



## SAFETY DATA SHEET

### Smart Flocc

According to Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, February 2016

#### SECTION 1: Identification: Product identifier and chemical identity

##### Product identifier

**Product name** Smart Flocc

##### Relevant identified uses of the substance or mixture and uses advised against

**Application** Waste Water treatment.

**Uses advised against** For professional use only. This product is not recommended for any industrial, professional or consumer use other than the Identified uses above.

##### Details of the supplier of the safety data sheet

**Supplier** Autosmart Australia  
 11 Darrambal Close  
 Rathmines  
 NSW 2283  
 Australia  
[www.autosmartaustralia.com.au](http://www.autosmartaustralia.com.au)  
 Tel: 02 49 75 14 88 (Mon to Fri, 08:00 - 16:00 AEST) (General Information. Transport Information. Mild Medical Information)  
[autosmart@autosmartaustralia.com.au](mailto:autosmart@autosmartaustralia.com.au)

**Contact Person** Mr. Russell Butler

##### Emergency telephone number

**Emergency telephone** Emergency No: +44 7808 971321 (24hrs) (Autosmart International, UK)  
 General Information. Transport Information. Mild medical Information:-  
 Tel: 02 49 75 14 88 (Mon to Fri, 08:00 - 16:00 AEST)

**National emergency telephone number** Poison Information Hotline: 13 11 26

#### SECTION 2: Hazard(s) identification

##### Classification of the substance or mixture

**Physical hazards** Not Classified

**Health hazards** Not Classified

**Environmental hazards** Not Classified

##### Label elements

**Hazard statements** NC Not Classified

**Precautionary statements** P280 Wear protective gloves.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P501 Dispose of contents/ container in accordance with local regulations.

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**Supplemental label information** For professional users only.

### Other hazards

This product does not contain any substances classified as PBT (persistent, bioaccumulative and toxic) or vPvB (very persistent and very bioaccumulative).

### SECTION 3: Composition and information on ingredients

#### Mixtures

<b>aluminium chlorohydrate</b> CAS number: 12042-91-0 Substance with a Community workplace exposure limit.	<b>0-10%</b>
<b>Classification</b> Not Classified	

The full text for all hazard statements is displayed in Section 16.

### SECTION 4: First aid measures

#### Description of first aid measures

<b>General information</b>	Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.
<b>Inhalation</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Remove any dentures. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.
<b>Skin Contact</b>	Remove affected person from source of contamination. Rinse immediately with plenty of water.
<b>Eye contact</b>	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.
<b>Protection of first aiders</b>	First aid personnel should wear appropriate protective equipment during any rescue.

#### Most important symptoms and effects, both acute and delayed

<b>General information</b>	See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	Prolonged inhalation of high concentrations may damage respiratory system.
<b>Ingestion</b>	Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
<b>Skin contact</b>	Prolonged contact may cause dryness of the skin.
<b>Eye contact</b>	May cause temporary eye irritation.

#### Indication of any immediate medical attention and special treatment needed

<b>Notes for the doctor</b>	Treat symptomatically.
<b>Specific treatments</b>	No special treatment required.

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### SECTION 5: Firefighting measures

#### Extinguishing media

**Suitable extinguishing media** The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

#### Special hazards arising from the substance or mixture

**Specific hazards** Containers can burst violently or explode when heated, due to excessive pressure build-up.

**Hazardous combustion products** Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

#### Advice for firefighters

**Protective actions during firefighting** Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to Australia/New Zealand Standards AS/NZS 4967 (for clothing) AS/NZS 1801 (for helmets), AS/NZS 4821 (for protective boots), AS/NZS 1801 (for protective gloves) will provide a basic level of protection for chemical incidents.

### SECTION 6: Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage.

#### Environmental precautions

**Environmental precautions** Avoid discharge to the aquatic environment. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

#### Methods and material for containment and cleaning up

**Methods for cleaning up** Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Reuse or recycle products wherever possible. Approach the spillage from upwind. Small Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Large Spillages: If leakage cannot be stopped, evacuate area. Flush spilled material into an effluent treatment plant, or proceed as follows. Contain and absorb spillage with sand, earth or other non-combustible material. Place waste in labelled, sealed containers. Clean contaminated objects and areas thoroughly, observing environmental regulations. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

#### Reference to other sections

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see Section 13.

### SECTION 7: Handling and storage, including how the chemical may be safely used

#### Precautions for safe handling

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<b>Usage precautions</b>	Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists.
<b>Advice on general occupational hygiene</b>	Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.
<b><u>Conditions for safe storage, including any incompatibilities</u></b>	
<b>Storage precautions</b>	Store away from incompatible materials (see Section 10). Store in accordance with local regulations. Keep container tightly closed and at temperature not exceeding 38°C.
<b>Storage class</b>	Unspecified storage.
<b><u>Specific end use(s)</u></b>	
<b>Specific end use(s)</b>	The identified uses for this product are detailed in Section 1.

### SECTION 8: Exposure controls and personal protection

#### Control parameters

#### Occupational exposure limits

##### aluminium chlorohydrate

Long-term exposure limit (8-hour TWA): WEL 2 mg/m<sup>3</sup> as Al

WEL = Workplace Exposure Limit.

#### Exposure controls

##### Protective equipment



##### Appropriate engineering controls

Provide adequate ventilation. Good general ventilation should be adequate to control worker exposure to airborne contaminants.

##### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with Australia/New Zealand Standard AS/NZS 1337. The following protection should be worn: Chemical splash goggles.

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<b>Hand protection</b>	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. The breakthrough time for any glove material may be different for different glove manufacturers. To protect hands from chemicals, gloves should comply with Australia/New Zealand Standard AS/NZS 2161. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended. The choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. When used with mixtures, the protection time of gloves cannot be accurately estimated. Gloves made from the following material may provide suitable chemical protection: Nitrile rubber. Thickness: >0.2mm The selected gloves should have a breakthrough time of at least 0.5 hours. Glove thickness is not necessarily a good measure of glove resistance as the permeation rate will depend on the exact glove composition. Repeated exposure to chemicals will degrade the ability of the glove to provide resistance to chemicals. Specific work environments and material handling practices may vary, therefore safety procedures should be developed for each intended application. Use thin cotton gloves inside natural rubber gloves if there is an allergy risk to natural rubber.
<b>Other skin and body protection</b>	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
<b>Hygiene measures</b>	Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.
<b>Respiratory protection</b>	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.
<b>Environmental exposure controls</b>	Not regarded as dangerous for the environment.

### SECTION 9: Physical and chemical properties

#### Information on basic physical and chemical properties

<b>Appearance</b>	Liquid.
<b>Colour</b>	Water-white. to Light (or pale). Amber.
<b>Odour</b>	Almost odourless.
<b>pH</b>	Not available.
<b>Melting point</b>	-12°C
<b>Initial boiling point and range</b>	104°C
<b>Vapour density</b>	~ 9.2 @ >180 deg.
<b>Relative density</b>	~ 1.19 @ 25°C
<b>Solubility(ies)</b>	Miscible with water.
<b>Viscosity</b>	Not available.
<b>Comments</b>	Information declared as "Not available" or "Not applicable" is not considered to be relevant to the implementation of the proper control measures.

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**Volatile organic compound** This product contains a maximum VOC content of 0 %.

### SECTION 10: Stability and reactivity

<b>Reactivity</b>	See the other subsections of this section for further details.
<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
<b>Possibility of hazardous reactions</b>	No potentially hazardous reactions known.
<b>Conditions to avoid</b>	There are no known conditions that are likely to result in a hazardous situation.
<b>Materials to avoid</b>	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
<b>Hazardous decomposition products</b>	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

### SECTION 11: Toxicological information

#### Information on toxicological effects

<b>Toxicological effects</b>	Not regarded as a health hazard under current legislation.
<b><u>Acute toxicity - oral</u></b>	
<b>Notes (oral LD<sub>50</sub>)</b>	Based on available data the classification criteria are not met.
<b><u>Acute toxicity - dermal</u></b>	
<b>Notes (dermal LD<sub>50</sub>)</b>	Based on available data the classification criteria are not met.
<b><u>Acute toxicity - inhalation</u></b>	
<b>Notes (inhalation LC<sub>50</sub>)</b>	Based on available data the classification criteria are not met.
<b><u>Skin corrosion/irritation</u></b>	
<b>Animal data</b>	Based on available data the classification criteria are not met.
<b><u>Serious eye damage/irritation</u></b>	
<b>Serious eye damage/irritation</b>	Based on available data the classification criteria are not met.
<b><u>Respiratory sensitisation</u></b>	
<b>Respiratory sensitisation</b>	Based on available data the classification criteria are not met.
<b><u>Skin sensitisation</u></b>	
<b>Skin sensitisation</b>	Based on available data the classification criteria are not met.
<b><u>Germ cell mutagenicity</u></b>	
<b>Genotoxicity - in vitro</b>	Based on available data the classification criteria are not met.
<b><u>Carcinogenicity</u></b>	
<b>Carcinogenicity</b>	Based on available data the classification criteria are not met.
<b>IARC carcinogenicity</b>	None of the ingredients are listed or exempt.
<b><u>Reproductive toxicity</u></b>	
<b>Reproductive toxicity - fertility</b>	Based on available data the classification criteria are not met.

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**Reproductive toxicity - development** Based on available data the classification criteria are not met.

### Specific target organ toxicity - single exposure

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

### Aspiration hazard

**Aspiration hazard** Based on available data the classification criteria are not met.

### General information

No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

### Inhalation

Prolonged inhalation of high concentrations may damage respiratory system.

### Ingestion

Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.

### Skin Contact

Prolonged contact may cause dryness of the skin.

### Eye contact

May cause temporary eye irritation.

### Route of exposure

Ingestion Inhalation Skin and/or eye contact

### Target Organs

No specific target organs known.

### Toxicological information on ingredients.

#### aluminium chlorohydrate

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** LD<sub>50</sub> >2,000 mg/kg, Oral, Rat

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** LD<sub>50</sub> >2,000 mg/kg, Dermal, Rat

### **SECTION 12: Ecological information**

### Ecotoxicity

Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

### Toxicity

Based on available data the classification criteria are not met.

### Ecological information on ingredients.

#### aluminium chlorohydrate

#### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 1 mg/l, Fish  
NOEC, 1440 hours: 0.013 mg/l, Fish

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 48 hours: 0.014 mg/l, Algae  
EC<sub>50</sub>, 72 hours: 0.075 mg/l, Algae

### Persistence and degradability

**Persistence and degradability** The product is expected to be biodegradable.

### Ecological information on ingredients.

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### aluminium chlorohydrate

**Persistence and degradability**

Expected to be readily biodegradable.

**Bioaccumulative potential****Bioaccumulative Potential** No data available on bioaccumulation.**Ecological information on ingredients.**

### aluminium chlorohydrate

**Bioaccumulative Potential** Bioaccumulation is unlikely.**Mobility in soil****Mobility**

The product is water-soluble and may spread in water systems. The product is non-volatile.

**Other adverse effects****Other adverse effects**

None known.

**SECTION 13: Disposal considerations****Waste treatment methods****General information**

The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

**Disposal methods**

Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority.

**SECTION 14: Transport information****General**

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADG).

**UN number**

Not applicable.

**UN proper shipping name**

Not applicable.

**Transport hazard class(es)**

No transport warning sign required.

**Packing group**

Not applicable.

**Environmental hazards****Environmentally hazardous substance/marine pollutant**

No.

**Special precautions for user**



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Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Pollution category: Cat Z

### SECTION 15: Regulatory information

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

##### National regulations

The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).  
National Code of Practice for the Preparation of Material Safety Data Sheets.  
Approved Criteria for Classifying Hazardous Substances.  
Exposure Standards for Atmospheric Contaminants in the Occupational Environment.  
Guidance Note on the Interpretation of Exposure Standards for Atmospheric Contaminants in the Occupational Environment.  
National Code of Practice for the Labelling of Workplace Substances.  
National Model Regulations for the Control of Workplace Hazardous Substances.  
National Code of Practice for the Control of Workplace Hazardous Substances.  
National Standard for the Storage and Handling of Workplace Dangerous Goods.  
National Code of Practice for the Storage and Handling of Workplace Dangerous Goods.  
Guidance Note for Placarding Stores for Dangerous Goods and Specified Hazardous Substances. Guidance Note for the Assessment of Health Risks Arising from Hazardous Substances in the Workplace.  
National Standard for the Control of Major Hazard Facilities. National Code of Practice for the Control of Major Hazard Facilities.

##### Schedule (SUSMP)

No Poison Schedule number allocated

#### Inventories

##### Australia - AICS

All the ingredients are listed or exempt.

### SECTION 16: Any other relevant information

#### Abbreviations and acronyms used in the safety data sheet

ADG: Australian dangerous goods code

IATA: International air transport association.

ICAO: Technical instructions for the safe transport of dangerous goods by air.

IMDG: International maritime dangerous goods.

CAS: Chemical abstracts service.

ATE: Acute toxicity estimate.

LC<sub>50</sub>: Lethal concentration to 50 % of a test population.

LD<sub>50</sub>: Lethal dose to 50% of a test population (median lethal dose).

EC<sub>50</sub>: 50% of maximal effective concentration.

PBT: Persistent, bioaccumulative and toxic substance.

vPvB: Very persistent and very bioaccumulative.

#### Training advice

Read and follow manufacturer's recommendations. Only trained personnel should use this material.

#### Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

## Smart Flocc

**Issued by** Prepared by Autosmart International Ltd, Lynn Lane, Shenstone, Lichfield, Staffordshire,  
WS14 0DH, Great Britain.  
www.autosmartinternational.com  
rbutler@autosmart.co.uk  
Tel +44 (0)1543 481616

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