Hydro Bloom Soft Water A

Safety Data Sheet

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

Date of issue: 9-7-2018 Version: 1.0

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

1.1. Product identifier

Product form : Mixture

Product name : Hydro Bloom Soft Water A

Product group : Trade product

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

1.2.1. Relevant identified uses

Intended for general public

Main use category : Consumer use,Professional use

Use of the substance/mixture : Plant nutrition

Title	Use descriptors
Hydro Bloom Soft Water A	PC12

Full text of use descriptors: see section 16

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Dutchpro B.V.
Asterweg 113
1031 HM Amsterdam - Nederland
T +31 (0)20 4480854
info@dutchpro.com

Correspondence address

Dutchpro B.V.
De Steiger 97
1351 AH Almere - Nederland

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]Mixtures/Substances: SDS EU 2015: According to Regulation (EU) 2015/830 (REACH Annex II)

Serious eye damage/eye irritation, Category 1 H318

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS05

Signal word (CLP) : Danger

Hazardous ingredients : Nitric acid, ammonium calcium salt; nitric acid 38 %

Hazard statements (CLP) : H318 - Causes serious eye damage.

Precautionary statements (CLP) : P102 - Keep out of reach of children.
P280 - Wear protective gloves, eye protection, protective clothing.
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, a doctor.

2.3. Other hazards

Other hazards not contributing to the classification : Ox.Sol./Liq. not applicable based on experience and literature.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments : Mentioned percentages are in (w/w %)

Name	Product identifier	% w/w (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Nitric acid, ammonium calcium salt	(CAS-No.) 15245-12-2 (EC-No.) 239-289-5 (REACH-no) 01-2119493947-16	10 - 20	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
Potassium nitrate	(CAS-No.) 7757-79-1 (EC-No.) 231-818-8 (REACH-no) 01-2119488224-35	5 - 10	Ox. Sol. 3, H272
Ammonium nitrate	(CAS-No.) 6484-52-2 (EC-No.) 229-347-8 (REACH-no) 01-2119490981-27	1 - 5	Ox. Sol. 3, H272 Eye Irrit. 2, H319
nitric acid 38 % (Note B)	(CAS-No.) 7697-37-2 (EC-No.) 231-714-2 (EC Index-No.) 007-004-00-1 (REACH-no) 01-2119487297-23	0,1 - 1	Ox. Liq. 2, H272 Met. Corr. 1, H290 Acute Tox. 3 (Inhalation), H331 Skin Corr. 1A, H314

Specific concentration limits:

Name	Product identifier	Specific concentration limits
nitric acid 38 %	(CAS-No.) 7697-37-2 (EC-No.) 231-714-2 (EC Index-No.) 007-004-00-1 (REACH-no) 01-2119487297-23	(5 =<C < 20) Skin Corr. 1B, H314 (C >= 20) Skin Corr. 1A, H314 (65 =<C < 99) Ox. Liq. 3, H272 (C >= 99) Ox. Liq. 2, H272

Note B : Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: "nitric acid … %".
In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a ght/weight basis.

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). In all cases of doubt, or when symptoms persist, seek medical attention.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. In all cases of doubt, or when symptoms persist, seek medical attention.

First-aid measures after skin contact : Take off immediately all contaminated clothing. Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. In case of loss of conscience place the victim in the recovery position. Immediately call a POISON CENTER/doctor.

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

Symptoms/effects after inhalation : EXPOSURE TO HIGH CONCENTRATIONS: May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing. Risk of pneumonia. Repeated long inhalation of decomposition products can lead to lung oedema.

Symptoms/effects after skin contact : May cause skin irritation. irritation (itching, redness, blistering).

Symptoms/effects after eye contact : Causes serious eye damage. Redness, pain. Lacrimation.

Symptoms/effects after ingestion : May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

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

Treat symptomatically. Effects of exposure (inhalation, ingestion, or skin contact) to substance might be delayed. Keep under medical supervision for at least 48 hours.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand. Making extinguishing agents environment-friendly.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : At high temperature may liberate dangerous gases. Nitrogen oxides. Metal oxides.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Ensure that there is a suitable ventilation system. Wear personal protective equipment.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Wash away remainder with plenty of water.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : With potential for aerosol generation.

Precautions for safe handling : Provide good ventilation in process area to prevent formation of vapour. Handle and open container with care. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not breathe vapours, mist. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

Hygiene measures : Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations. Provide local exhaust or general room ventilation. Handle and open container with care. Avoid aerosolbuilding.

Storage conditions : Keep only in original container. Store in a dark area. Close container tightly after use. Keep out of frost. Protect from heat and direct sunlight.

Incompatible materials : Sources of ignition. Direct sunlight.

Storage temperature : 10 - 30 °C

Packaging materials : Suitable material: Polyethylene.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

nitric acid 38 % (7697-37-2)		
EU	Local name	Nitric acid
EU	IOELV STEL (mg/m³)	2,6 mg/m³
EU	IOELV STEL (ppm)	1 ppm
EU	Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC
United Kingdom	Local name	Nitric acid
United Kingdom	WEL STEL (mg/m³)	2,6 mg/m³
United Kingdom	WEL STEL (ppm)	1 ppm
United Kingdom	Regulatory reference	EH40. HSE

Potassium nitrate (7757-79-1)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	20,8 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	36,7 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	12,5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	10,9 mg/m³
Long-term - systemic effects, dermal	12,5 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,45 mg/l
PNEC aqua (marine water)	0,045 mg/l
PNEC aqua (intermittent, freshwater)	4,5 mg/l
PNEC (STP)	
PNEC sewage treatment plant	18 mg/l

Nitric acid, ammonium calcium salt (15245-12-2)	
DNEL/DMEL (General population)	
Acute - systemic effects, oral	10 mg/kg bodyweight
PNEC (Water)	
PNEC aqua (freshwater)	0,45 mg/l
PNEC aqua (marine water)	0,045 mg/l
PNEC aqua (intermittent, freshwater)	4,5 mg/l
PNEC (STP)	
PNEC sewage treatment plant	18 mg/l

Ammonium nitrate (6484-52-2)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	5,12 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	36 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	2,56 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	8,9 mg/m³
Long-term - systemic effects, dermal	2,56 mg/kg bodyweight/day
PNEC (STP)	
PNEC sewage treatment plant	18 mg/l

nitric acid 38 % (7697-37-2)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	2,6 mg/m³
Long-term - local effects, inhalation	2,6 mg/m³
DNEL/DMEL (General population)	
Acute - local effects, inhalation	1,3 mg/m³
Long-term - local effects, inhalation	1,3 mg/m³

8.2. Exposure controls

Appropriate engineering controls:

Provide sufficient air exchange and/or exhaust.

Personal protective equipment:

Avoid all unnecessary exposure. Gloves. Safety glasses. Protective clothing.

Hand protection:

Wear suitable gloves tested to EN374. Suitable material: butyl rubber, Polyvinylchloride (PVC), Fluoroelastomer (Viton®) (FKM). Layer thickness : 0,4 - 0,7 mm. penetration time (maximum wearing period): > 480 min. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. Gloves must be replaced after each use and whenever signs of wear or perforation appear

Eye protection:

Use eye protection according to EN 166, designed to protect liquid splashes. Face shield

Skin and body protection:

Wear suitable protective clothing. Recommendation: Chemical resistant suit. EN 14605. Boots.

Respiratory protection:

No personal breathing protective equipment is normally required. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type E according to standard EN 14387) is used

Personal protective equipment symbol(s):

Other information:

Do not eat, drink or smoke during use. Keep away from food, drink and animal feedingstuffs. Wash hands before breaks and immediatley after using the product. If on skin, take off contaminated clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Yellow.
Odour	: odourless.
Odour threshold	: No data available
pH	: 3,8
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 93 °C
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 at 20 °C	: No data available
Relative density	: No data available
Solubility	: Water: Completely soluble.
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

Stable in use and storage conditions as recommended in item 7.

10.2. Chemical stability

Stable under normal conditions. Storage at elevated temperatures may cause pressure build-up in sealed containers. Keep out of frost.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Keep away from oxidizers, strong acids and strong bases.

10.4. Conditions to avoid
Direct sunlight. Extremely high or low temperatures. Protect against frost.

10.5. Incompatible materials
Corrosive to metals. Strong alkalis. Combustible materials. Strong reducing agents. Organic material.

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates : Nitrogen oxides. metallic oxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Potassium nitrate (7757-79-1)	
LD50 oral rat	> 2000 mg/kg bw/day
LD50 dermal rat	> 5000 mg/kg bodyweight
LC50 inhalation rat (mg/l)	> 527 mg/m³ (4 h)

Nitric acid, ammonium calcium salt (15245-12-2)	
LD50 oral rat	300 - 2000 mg/kg
LD50 dermal rat	2000 mg/kg

Ammonium nitrate (6484-52-2)	
LD50 oral rat	2950 mg/kg

nitric acid 38 % (7697-37-2)	
LC50 inhalation rat (mg/l)	2,65 mg/l

Skin corrosion/irritation : Not classified
pH: 3,8
Additional information : May cause skin irritation
irritation of mucous membranes
Serious eye damage/irritation : Causes serious eye damage.
pH: 3,8
Respiratory or skin sensitisation : Not classified
Additional information : Based on available data, the classification criteria are not met
Germ cell mutagenicity : Not classified
Additional information : Based on available data, the classification criteria are not met
Carcinogenicity : Not classified
Additional information : Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified
Additional information : Based on available data, the classification criteria are not met
STOT-single exposure : Not classified
Additional information : Based on available data, the classification criteria are not met

Nitric acid, ammonium calcium salt (15245-12-2)	
NOAEL (oral, rat)	1000 - 15000 mg/kg bodyweight

STOT-repeated exposure : Not classified
Additional information : Based on available data, the classification criteria are not met

Ammonium nitrate (6484-52-2)	
NOAEL (oral, rat, 90 days)	256 - 15000 mg/kg bodyweight/day

Aspiration hazard : Not classified
Additional information : Based on available data, the classification criteria are not met

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

Potassium nitrate (7757-79-1)	
LC50 fishes	100 - 1378 mg/l
EC50 Daphnia	490 mg/l

Nitric acid, ammonium calcium salt (15245-12-2)	
LC50 fishes	95 - 447 mg/l
EC50 72h algae (1)	100 mg/l

Ammonium nitrate (6484-52-2)	
LC50 fishes	95 - 447 mg/l
EC50 Daphnia	555 mg/l

nitric acid 38 % (7697-37-2)	
LC50 fishes	12 g/l

12.2. Persistence and degradability

Hydro Bloom Soft Water A	
Persistence and degradability	Potentially biodegradable.

12.3. Bioaccumulative potential

Hydro Bloom Soft Water A	
Bioaccumulative potential	Bioaccumulation unlikely.

12.4. Mobility in soil

Hydro Bloom Soft Water A	
Ecology - soil	No supplementary information available.

12.5. Results of PBT and vPvB assessment

Hydro Bloom Soft Water A
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Additional information : After use, container has to be completely emptied and closed.

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : 06 10 00 - wastes from the MFSU of nitrogen chemicals, nitrogen chemical processes and fertiliser manufacture
06 10 02* - wastes containing dangerous substances

SECTION 14: Transport information

In accordance with ADR / IATA / IMDG / RID

ADR	IMDG	IATA	RID
14.1. UN number			
Not applicable	Not applicable	Not applicable	Not applicable

14.2. UN proper shipping name			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available			

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:	
3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	nitric acid 38 %
3(a) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F	nitric acid 38 %
3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	Hydro Bloom Soft Water A - nitric acid 38 %
58. Ammonium nitrate (AN)	Ammonium nitrate

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Child-resistant fastening : Not applicable

Tactile warning : Not applicable

Directive 2012/18/EU (SEVESO III)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail

Data sources : ECHA (European Chemicals Agency).

Other information : DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H- and EUH-statements:	
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Met. Corr. 1	Corrosive to metals, Category 1
Ox. Liq. 2	Oxidising Liquids, Category 2
Ox. Sol. 3	Oxidising Solids, Category 3
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H272	May intensify fire; oxidiser.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.

Full text of use descriptors	
PC12	Fertilizers

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Eye Dam. 1	H318	Calculation method

SDS EU (REACH Annex II)

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 construed as guaranteeing any specific property of the product