

**SECTION I: Identification of the Substance/Mixture and of the Company/Undertaking****1.1 Product Identifier**

Product name: Complete

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

Use: Fertiliser

**1.3 Details of the supplier of the safety data sheet**Company: Aquatrols Europe Ltd  
The Panorama, Office G47  
Park Street  
Ashford  
Kent TN23 3DLWebsite: [eu.aquatrols.com](http://eu.aquatrols.com)

Phone number: + 44 (0)1233 756 241

Email: [jyichye@aquatrols.com](mailto:jyichye@aquatrols.com)**1.4 Emergency telephone**Phone number: CHEMTREC - (800) 424-9300  
CHEMTREC INTERNATIONAL- +1-703-527-3887  
NETHERLANDS - +31 88 755 85 61  
SPAIN - +34 917 689 800  
UK - + 44 2890 63 2032**SECTION II: Hazards Identification****2.1 Classification of the substance or mixture**

Product description: Mixture

**Classification according to Regulation (EC) No. 1272/2008**

H315: Skin corrosion/irritation – Category 2

H319: Serious eye damage/irritation – Category 2A

H335: Specific Target Organ Toxicity, Single Exposure; Respiratory Tract Irritation – Category 3

## 2.2 GHS label elements

Labelled according to Regulation (EC) No. 1272/2008



Hazard pictograms:

Signal word:

WARNING

Hazard statements:

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

Precautionary statements

Prevention:

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash face, hands and any exposed skin thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

Response:

IF ON SKIN: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

Call a POISON CENTER or doctor/physician if you feel unwell.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Storage:

Store in a well-ventilated place. Keep container tightly closed.

Store locked up

Disposal:

Dispose of contents/container to an approved waste disposal plant.

## 2.3 Other hazards which do not result in classification

Harmful if swallowed, in contact with skin or inhaled.

**SECTION III: COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substance/Mixture:** Mixture**3.2 Hazardous ingredients**

Chemical Name	CAS No. EC No.	Classification according to Regulation EC 1272/2008 (CLP)	Concentration
Potassium nitrate	7757-79-1 231-818-8	Ox. Sol. 3 – H272	30-40%
Ammonium nitrate	6484-52-2 229-347-8	Ox. Sol. 1 – H271 Skin Irrit. 2 – H315 Eye Irrit. 2 – H319 STOT SE 3 – H335	20-30%

**3.3 Non-hazardous ingredients and impurities**

Not applicable.

**SECTION IV: FIRST AID MEASURES****4.1 Description of first aid measures**

- General advice:** Show this SDS to the doctor in attendance.  
First responder needs to protect himself.  
Place affected apparel in a sealed bag for subsequent decontamination.
- Inhalation:** May cause irritation to mucous membranes. Move exposed person to fresh air.  
Consult a physician if necessary.
- Skin contact:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists. Wash contaminated clothing before re-use.

<b>Eye contact:</b>	Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists.
<b>Ingestion:</b>	Do not induce vomiting without medical advice. Seek medical advice.

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

Symptoms after inhalation:	May cause irritation to respiratory system and central nervous system.
Symptoms after skin contact:	May cause irritation to skin.
Symptoms after eye contact:	May cause irritation to eyes.
Symptoms after ingestion:	May cause irritation to mucous membranes.

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

Inhalation:	Inhalation of vapour may cause shortness of breath. Seek medical attention if irritation or symptoms persist.
Note to physician:	Treat symptomatically.

**SECTION V: FIREFIGHTING MEASURES****5.1 Extinguishing media**

Suitable extinguishing media:	Dry chemical, CO <sub>2</sub> , foam, water spray.
Unsuitable extinguishing media:	High volume water jet

**5.2 Special hazards arising from the substance or mixture**

Specific hazards during firefighting:	Under fire conditions, will burn.
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<b>Hazardous decomposition products:</b>	Irritating, toxic and obnoxious fumes.
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**5.3 Advice for firefighters**

<b>Special protective equipment:</b>	Firefighters should wear approved self-contained breathing apparatus and full protective clothing.
<b>Further information:</b>	Standard procedure for chemical fires. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

<b>SECTION VI: ACCIDENTAL RELEASE MEASURES</b>
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**6.1 Personal precautions, protective equipment and emergency procedures.**

Wear suitable protective equipment. For further information, see Section VIII "Exposure Controls/Personal Protection".

**6.2 Environmental precautions**

Do not allow to enter drains. Prevent further spillage if safe.

**6.3 Methods and materials for containment and cleanup**

Methods of containment:	Stop leak if safe to do so. Dam up with sand or inert earth (do not use combustible materials).
Recovery:	Soak up with inert absorbent materials. Shovel or sweep up. Keep in suitable, closed container for disposal. Never return spills to original containers for re-use.
Decontamination/cleaning:	Clean contaminated surface thoroughly. Wash non-recoverable remainder with large amounts of water. Recover the cleaning water for subsequent disposal. Decontaminate tools, equipment and personal protective equipment in a segregated area.
Disposal:	Dispose of in accordance with local regulations.

**6.4 Reference to other sections**

See Section VII for Handling and Storage.

<b>SECTION VII: HANDLING AND STORAGE</b>
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**7.1 Precautions for safe handling of the substance/mixture.**

Technical measures:	Provide adequate ventilation.
Advice on safe handling and usage:	Avoid inhalation of vapor or mist. Avoid contact with skin and eyes.
Hygiene measures:	Personal hygiene is an important workplace practice exposure control measure and the following general measures should be taken when working with or handling this material: <ol style="list-style-type: none"><li>1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.</li><li>2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.</li><li>3) Wash exposed skin promptly to remove accidental splashes or contact with material.</li></ol>

**7.2 Conditions for safe storage, including any incompatibilities****Storage conditions**

Recommended:	Keep container tightly closed in a cool, dry, well-ventilated place. Keep out of reach of children. Keep in properly labeled plastic containers.
To be avoided:	Keep away from open flames, hot surfaces and sources of ignition. Keep away from incompatible materials

**Storage stability**

Storage temperature:	Store at temperatures between 5 and 20°C.
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**7.3 Specific end use(s)**

See Section I

**SECTION VIII: EXPOSURE CONTROLS/PERSONAL PROTECTION****General comments**

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

**8.1 Control parameters**

Local and general ventilation.

**8.2 Exposure controls**

Exposure limits: Potassium nitrate: 20.8 mg/m<sup>3</sup> 8 h  
10 mg/m<sup>3</sup> 15 min.

Protective measures: Ensure that eyewash stations and safety showers are close to workstation. Emergency equipment immediately accessible, with instructions for use. Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards, and/or risks that may occur during use.

Respiratory protection: When respirators are required, use approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

Hand protection: Gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Eye protection:	Eye and face protection will vary dependent upon work, environmental conditions and material handling practices. Appropriate approved equipment should be selected for the particular use intended for this material. Eye contact should be prevented through the use of safety glass with side-shields.
Body protection:	Footwear protecting against chemicals; impervious clothing.
Hygiene measures:	Personal hygiene is an important workplace practice exposure control measure and the following general measures should be taken when working with or handling this material: <ol style="list-style-type: none"><li>1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.</li><li>2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.</li><li>3) Wash exposed skin promptly to remove accidental splashes or contact with material.</li></ol>

<b>SECTION IX: CHEMICAL AND PHYSICAL PROPERTIES</b>
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**9.1 Information on basic physical and chemical properties**

<b>Physical state:</b>	Liquid
<b>Form:</b>	Liquid
<b>Color:</b>	Green
<b>Odor:</b>	Mild
<b>Odor threshold:</b>	No data available
<b>pH:</b>	4.5 – 6.5
<b>Melting point:</b>	< -2°C
<b>Freezing point:</b>	Not determined
<b>Boiling point:</b>	< 100°C
<b>Flashpoint:</b>	Not determined
<b>Evaporation rate:</b>	Not determined
<b>Flammability:</b>	Not determined
<b>Upper explosive limit:</b>	No data available



<b>Lower explosive limit:</b>	No data available
<b>Vapor pressure:</b>	Not determined
<b>Vapor density:</b>	Not determined
<b>Specific gravity :</b>	1.52 - 1.56 g/mL
<b>Solubility:</b>	Soluble in water
<b>Partition n-octanol/water:</b>	No data available
<b>Autoignition temperature:</b>	No data available
<b>Thermal decomposition:</b>	No data available
<b>Viscosity:</b>	No data available
<b>Explosive properties:</b>	No data available
<b>Oxidizing properties:</b>	No data available

## 9.2 Other information

Not applicable

## SECTION X: STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4 Conditions to avoid

Burning produces obnoxious and irritating fumes.

### 10.5 Incompatible materials

Strong bases.

### 10.6 Hazardous decomposition products

Will not decompose if stored and used as recommended.

## SECTION XI: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

Acute oral toxicity: May cause irritation.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ammonium nitrate	2000 mg/kg (rat)	2950 mg/kg (rat)	-
Potassium nitrate	2000 mg/kg (rat)	2000 mg/kg (rat)	527: 4 h mg/m <sup>3</sup>

**Skin corrosion/irritation**

Skin irritation: No data available

**Serious eye damage/eye irritation**

Eye irritation: Not data available

**Respiratory or skin sensitization**

Sensitization: No data available

**Mutagenicity**

Genotoxicity in vitro: No data available

Genotoxicity in vivo: No data available

**Carcinogenicity**

Carcinogenicity: No data available

**Toxicity for reproduction and development**

Toxicity to reproduction/fertility: No data available

Developmental toxicity/teratogenicity: No data available

**SECTION XII: ECOLOGICAL INFORMATION**

**12.1 Toxicity**

Toxic to aquatic life with long lasting effects.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Custacea
Ammonium nitrate	1700: 96 h Desmodesmus subspicatus (green algae) mg/L LC50	100: 96 h Poecillia reticulata mg/L LC50	-	101: 24 h Daphnia magna mg/L EC50
Potassium nitrate	1700: 72 h Desmodesmus subspicatus	1378: 96 h Poecillia reticulata mg/L LC50	-	101: 24 h Daphnia magna mg/L EC50

	(green algae) mg/L IC50			
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**12.2 Persistence and degradability**

This preparation contains a substance not yet tested completely.

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

Not yet fully tested.

**12.6 Other adverse effects**

May cause long-term adverse effects in the aquatic environment.

**SECTION XIII: DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods**

Advice on disposal: Dispose of in compliance with all local and national regulations.

Contaminated containers: Rinse with appropriate solvent. Dispose of contents/container in accordance with local regulations.

**SECTION XIV: TRANSPORT INFORMATION**

In accordance with the provisions of ADR/RID/ADNR/IMDG/ICAO/IATA

**14.1 UN Number**

Not classified as dangerous

**14.2 Shipping name UN Model**

Not applicable

**14.3 Transport hazard class**

Not applicable

**14.4 Packing group**

Not applicable

**14.5 Environmental hazards**

Other information: No additional information available

**14.6 Special precautions for use**

No additional information available

**14.6.1 Ground transport**

No additional information available

**14.6.2 Sea transport**

No additional information available.

**14.6.3 Air transport**

No additional information available

**14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code**

Not applicable.

**SECTION XV: REGULATORY INFORMATION****15.1 Safety legislation specific for the substance or mixture****15.1.1 EU-Regulations**

No restrictions according to Annex XVII of REACH. Does not contain REACH candidate substances.

**15.1.2 National regulations**

No information available

**15.2 Chemical safety assessment**

No information available

**SECTION XVI: OTHER INFORMATION****More information****Abbreviations**

ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road

