



**SAFETY DATA SHEET**

**Smart Algae**

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

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**1.1. Product identifier**

**Product name** SMART ALGAE  
**Product number** SGI15NP17  
**Internal identification** Smart Algae

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

**Identified uses** Chlorine based liquid moss & algae remover.

**1.3. Details of the supplier of the safety data sheet**

**Supplier** Smart Graffiti Ireland  
Apple View,  
Trim Road,  
Kildalkey,  
Co. Meath.  
C15 W702  
Tel: +353 (0)86 8111187  
sales@smartgraffiti.eu

**1.4. Emergency telephone number**

**Emergency telephone** +353 (0)86 8111187  
Available 24/7 from our website [www.smartgraffiti.eu](http://www.smartgraffiti.eu)  
Technical Advice +353 (0)86 8111187

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**SECTION 2: Hazards identification**

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**2.1. Classification of the substance or mixture**

**Classification**

**Physical hazards**

Not Classified

**Health hazards**

Skin Corr. 1B - H314 Eye Dam. 1 - H318

**Environmental hazards**

Aquatic Acute 1 - H400

**Classification (67/548/EEC or 1999/45/EC)**

C;R34. N;R50. R31.

**2.2. Label elements**

**Pictogram**



**Signal word** Danger

**Hazard statements**

**SMART ALGAE**

H314 Causes severe skin burns and eye damage.  
 H400 Very toxic to aquatic life.

**Precautionary statements**

P102 Keep out of reach of children.  
 P260 Do not breathe mist.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P235+P410 Keep cool. Protect from sunlight.  
 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.  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P315 Get immediate medical advice/attention.  
 P501 Dispose of contents/container in accordance with local regulations.

**Supplemental label information**

EUH031 Contact with acids liberates toxic gas.

**Contains**

SODIUM HYPOCHLORITE SOLUTION, ... % CI ACTIVE

**2.3. Other hazards**

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

**SECTION 3: Composition/information on ingredients**

**3.2. Mixtures**

SODIUM HYPOCHLORITE SOLUTION, ... % CI ACTIVE		10-15%
CAS number: 7681-52-9 EC number: 231-668-3		
M factor (Acute) = 10		
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>	
Skin Corr. 1B - H314	C;R34 R31 N;R50	
Eye Dam. 1 - H318		
Aquatic Acute 1 - H400		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**Inhalation**

Unlikely route of exposure as the product does not contain volatile substances. If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

**Ingestion**

Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention immediately.

**Skin contact**

Wash with plenty of water. Get medical attention promptly if symptoms occur after washing.

**Eye contact**

Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Get medical attention immediately. Continue to rinse.

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

**General information**

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation**

**SMART ALGAE****Inhalation**

Irritation of nose, throat and airway.

**Ingestion**

May cause chemical burns in mouth and throat.

**Skin contact**

Burning pain and severe corrosive skin damage. May cause serious chemical burns to the skin.

**Eye contact**

Severe irritation, burning and tearing. Prolonged contact causes serious eye and tissue damage.

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

Treat symptomatically.

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

The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

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

Thermal decomposition or combustion products may include the following substances: Irritating gases or vapours.

**5.3. Advice for firefighters****Special protective equipment for firefighters**

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****Personal precautions**

Wear protective clothing, gloves, eye and face protection. For personal protection, see Section 8.

**6.2. Environmental precautions****Environmental precautions**

This product is dangerous for the environment: Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

**6.3. Methods and material for containment and cleaning up****Methods for cleaning up**

Small Spillages: Flush away spillage with plenty of water. Large Spillages: Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely.

**6.4. Reference to other sections****Reference to other sections**

For personal protection, see Section 8.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Usage precautions**

Wear protective clothing, gloves, eye and face protection.

**7.2. Conditions for safe storage, including any incompatibilities****Storage precautions**

Keep only in the original container in a cool, well-ventilated place. Keep container tightly closed. Protect from sunlight. Store away from the following materials: Acids.

**7.3. Specific end use(s)**

## SMART ALGAE

### Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

### Usage description

See Product Information Sheet & Label for detailed use of this product.

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## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

#### Ingredient comments

No exposure limits known for ingredient(s).

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Not relevant.

#### Eye/face protection

The following protection should be worn: Chemical splash goggles or face shield.

#### Hand protection

Wear protective gloves. Polyvinyl chloride (PVC).

#### Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

#### Respiratory protection

Respiratory protection not required.

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## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

#### Appearance

Liquid.

#### Colour

Clear. Pale Yellow.

#### Odour

Characteristic Hypochlorite

#### pH

pH (concentrated solution): 12.4

#### Melting point

-2°C

#### Initial boiling point and range

102°C @ 760 mm Hg

#### Flash point

Boils without flashing.

#### Relative density

1.160 @ 20°C

#### Solubility(ies)

Soluble in water.

### 9.2. Other information

## SMART ALGAE

### Other information

None.

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### SECTION 10: Stability and reactivity

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#### 10.1. Reactivity

Generates toxic gas in contact with acid. Reactions with the following materials may generate heat: Strong acids.

#### 10.2. Chemical stability

##### Stability

Inadequately vented containers may become pressurised.

#### 10.3. Possibility of hazardous reactions

See sections 10.1,10.4 & 10.5

#### 10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight.

#### 10.5. Incompatible materials

##### Materials to avoid

Strong acids. Aluminium, Tin, Zinc and their alloys.

#### 10.6. Hazardous decomposition products

Toxic chlorine gas can be released if heated.

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### SECTION 11: Toxicological information

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#### 11.1. Information on toxicological effects

##### Toxicological effects

We have not carried out any animal testing for this product. Any ATE figures quoted below are from Toxicity Classifications that have been carried out using ATE (Acute Toxicity Estimate) Calculation Method using LD50 or ATE figures provided by the Raw Material Manufacturer.

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### SECTION 12: Ecological Information

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##### Ecotoxicity

Very toxic to aquatic life. Another potential hazard is from the alkalinity of the product.

#### 12.1. Toxicity

We have not carried out any Aquatic testing, therefore we have no Aquatic Toxicity Data specifically for this product. The Aquatic Toxicity Data, where provided by the raw material manufacturer for ingredients with aquatic toxicity, can be made available on request. Very toxic to aquatic organisms.

#### 12.2. Persistence and degradability

##### Persistence and degradability

This product, at use dilutions, is readily broken down in biological effluent treatment plants.

#### 12.3. Bioaccumulative potential

The product does not contain any substances expected to be bioaccumulating.

#### 12.4. Mobility in soil

##### Mobility

Not known.

#### 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

Not known.

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### SECTION 13: Disposal considerations

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## SMART ALGAE

### 13.1. Waste treatment methods

#### **Disposal methods**

Discharge used solutions to drain. Small amounts (less than 5 Litres) of unwanted product may be flushed with water to sewer. Larger volumes must be sent for disposal as special waste. Rinse out empty container with water and consign to normal waste.

### **SECTION 14: Transport information**

#### 14.1. UN number

UN No. (ADR/RID)	1791
UN No. (IMDG)	1791
UN No. (ICAO)	1791

#### 14.2. UN proper shipping name

Proper shipping name (ADR/RID)	HYPOCHLORITE SOLUTION
Proper shipping name (IMDG)	HYPOCHLORITE SOLUTION
Proper shipping name (ICAO)	HYPOCHLORITE SOLUTION
Proper shipping name (ADN)	HYPOCHLORITE SOLUTION

#### 14.3. Transport hazard class(es)

ADR/RID class	Class 8 : Corrosive Substances.
ADR/RID label	8
IMDG class	Class 8: Corrosive substances.
ICAO class/division	Class 8: Corrosive substances.
ICAO subsidiary risk	
Transport labels	



#### 14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ICAO packing group	II

#### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



Yes.

#### 14.6. Special precautions for user

EmS	F-A, S-B
Emergency Action Code	
Hazard Identification Number (ADR/RID)	
Tunnel restriction code	(E)

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

## SMART ALGAE

Not relevant. for a packaged product.

### SECTION 15: Regulatory information

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

##### EU legislation

Safety Data Sheet prepared in accordance with REACH Commission Regulation (EU) No 453/2010 (which amends Regulation (EC) No 1907/2006). The product is as classified under GHS/CLP- Regulation (EC) No 1272/2008 classification, labelling & packaging of substances & mixtures. Ingredients are listed with classification under both CHIP - Directive 67/548/EEC - classification, packaging & labelling of dangerous substances & GHS/CLP- Regulation (EC) No 1272/2008 classification, labelling & packaging of substances & mixtures.

##### Guidance

Workplace Exposure Limits EH40.

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out as not applicable as this product is a mixture.

### SECTION 16: Other information

#### Key literature references and sources for data

Material Safety Data Sheet, Misc. manufacturers. CLP Class - Table 3.1 List of harmonised classification and labeling of hazardous substances. CHIP Class - Table 3.2 The list of harmonised classification and labelling of hazardous substances from Annex I to Directive 67/548/EEC. ECHA - C&L Inventory database.

#### Revision comments

Slight change to Packing Group in Transport Section 14 & This product is now using classification from GHS/CLP - Regulation (EC) No 1272/2008 classification, labelling & packaging of substances & mixtures.

**Revision date** 27/05/2015

**Revision** Issue 9

**SDS status** The Risk Phrases / Hazard Statements listed below in this Section No 16 relate to the Raw Materials (Ingredients) in the Product (as listed in Section 3) and NOT the product itself. For the Risk Phrases / Hazard Statements relating to this Product see Section 2.

#### Risk phrases in full

- R31 Contact with acids liberates toxic gas.
- R34 Causes burns.
- R35 Causes severe burns.
- R50 Very toxic to aquatic organisms.

#### Hazard statements in full

- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H400 Very toxic to aquatic life.