, Bilston, WV14 0QL Tel (UK): 01902 510200, Tel (Ireland): 042 939 5502
E-mail address technical_uk@nch.com
Website address www.ncheurope.com

1.4. Emergency telephone number

UK - 01902 510200 (available during Office Hours)
In Republic of Ireland (available from 8am to 10pm daily): 01 809 2166

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP/GHS) and its adaptations

Skin corrosion: Category 1B
Serious damage to eyes: Category 1
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP/GHS)

Contains SODIUM HYDROXIDE & 2-AMINOETHANOL

Hazard pictograms



Signal word DANGER

Hazard Statements

H314 - Causes severe skin burns and eye damage

Precautionary Statements

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/shower.
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
P260 - Do not breathe vapors.
P280 - Wear protective gloves/protective clothing/eye protection.
For industrial and institutional use only.
Keep out of reach of children.

2.3. Other hazards

Due to pH level, product is classed as corrosive.

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

SECTION 3. COMPOSITION / INFORMATION OF INGREDIENTS

3.2 Mixture

Chemical Name	CAS-No.	EC No.	EU - REACH reg number	Weight-%	EU - GHS/CLP Classification	Notes
PROPYLENE GLYCOL MONOBUTYL ETHER	5131-66-8	225-878-4	01-2119475527-	3 - < 5	Skin Irrit. 2 (H315)	

			28		Eye Irrit. 2 (H319)
SODIUM SILICATE	1344-09-8	215-687-4	01-2119448725-31	3 - < 5	Skin Irrit. 2 (H315) Eye Dam. 1 (H318)
SODIUM C14-17 SEC ALKYL SULFONATE	97489-15-1	307-055-2	01-2119489924-20	1 - < 3	Skin Irrit. 2 (H315) Eye Dam. 1 (H318)
DIPROPYLENE GLYCOL METHYL ETHER	34590-94-8	252-104-2	01-2119450011-60	1 - < 3	-
ISOTRIDECANOL, ETHOXYLATED 8EO	69011-36-5	500-241-6	.	1 - < 3	Acute Tox. 4 (H302) Eye Dam. 1 (H318)
2-AMINOETHANOL	141-43-5	205-483-3	01-2119486455-28	< 1	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Corr. 1B (H314)
SODIUM HYDROXIDE	1310-73-2	215-185-5	01-2119457892-27	< 1	Skin Corr. 1A (H314)

For any H statements mentioned in this section, see the full text in section 16.

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

General advice

Do not breathe vapours or spray mist. Do not get in eyes, on skin or on clothing. Get medical attention immediately if symptoms occur.

Eye Contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin Contact

Remove immediately all contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately.

Ingestion

Never give anything by mouth to an unconscious person. Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately.

Inhalation

Move to fresh air. If not breathing, give artificial respiration. Get medical attention immediately.

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

Sensitisation

No information available.

Eye contact

Corrosive. Causes burns and may lead to corneal damage and possible blindness.

Skin contact

Corrosive, Causes burns and possible deep ulcerations or scarring.

Ingestion

Ingestion may result in severe burns to the mouth, throat and digestive tract.

Inhalation

Inhalation of mists may result in severe burns to the respiratory tract.

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

Notes to physician

The product causes burns of eyes, skin and mucous membranes.

SECTION 5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use: Water spray. Foam. Carbon dioxide (CO₂). Dry chemical.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition - None known.

Material can create slippery conditions.

5.3. Advice for firefighters

Firefighters should wear a self-contained breathing apparatus and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin, eyes, and clothing. Use personal protective equipment. Refer to protective measures listed in sections 7 and 8. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.

6.2. Environmental precautions

Avoid release of neat product into surface water and sanitary sewage system.

6.3. Methods and material for containment and cleaning upMethods for Containment

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Methods for Cleaning up

Neutralize with an acid. Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

Refer to sections 7, 8 and 13.

SECTION 7. HANDLING AND STORAGE**7.1. Precautions for safe handling**

Training : Due to the hazardous nature of this product, training in its use is recommended. Avoid contact with skin, eyes and clothing. Avoid breathing vapours or mists. Do not eat, drink or smoke when using this product. Ensure adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

No information available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**Exposure limits

If vapours, fumes or mists are generated, their concentration in the workplace area should be kept to the lowest reasonable level. For substances.

Chemical Name	European Union	The United Kingdom	France	Germany	Austria
DIPROPYLENE GLYCOL METHYL ETHER		STEL: 150 ppm STEL: 924 mg/m ³ TWA: 50 ppm TWA: 308 mg/m ³ Skin	TWA: 50 ppm TWA: 308 mg/m ³ Skin	AGW: 50ppm AGW: 310mg/m ³ Peak: 50ppm Peak: 310mg/m ³ TWA: 50ppm TWA: 310mg/m ³	Skin STEL: 100 ppm STEL: 614 mg/m ³ TWA: 50 ppm TWA: 307 mg/m ³
2-AMINOETHANOL	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ Skin	STEL: 3 ppm STEL: 7.6 mg/m ³ TWA: 1 ppm TWA: 2.5 mg/m ³ Skin	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ Skin	AGW: 2ppm AGW: 5.1mg/m ³ Peak: 4ppm Peak: 10.2mg/m ³ TWA: 2ppm TWA: 5.1mg/m ³	Skin STEL: 3 ppm STEL: 7.6 mg/m ³ TWA: 1 ppm TWA: 2.5 mg/m ³
SODIUM HYDROXIDE		STEL: 2 mg/m ³	TWA: 2 mg/m ³		STEL: 4 mg/m ³ TWA: 2 mg/m ³

Chemical Name	Spain	Portugal	Italy	The Netherlands	Switzerland
DIPROPYLENE GLYCOL METHYL ETHER	Skin TWA: 50 ppm TWA: 308 mg/m ³	TWA: 50 ppm TWA: 308 mg/m ³ Skin	TWA: 50 ppm TWA: 308 mg/m ³ Skin	TWA: 300 mg/m ³	STEL: 50 ppm STEL: 300 mg/m ³ TWA: 50 ppm TWA: 300 mg/m ³
2-AMINOETHANOL	Skin STEL: 3 ppm STEL: 7.5 mg/m ³ TWA: 1 ppm TWA: 2.5 mg/m ³	STEL: 3 ppm STEL: 7.6 mg/m ³ TWA: 1 ppm TWA: 2.5 mg/m ³ Skin	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ Skin	Skin STEL: 7.6 mg/m ³ TWA: 2.5 mg/m ³	STEL: 4 ppm STEL: 10 mg/m ³ TWA: 2 ppm TWA: 5 mg/m ³

SODIUM HYDROXIDE	STEL: 2 mg/m ³	Ceiling: 2 mg/m ³			STEL: 2 mg/m ³ TWA: 2 mg/m ³
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Chemical Name	Denmark	Finland	Norway	Sweden	Czech
PROPYLENE GLYCOL MONOBUTYL ETHER					PEL: 270mg/m ³ NPK-P: 550mg/m ³
DIPROPYLENE GLYCOL METHYL ETHER	TWA: 50 ppm TWA: 309 mg/m ³ Skin	TWA: 50 ppm TWA: 310 mg/m ³ Skin	TWA: 50 ppm TWA: 300 mg/m ³ Skin	50 ppm 300 mg/m ³ 75 ppm 450 mg/m ³	PEL: 270mg/m ³ NPK-P: 550mg/m ³
2-AMINOETHANOL	TWA: 1 ppm TWA: 2.5 mg/m ³ Skin	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ Skin	TWA: 1 ppm TWA: 2.5 mg/m ³ Skin	3 ppm 8 mg/m ³ 6 ppm 15 mg/m ³	PEL: 2.5mg/m ³ NPK-P: 7.5mg/m ³
SODIUM HYDROXIDE	Ceiling: 2 mg/m ³	STEL: 2 mg/m ³ Ceiling: 2 mg/m ³	Grenseverdi: 2 mg/m ³	1 mg/m ³ inhalable dust 2 mg/m ³	PEL: 1mg/m ³ NPK-P: 2mg/m ³

Chemical Name	Poland	Ireland
DIPROPYLENE GLYCOL METHYL ETHER	NDSch: 480 mg/m ³ NDS: 240 mg/m ³	TWA: 50 ppm TWA: 308 mg/m ³ STEL: 150 ppm STEL: 924 mg/m ³ Skin
2-AMINOETHANOL	NDSch: 7.5 mg/m ³ NDS: 2.5 mg/m ³	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ Skin
SODIUM HYDROXIDE	NDSch: 1 mg/m ³ NDS: 0.5 mg/m ³	STEL: 2 mg/m ³

8.2. Exposure controls

Control parameters

Provide an eyewash station. Provide washing facilities.

Engineering Measures

General ventilation is normally adequate.

Personal Protective Equipment

Use personal protection equipment as per Directive 89/686/EEC.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Conforming to EN 143 eg P2 / P3 Particle filters.

Hand Protection

Wear suitable protective gloves conforming to EN 374. Type of gloves suggested: Short term use eg occasional contact or splash protection; Nitrile rubber (0.4 mm). PVC (0.7mm). Long term use eg continuous wear or immersion; Neoprene gloves (0.4 mm). Breakthrough time of the glove material (protective index 6, breakthrough time: >480 min). For break through times, refer to glove manufacturers recommendations.

Skin Protection

Body protection must be chosen based on activity and possible exposure, e.g. footwear (solid shoes, rubber boots), rubber apron, long-sleeved work clothing, impervious suit.

Eye Protection

Safety glasses with side-shields. Approved to EN 166. For large volumes, faceshields should be used.

General hygiene considerations

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practise. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Information below relates to typical values and does not constitute a specification.

Appearance	Light green	Specific Gravity	1.14
Physical State	Liquid	Solubility	Soluble in water
Odour	Slight	Autoignition Temperature	No information available.
pH	13	Viscosity	No information available
Melting Point/Range	-5 °C	Explosive properties	No information available
Boiling Point/Range	100 °C	Oxidizing Properties	No information available.
Flash Point	Not relevant	VOC Content (%)	6.5 %

Evaporation Rate	No information available.
Flammability Limits in Air %	No information available.
Vapor Pressure	No information available.
Vapor Density	No information available.

9.2. Other information

No other information available

SECTION 10. STABILITY AND REACTIVITY**10.1. Reactivity**

Not considered as highly reactive. See further information below.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

The mixture itself will not dangerously react or polymerise to create hazardous conditions in normal use.

10.4. Conditions to avoid

No conditions to be specially mentioned.

10.5. Incompatible materials

Strong acids.

10.6. Hazardous decomposition products

None under normal storage conditions and use.

Thermal decomposition - None known.

SECTION 11. TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**Product Information

The product itself has not been tested.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
PROPYLENE GLYCOL MONOBUTYL ETHER	= 1900 mg/kg (Rat)		
SODIUM SILICATE	= 1153 mg/kg (Rat)		
SODIUM C14-17 SEC ALKYL SULFONATE	= 500 mg/kg (Rat)		
DIPROPYLENE GLYCOL METHYL ETHER	= 5230 mg/kg (Rat)	= 9500 mg/kg (Rabbit)	
ISOTRIDECANOL, ETHOXYLATED 8EO	> 2000 mg/kg (Rat)		
2-AMINOETHANOL	= 1720 mg/kg (Rat)	= 1000 mg/kg (Rabbit)	
SODIUM HYDROXIDE		= 1350 mg/kg (Rabbit)	

Sensitisation

No information available.

Skin contact

Corrosive, Causes burns and possible deep ulcerations or scarring.

Inhalation

Inhalation of mists may result in severe burns to the respiratory tract.

Ingestion

Ingestion may result in severe burns to the mouth, throat and digestive tract.

Eye contact

Corrosive. Causes burns and may lead to corneal damage and possible blindness.

Chronic Toxicity:

Inhaled corrosive substances can lead to a toxic oedema of the lungs.

Carcinogenicity

There are no known carcinogenic substances in this product.

Mutagenic Effects

There are no known mutagenic substances in this product.

Reproductive Effects

There are no known substances in this product with effects on reproduction.

SECTION 12. ECOLOGICAL INFORMATION**12.1. Toxicity**Product Information

The product itself has not been tested.

Ecotoxicity effects

pH values above 10.5 may be fatal to fish and other aquatic organisms.

Chemical Name	Toxicity to Fish	Water Flea	Toxicity to Algae
SODIUM SILICATE	LC50 301-478 mg/L Lepomis macrochirus 96 h	= 216 mg/L 96 h	

	LC50 = 3185 mg/L Brachydanio rerio 96 h		
SODIUM C14-17 SEC ALKYL SULFONATE	LC50 = 8.4 mg/L Brachydanio rerio 96 h LC50 1.0 - 5.0 mg/L Brachydanio rerio 96 h		EC50 = 95.5 mg/L Desmodesmus subspicatus 72 h
DIPROPYLENE GLYCOL METHYL ETHER	LC50 > 10000 mg/L Pimephales promelas 96 h	1919: 48 h Daphnia magna mg/L LC50	
2-AMINOETHANOL	LC50 = 227 mg/L Pimephales promelas 96 h LC50 = 3684 mg/L Brachydanio rerio 96 h LC50 300 - 1000 mg/L Lepomis macrochirus 96 h LC50 114 - 196 mg/L Oncorhynchus mykiss 96 h LC50 > 200 mg/L Oncorhynchus mykiss 96 h	65: 48 h Daphnia magna mg/L EC50	EC50 = 15 mg/L Desmodesmus subspicatus 72 h
SODIUM HYDROXIDE	LC50 = 45.4 mg/L Oncorhynchus mykiss 96 h		

12.2. Persistence and degradability

Persistence and degradability are substance specific, no test data is available on the constituents of this mixture to degrade or persist in the environment, either through biodegradation or other processes, such as oxidation or hydrolysis. The surfactant(s) contained in this preparation complies (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.

12.3. Bioaccumulative potential

No information available.

Chemical Name	log Pow
DIPROPYLENE GLYCOL METHYL ETHER	-0.064
2-AMINOETHANOL	-1.91

12.4. Mobility in soil

Soluble in water.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

12.6. Other adverse effects

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues / Unused Products

Dispose of in accordance with local regulations.

Contaminated Packaging

Empty containers should be taken for local recycling, recovery or waste disposal. Empty remaining contents. Recycle according to official regulations.

EWC waste disposal No

The following EWC/ AVV waste codes may be applicable:

07 06 01* aqueous washing liquids and mother liquors

20 01 29* Detergents containing dangerous substances

Other Information

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific

SECTION 14. TRANSPORT INFORMATION

14.1, 14.2, 14.3, 14.4.

IMDG/IMO

UN Number	UN3266
UN proper shipping name	Corrosive liquid, basic, inorganic, n.o.s.
Hazard Class	8
Packing Group	III
EmS	F-A, S-B

ADR / RID

UN-No	UN3266
Hazard Class	8
Packing Group	III
Classification Code	C5
Limited Quantity	5 L
Transport Cat. (Tunnel Restriction Code)	3 (E)

IATA/ICAO

UN-No	UN3266
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Hazard Class	8
Packing Group	III
ERG Code	8L

14.5. Environmental hazards

The mixture is not environmentally hazardous for transport

14.6. Special precautions for user

No special precautions.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Packaged product, not typically transported in IBC's.

Additional information

The above information is based on latest transport regulations i.e. ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport.

SECTION 15. REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

This mixture was classified in compliance with EC Regulation 1272/2008 (CLP) and its adaptations.

This is a detergent product and complies with the Detergent Regulation (EC) No.648/2004. . .

Labelling for contents (REGULATION (EC) No 648/2004 - 907/2006):

< 5% amphoteric surfactants, < 5% non-ionic surfactants, < 5% anionic surfactants,

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for this mixture by the supplier

SECTION 16. OTHER INFORMATION**Text of H statements mentioned in Section 3**

H302 - Harmful if swallowed. H312 - Harmful in contact with skin. H314 - Causes severe skin burns and eye damage. H315 - Causes skin irritation. H318 - Causes serious eye damage. H319 - Causes serious eye irritation. H332 - Harmful if inhaled. H335 - May cause respiratory irritation.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

On the basis of test data. H314 - Causes severe skin burns and eye damage.

Prepared By JD

Creation Date 15/12/2015

Revision Date 21/01/2019

Revision summary

CLP update. SDS sections updated 2 16

Abbreviations

REACH: Registration Evaluation Authorisation Restriction of Chemicals

EU: European Union

EC: European community

EEC: European Economic Community

UN: United Nations

CAS: Chemical Abstracts Service

PBT: Persistent Bioaccumulative Toxic

vPvB: very Persistent very Bioaccumulative

LC50: Lethal concentration, 50 percent

LD50 : Lethal dose, 50 percent

EC50: Effective concentration, 50 percent

LogPow: LogP octanol/water

VwVwS: Verwaltungsvorschrift wassergefährdende Stoffe (Administrative order relating to substances hazardous to water - Germany)

WGK: Wassergefährdungsklasse (Water Hazard Class - Germany).

AVV: Abfallverzeichnis-Verordnung (Waste Code - Germany)

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (European agreement governing the international carriage of dangerous goods by road)

IMDG: International Maritime Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the International carriage of Dangerous goods by rail)

EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods

ERG: Emergency Response Guidebook

IUCLID / RTECS International Uniform Chemical Information Database / Registry of Toxic Effects of Chemical Substances

GHS: Globally Harmonised System of classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

VOC: Volatile Organic Chemical

w/w: weight for weight

DMSO: Dimethyl sulphoxide

OECD: Organization for Economic Cooperation and Development

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

Further Information

Component test results displayed in sections 11 and 12 are typically supplied by Chemadvisor and assembled from publicly available literature sources e.g. IUCLID / RTECS

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet