

## Material Safety Data Sheet

### 1 Identification of the substance/preparation and of the company/undertaking.....

**Product Name:** Multi-5 Chlorine Granules

**Chemical Name:** Sodium Dichloroisocyanurate, Aluminium Sulphate, Copper Sulphate

**Application of the substance / the preparation:** Swimming Pool Water Sanitiser

**Manufacturer/Supplier:** swimmingpoolchemicals.co.uk  
Unit 1 Pool Banks Business Park  
High Street, Tarvin  
Chester, Cheshire  
CH3 8JH  
UK  
Tel: 01829 740290  
Fax: 01829 741855  
E-mail: [sales@totalpool.co.uk](mailto:sales@totalpool.co.uk)

**Information in case of emergency:** Tel: 01829 740290

### 2 Hazards Identification

#### Hazard description

- Xn Harmful
- N Dangerous for the environment

#### Information concerning particular hazards for human and the environment

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 22 Harmful if swallowed.

R 31 Contact with acids liberates toxic gas.

R 36/37 Irritating to eyes and respiratory system.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Classification system

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

### 3 Composition/information on ingredients

#### Chemical characterization

**Description:** Mixture of substances listed below with nonhazardous additions.

**Dangerous components**

CAS: 51580-86-0 EINECS: 220-767-7	Sodium dichloroisocyanurate, dihydrate Xn, Xi, N; R 22-31-36/37-50/53	50-100%
CAS: 100043-01-3 EINECS: 233-135-0	Aluminium sulphate Xi; R 36/37/38	2.5-10%
CAS: 7758-99-8	Copper sulphate pentahydrate Xn, Xi, N; R 22-36/38-50/53	≤ 2.5%

**Additional information:** For the wording of the listed risk phrases refer to section 16.

**4 First aid measures**

**General Information:** Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident. Immediately remove any clothing soiled by the product.

**After inhalation:** Supply fresh air. Consult doctor in case of complaints.

**After skin contact:** Immediately rinse with water. If skin irritation continues, consult a doctor.

**After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor. Check for and remove any contact lenses.

**After swallowing:** Rinse out mouth and then drink plenty of water. Seek immediate medical advice.

**Information for doctor:** Treat symptomatically and supportively.

**5 Fire-fighting measures**

**Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

**Protective equipment**

- Wear self-contained respiratory protective device.
- Wear fully protective suit.
- Do not inhale explosion gas or combustion gases.

**6 Accidental release measures****Person-related safety precautions**

- Ensure adequate ventilation
- Avoid formation of dust.
- Mount respiratory protective device.
- Wear protective equipment.

- Keep unprotected persons away.

#### Measures for environmental protection

- Do not allow to penetrate the ground/soil.
- Do not allow product to reach sewage system or any water course.
- Do not allow to enter sewers/ surface or ground water.

#### Measures for cleaning/collecting

- Pick up mechanically.
- Send for recovery or disposal in suitable receptacles.
- Ensure adequate ventilation.

## 7 Handling and storage

### Handling

#### Information for safe handling

- Prevent formation of dust.
- Ensure good ventilation/exhaustion at the workplace.
- Ensure high housekeeping standards to remove build of dust.
- Do not mix with other products in the concentrated form.
- Do not mix with acids - toxic gas will be evolved.

**Information about fire – and explosion protection:** No special measures required.

### Storage

#### Requirements to be met by storerooms and receptacles

- Prevent any seepage into the ground.

#### Information about storage in one common storage facility

- Store away from foodstuffs.
- Do not store together with acids.

#### Further information about storage conditions

- Store in cool, dry conditions in well sealed receptacles.

## 8 Exposure controls/personal protection

**Additional information about design of technical facilities:** No further data; see item 7.

<b>Ingredients with limit values that require monitoring at the workplace:</b>	
<b>51580-86-0 sodium dichloroisocyanurate, dihydrate</b>	
WEL	Short-term value: 0.07 mg/m <sup>3</sup> Long-term value: 0.02 mg/m <sup>3</sup> Sen; as -NCO

**Additional information:** The lists valid during the making were used as basis.

**Personal protective equipment**

- Select PPE appropriate for the operations taking place taking into account the product properties.

**General protective and hygienic measures**

- Do not eat, drink, smoke or sniff while working.
- Storing food in the working area is prohibited.
- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Avoid contact with eyes and skin.
- Do not inhale dust / smoke / mist.

**Respiratory protection**

- In case of brief exposure or low pollution use respiratory filter device.
- In case of intensive or longer exposure use self-contained respiratory protective device.

**Protection of hands:** Protective gloves.

- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

**Material of glove**

- The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and therefore has to be checked prior to the application.

**Penetration time of glove material**

- The exact break through time has to be found out by the manufacturer of the protective gloves has to be observed.

**Eye protection:** Tightly sealed goggles.

**Body protection:** Protective work clothing.

**9 Physical and chemical properties****General information**

**Form:** Solid

**Colour:** Whitish

**Odour:** Chlorine

### Change in condition

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** Undetermined.

**Flash point:** Not applicable

**Ignition temperature:** >200 degrees centigrade.

**Self-igniting:** Product is not self-igniting.

**Danger of explosion:** Product does not present an explosion hazard.

**Density:** Not determined.

**Solubility in water / Miscibility with water:** Partly soluble.

**Solvent content: VOC (EC) 0.00%**

### 10 Stability and reactivity

**Thermal decomposition / conditions to be avoided:** No decomposition if used and stored according to specifications.

**Materials to be avoided:** Strong acids and oxidising agents.

**Dangerous reactions:** Reacts with acids to produce free chlorine.

**Dangerous decomposition products:** Chlorine.

### 11 Toxicological information

**Acute toxicity:**

<b>LD/LC50 values relevant for classification:</b>
<b>51580-86-0 sodium dichloroisocyanurate, dihydrate</b>
Oral   LD50   1400 mg/kg (rat)
<b>7758-99-8 Copper sulphate pentahydrate</b>
Oral   LD50   300 mg/kg (rat)

**Primary irritant effect:**

**On the skin:** No irritant effect.

**On the eye:** Irritating effect.

**Sensitization:** No sensitizing effects known.

**Additional toxicological information:** The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: Harmful.

### 12 Ecological information

#### Behaviour in environmental systems

**Mobility and bioaccumulation potential:** Product is not expected to bioaccumulate.

#### Ecotoxicological effects

**Remark:** Very toxic for fish.

**General notes:**

- Also poisonous for fish and plankton in water bodies.
- Very toxic for aquatic organisms.
- Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

- Do not allow product to reach ground water, water course or sewage system.
- Danger to drinking water if even small quantities leak into ground.

### 13 Disposal considerations

#### **Product**

#### **Recommendation**

- Contact waste processors for recycling information.
- Must not be disposed together with household garbage.
- Do not allow product to reach sewage system.
- Used, degraded or contaminated product may be classified as hazardous waste.
- Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

#### **European waste catalogue**

Waste key number in accordance with the European Waste catalogue (EWC) are origin-referred defined. Since this product is used in several industries, no waste key can be provided by the supplier. The waste key number should be determined in arrangement with your waste disposal partner or the responsible authority.

#### **Uncleaned packaging**

**Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

#### **Land transport ADR/RID (cross-border)**

**ADR/RID class:** 9 Miscellaneous dangerous substances and articles.

**Danger code (Kemler):** 90

**UN-Number:** 3077

**Packaging group:** III

**Hazard label:** 9

**Description of goods:** 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (sodium dichloroisocyanurate, dihydrate)

#### **Maritime transport IMDG:**

**IMDG Class:** 9

**UN Number:** 3077

**Label:** 9

**Packaging Group:** III

**Marine Pollutant:** No

**Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

#### **Air transport ICAO-TI and IATA-DGR:**

**ICAO/IATA Class:** 9

**UN/ID Number:** 3077

**Label:** 9

**Packaging group:** III

**Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (sodium dichloroisocyanurate, dihydrate)

## 15 Regulatory information

### Labelling according to EU guidelines

- The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

### Code letter and hazard designation of product

- Xn Harmful.
- N Dangerous for the environment.

### Hazard-determining components of labelling

- Sodium dichloroisocyanurate dihydrate

### Risk phrases:

- 22 Harmful if swallowed.
- 31 Contact with acids liberates toxic gas.
- 36/37 Irritating to eyes and respiratory system.
- 50/53 Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

### Safety phrases:

- 2 Harmful if swallowed.
- 31 Contact with acids liberates toxic gas.
- 36/37 Irritating to eyes and respiratory system.
- 36/37/38 Irritating to eyes, respiratory system and skin.
- 36/38 Irritating to eyes and skin.
- 50/53 Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

### Relevant R-phrases

- 22 Harmful if swallowed.
- 31 Contact with acids liberates toxic gas.
- 36/37 Irritating to eyes and respiratory system.
- 36/37/38 Irritating to eyes, respiratory system and skin.
- 36/38 Irritating to eyes and skin.
- 50/53 Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.