



SAFETY DATA SHEET – Stabilised Chlorine Granules

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING	
1.1 Product identifier	Stabilised Chlorine Granules Sodium dichloroisocyanurate dihydrate (56%) EC No. 220-767-7 REACH Registration No. 01-2119489371-33
1.2 Relevant identified uses of the substance or mixture and uses advised against	Intended use: chlorination of swimming pools
1.3 Details of the supplier of the SDS	A & R Products (South East) Ltd Europa House Pivington Mill Pluckley Kent TN27 0PG SDS compiler: mail@arproducts.co.uk
1.4 Emergency telephone number:	01233 841855 (Monday – Friday 9.00 – 17.00 hrs GMT)
SDS Issue 2:	09/12/2013

SECTION 2 HAZARDS IDENTIFICATION	
2.1 Classification of the substance or mixture <i>see section 16 for full text of H-and R- phrases</i>	<p><u>Classification to CLP ((EC) No 1272/2008):</u> Acute Tox. 4*; H302 Eye Irrit. 2; H319 STOT SE 3; H335 Aquatic Acute 1; H400 Aquatic Chronic 1; H410</p> <p>-----</p> <p><u>Classification to DPD (1999/45/EC) and CHIP:</u> Harmful Xn; R22, R31, Irritant Xi; R36/37 Dangerous for the environment N;R50/53</p>
2.2 Label elements	<p>Labelling in accordance with CLP ((EC) No 1272/2008)</p> <div style="display: flex; align-items: center; justify-content: center;">   <div style="margin-left: 20px;">WARNING</div> </div>
<i>Note: only the text is required on the label (not the statement codes)</i>	<p><i>H302</i> Harmful if swallowed <i>H319</i> Causes serious eye irritation <i>H335</i> May cause respiratory irritation <i>H410</i> Very toxic to aquatic life with long lasting effects <i>P260</i> Do not breathe dust <i>P220</i> Keep away from acids <i>P280</i> Wear protective gloves <i>P273</i> Avoid release to the environment <i>P270</i> Do not eat, drink or smoke when using this product <i>P305+351+338</i> IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. <i>EUH206</i> Warning! Do not use together with other products. May release dangerous gases (chlorine) <i>EUH031</i> Contact with acids liberates toxic gas. <i>P102</i> Keep out of reach of children. <i>P101</i> If medical advice is needed, have product container or label at hand.</p>
2.3 Other hazards	Sodium dichloroisocyanurate dihydrate No other information is available.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance

Hazardous Ingredients:

see section 16 for full text of classification phrases

Name	EC No.	CAS No.	DSD Classn.	CLP Classification	%
sodium dichloroisocyanurate dihydrate	220-767-7	51580-86-0	Xn; R22 R31 Xi; R36/37 N; R50/53	Acute Tox. 4 *; H302 Eye Irrit. 2; H319 STOT SE 3; H335 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	56

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination

Ingestion: Do NOT induce vomiting. If conscious, give half a litre of water to drink immediately. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

4.2 Most important symptoms and effects, both acute and delayed

Eye contact: Hazardous in case of eye contact (irritation and redness).

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Delayed effects can be expected after short-term exposure.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Eye wash equipment should be available on the premises.

SECTION 5 FIREFIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing measures appropriate to surrounding environment. Alcohol resistant foam. Carbon dioxide
Do not use ABC (dry powder) extinguishers containing nitrogen, due to risk of violent chemical reactions

5.2 Specific hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.
Not combustible but enhances combustion of other substances

5.3 Advice for fire-fighters

Wear protective clothing to prevent contact with skin and eyes. Wear self-contained breathing apparatus.
Cool endangered receptacles with water spray

SECTION 6 ACCIDENTAL RELEASE MEASURES	
6.1 Personal precautions, protective equipment and emergency procedures	Select appropriate protective clothing for the size of the spillage. Provide adequate ventilation. Avoid formation of dust. Avoid contact with skin and eyes. Do not breathe dust.
6.2 Environmental precautions	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.
6.3 Methods and material for containment and cleaning up	Sweep up and shovel. Keep in suitable, closed containers for disposal. Avoid dust formation. Flush away traces with water. Further information: Treat recovered material as described in section 13 "Disposal considerations".
6.4 Reference to other sections	Personal protective equipment: See section 8

SECTION 7 HANDLING AND STORAGE	
7.1 Precautions for safe handling	Avoid contact with skin and eyes. Ensure adequate ventilation. Keep away from incompatibles such as acids. Prevent formation of dust
7.2 Conditions for safe storage, including any incompatibilities	Keep container tightly closed and in a cool, well-ventilated area. Store away from acids. Keep away from food, drink and animal feeding stuffs
7.3 Specific end use(s)	For chlorination of swimming pools

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION	
8.1 Control parameters	Sodium dichloroisocyanurate dihydrate : Workplace Exposure Limits (WEL): STEL 0.07 mg/m ³ LTEL 0.02 mg/m ³
8.2 Exposure controls	Refer to protective measures listed in sections 7 and 8. Dust respirator - be sure to use an approved/certified dust mask/respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Wear protective gloves and replace at first signs of wear – the glove material has to be impermeable and resistant to the product. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Suitable materials: PVC gloves. Eye protection: Tightly fitting safety goggles Skin and body protection: overalls Environmental exposure controls: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains, inform respective authorities. If material reaches soil inform authorities responsible for such cases.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties – does not constitute a specification	
Appearance	White solid (granules)
Odour	chlorine
Odour threshold	no data available
pH	6-7
Melting Point (°C)	Decomposes >252
Initial boiling point/boiling range (°C)	no data
Flash Point (°C)(closed cup)	not applicable (non-flammable)
Evaporation rate	no data available
Flammability	not applicable (non-flammable)
Upper/lower flammability limits	not applicable (non-flammable)
Vapour pressure (mbar @ 20°C)	no data available
Vapour density	not applicable
Relative Density (@20°C)	0.97
Bulk density (@20°C)	1000 kg/m ³
Solubility in water	Soluble (>10g/l @ 25°C) (hydrolyses)
Solubility in fat / solvent	not miscible
Partition coefficient (log Pow)	no data available
Autoignition temperature (°C)	not applicable (non-flammable)
Decomposition temperature	no data available
Viscosity (mPa.s @ 20°C)	not applicable
Explosive properties	not explosive
Oxidising properties	Oxidising
9.2 Other information	None

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity	no information available
10.2 Chemical stability	Decomposes on heating or on contact with water
10.3 Possibility of hazardous reactions	Chlorine will be released on contact with acids Has oxidising properties and reacts violently with reducing agents
10.4 Conditions to avoid	Direct sunlight. Heat
10.5 Incompatible materials	Acids (chlorine released)
10.6 Hazardous decomposition products	In combustion emits toxic fumes of nitrogen oxides, chlorine.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects	
Acute Toxicity	
-oral	LD50 1500 mg/kg (rat)
-inhalation	Symptoms: Vomiting, Dizziness. Irritating to respiratory system.
-dermal	LD50 >5000 mg/kg (rabbit)
Corrosivity/Irritation	
-eye	Irritating to eyes
-skin	May irritate skin
-respiratory system	May cause respiratory irritation
Sensitisation -skin	no information
Other relevant toxicity information	Handle in accordance with good industrial hygiene and safety practice.

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity	Classified as very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
12.2 Persistence and degradability	Believed not to persist in the environment
12.3 Bioaccumulative potential	Not expected to bioaccumulate. Hydrolyses in water, liberating free chlorine and cyanuric acid (these products are not bioaccumulative)
12.4 Mobility in soil	Soluble in water. No further information
12.5 Results of PBT and vPvB assessment	No known PBT or vPvB chemicals present
12.6 Other adverse effects	Do not flush into surface water or sanitary sewer system.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	
Waste Residue:	Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services. European Waste Code: No waste code according to the European Waste Catalogue assigned for this product. The waste code is established in consultation with the regional waste disposer.
Packaging:	Empty contaminated packagings thoroughly. Packagings that cannot be cleaned are to be disposed of in the same manner as the product

SECTION 14 TRANSPORT INFORMATION

Classified as dangerous goods for carriage under ADR/RID/ADN/IMDG/ICAO/IATA regulations	
14.1 UN Number	UN 3077
14.2 UN Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Sodium dichloroisocyanurate, dihydrate)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	Classified as Environmentally Hazardous Substance
14.6 Special precautions for user	See section 8 for safe handling. Do not transport wet or damp product.
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable to packaged goods

SECTION 15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	Supply regulations: Classified as hazardous under DPD/GHS/CLP criteria (DPD: Dangerous Preparations Directive; GHS: Globally Harmonised system of classification and labelling of chemicals; CLP: Classification, Labelling and Packaging regulations) Transport regulations: Classified as Dangerous Goods for Carriage under ADR/RID/IMDG/ICAO/IATA regulations
15.2 Chemical Safety Assessment	No formal chemical safety assessment has been carried out

SECTION 16 OTHER INFORMATION

Full text of classification data in sections 2 and 3

Acute Tox. 4 *; H302	Acute toxic, category 4; Harmful if swallowed
Eye Irrit. 2; H319	Eye irritant, category 2; Causes serious eye irritation
STOT SE 3; H335	Specific target organ toxicity, single exposure, category 3; May cause respiratory irritation
Aquatic Acute 1; H400	Aquatic acute toxicity, category 1; Very toxic to aquatic life
Aquatic Chronic 1; H410	Aquatic chronic toxicity, category 1; Very toxic to aquatic life with long lasting effects
Xn; R22	Harmful; Harmful if swallowed
Xi; R36/37	Irritant; Irritating to eyes and respiratory system
N;R50/53	Dangerous for the Environment; Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R31	Contact with acids liberates toxic gas.

The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text