### Revision nr. 4 MARBEC S.R.L. Dated 27/02/2018 Printed on 27/02/2018 0030640 - ALGANET Page n. 1/17 Safety Data Sheet According to Annex II to REACH - Regulation 2015/830 SECTION 1. Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier 0030640 Code: Product name ALGANET Chemical name and synonym ALGANET 1.2. Relevant identified uses of the substance or mixture and uses advised against Sector of use SU22 – Professional uses Different uses than those described. Do not use in combination with other products Uses advised against Intended use Alkaline cleaner in powder, dispersible in water to eliminate mold and algae outside 1.3. Details of the supplier of the safety data sheet MARBEC S.R.L. Name VIA CROCE ROSSA 5/i Full address 51037 MONTALE (PISTOIA) District and Country ITALY Tel. +390573/959848 Fax +390573/959385 e-mail address of the competent person responsible for the Safety Data Sheet info@marbec.it 1.4. Emergency telephone number For urgent inquiries refer to MARBEC srl +390573959848 h8.30-13 h14-18 o +393357267921 Telephone number of Poison Centers active 24/24 hours CAV IRCSS Fondazione Maugeri – Pavia 0039-0382-24444 CAV Ospedali Riuniti - Bergamo 0039-800-883300 CAV Ospedale Niguarda Ca Granda - Milano 0039-02-66101029 CAV Ospedale Careggi- Firenze 0039-055-7947819 CAV Policlinico Gemelli – Roma 0039-06-3054343 CAV Policlinico Umberto I – Roma 0039-06 49978000 CAV Ospedale Cardarelli - Napoli 0039-081 5453333 **SECTION 2. Hazards identification** 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:		
Acute toxicity, category 4	H302	Harmful if swallowed.
Skin corrosion, category 1B	H314	Causes severe skin burns and eye damage.

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Serious eye damage, category 1 Specific target organ toxicity - single exposure, category 3	H318 H335	Causes serious eye damage. May cause respiratory irritation.
Hazardous to the aquatic environment, acute toxicity,	H400	Very toxic to aquatic life.
category 1		
Hazardous to the aquatic environment, chronic toxicity, category 1	H410	Very toxic to aquatic life with long lasting effects.

### 2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words:

Danger

Hazard statements:

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.
H410	Very toxic to aquatic life with long lasting effects.
EUH031	Contact with acids liberates toxic gas.

Precautionary statements:

P260 P305+P351+P338	Do not breathe dust / fume / gas / mist / vapours / spray. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P280	Wear protective gloves/ protective clothing / eve protection / face protection.
P310	Immediately call a POISON CENTER / doctor /
P264	Wash thoroughly after handling.
P273	Avoid release to the environment.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
Contains:	Sodium metasilicate pentahydrate, chlorine-based bleaching agents> 30%, phosphates 5 - 15%, anionic surfactants <5%

### 2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

# SECTION 3. Composition/information on ingredients

**3.1. Substances.** Information not applicable.

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### 3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
Sodium dichloroisocyanurate dihydrate		
CAS 51580-86-0	$30 \le x < 70$	Acute Tox. 4 H302, Eye Irrit. 2 H319, STOT SE 3 H335, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1, EUH031
EC 220-767-7		
INDEX 613-030-01-7		
Reg. no. 01-2119489371-33-xxxx		
SODIUM CARBONATE		
CAS 497-19-8	$10 \le x < 30$	Eye Irrit. 2 H319
EC 207-838-8		
INDEX 011-005-00-2		
Reg. no. 01-2119485498-19		
Sodium metasilicate pentahydrate		
CAS 10213-79-3	9≤x< 20	Met. Corr. 1 H290, Skin Corr. 1B H314, Eye Dam. 1 H318, STOT SE 3 H335
EC 229-912-9		
INDEX -		
Reg. no. 012119449811-37		
POTASSIUM PYROPHOSPHATE		
CAS 7320-34-5	5≤x< 9	Eye Irrit. 2 H319
EC 230-785-7		
INDEX -		
Reg. no. 01-2119489369-18		
Sulfuric acid, mono-C12-14-alkyl esters, sodium salts CAS 85586-07-8	1≤x< 3	Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315
EC 287-809-4		······································
INDEX -		
Reg. no. 01-2119489463-28		

The full wording of hazard (H) phrases is given in section 16 of the sheet.

### **SECTION 4. First aid measures**

### 4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

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Inhalation: sore throat, cough and nausea. Skin contact: redness with a strong sensation of itching with the possibility of forming sores. Eye contact: severe pain and tearing with impaired vision. Ingestion: abdominal pain, nausea and general weakness.

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

Information not available

### **SECTION 5. Firefighting measures**

### 5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

Powders based on ammonia salts and other halogenated extinguishing media.

Do not use water jets. Water is not effective to extinguish the fire but it can be used to cool closed containers exposed to flames, preventing bursts and explosions.

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

### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products. The product is combustible and, when the powder is released into the air in sufficient concentrations and in the presence of a source of ignition, it can create explosive mixtures with air. Fires may start or get worse by leakage of the solid product from the container, when it reaches high temperatures or through contact with sources of ignition.

#### dicloroisocianurato sodico

In caso di combustione possibile formazione di cloro gassoso. In caso di incendio si possono liberare: acido cianidrico, ossidi di carbonio e gas nitrosi. Munire gli addetti all'emergenza di indumenti protettivi adeguati e autorespiratore (SCBA) con maschera completa e ventilazione forzata.

### 5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

### **SECTION 6.** Accidental release measures

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

If there are no contraindications, spray powder with water to prevent the formation of dust. Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

### 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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

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In case of solid product, avoid the formation of dust. In the case of liquid product, contain and absorb the spill with inert absorbent material (for example sand, earth, vermiculite, fossil flour). Put the contaminated material in suitable containers and send it to waste disposal. After collection, wash the area and the materials involved with water, recovering the water used and, if necessary, sending it to disposal in authorized facilities.

#### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

### **SECTION 7. Handling and storage**

#### 7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

#### 7.2. Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place, away from direct sunlight and at a temperature below 35 ° C (the storage temperature can reach values of 40-45 ° C only for short periods not exceeding 24 hours).

Avoid contact with water and moisture, closing the containers well after each use. Keep away from food, drink and pet food. If the product is kept in a sheltered, dry and cool place (T max 25-30 ° C) its shelf life is virtually undefined.

### 7.3. Specific end use(s)

Information not available

### **SECTION 8. Exposure controls/personal protection**

### 8.1. Control parameters

Regulatory References:

TLV-ACGIH ACGIH 2018

Туре	Country	TWA/8h		STEL/15min				
		mg/m3	ppm	mg/m3	ppm			
TLV-ACGIH			0,5		1			
Predicted no-effect concent	tration - PNEC							
Normal value in fresh water	ſ			0,00017	mg	ı/I		
Normal value in marine wat	ter			1,52	mg	ı/I		
Normal value for fresh wate	er sediment			7,56	mg	ı/kg		
Normal value for water, inte	ermittent release			0,0017	mg	ı/I		
Normal value of STP micro	organisms			0,59	mg	ı/I		
Normal value for the terrest	trial compartment			0,756	mg	ı/kg		
Health - Derived no-eff	fect level - DNEL / I	OMEL						
	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Chronic local	Acute local	Acute systemic	Chronic systemic

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				1,15 mg/kg/d				
nhalation				1,99 mg/m3				8,11 mg/m3
Skin				1,15 mg/kg/d				2,3 mg/kg/c
SODIUM CARBONATE								
Threshold Limit Value	Country	TWA/8h		STEL/15min				
		mg/m3	ppm	mg/m3	ppm			
TLV-ACGIH		10		<u> </u>				
Health - Derived no-effec	t level - DNEL / D	MEL						
	Effects on				Effects on			
Route of exposure	consumers Acute local	Acute systemic	Chronic local	Chronic	workers Chronic local	Acute local	Acute	Chronic
Inhalation			10 mg/m3	systemic			systemic 10 mg/m3	systemic
SODIUM METASILICATE		E						
	IUIT - FINEC			7.5		1		
Normal value in fresh water				7,5	mg/			
Normal value in marine water				1	mg/	I		
Normal value for fresh water s				VND				
Normal value for marine water				VND				
Normal value for water, interm				7,5	mg/	1		
Normal value of STP microorg	anisms			1000	mg/	1		
Normal value for the terrestrial	compartment			VND				
Health - Derived no-effec	t level - DNEL / D Effects on consumers	MEL			Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic	Chronic local	Acute local	Acute	Chronic
Oral				systemic 0,74 mg/kg			systemic	systemic
				bw/d 1,55 mg/m3				6,22 mg/m3
Inhalation				0,74 mg/kg				1,49 mg/kg
								bw/d
Inhalation Skin				bw/d				
Skin				bw/d				
Skin POTASSIUM PYROPHOS	PHATE			bw/d				
Skin POTASSIUM PYROPHOS Threshold Limit Value	Country	TWA/8h		bw/d STEL/15min				
		TWA/8h mg/m3	ppm		ppm			
Skin POTASSIUM PYROPHOS Threshold Limit Value			ppm	STEL/15min	ppm			
Skin POTASSIUM PYROPHOS Threshold Limit Value Type	Country	mg/m3	ppm	STEL/15min	ppm			
Skin POTASSIUM PYROPHOS Threshold Limit Value Type TLV-ACGIH	Country	mg/m3	ppm	STEL/15min	ppm mg/	1		
Skin POTASSIUM PYROPHOS Threshold Limit Value Type TLV-ACGIH Predicted no-effect concentrat	Country	mg/m3	ppm	STEL/15min mg/m3				
Skin POTASSIUM PYROPHOS Threshold Limit Value Type TLV-ACGIH Predicted no-effect concentrat Normal value in fresh water Normal value in marine water	Country ion - PNEC	mg/m3	ppm	STEL/15min mg/m3 0,05	mg/	1		
Skin POTASSIUM PYROPHOS Threshold Limit Value Type TLV-ACGIH Predicted no-effect concentrat Normal value in fresh water Normal value in marine water Normal value for water, interm	Country ion - PNEC ittent release	mg/m3	ppm	STEL/15min mg/m3 0,05 0	mg/	1		
Skin POTASSIUM PYROPHOS Threshold Limit Value Type TLV-ACGIH Predicted no-effect concentrat Normal value in fresh water	Country ion - PNEC ittent release anisms t level - DNEL / D Effects on	mg/m3 10	ppm	STEL/15min mg/m3 0,05 0 0,5	mg/ mg/ mg/ Effects on	1		
Skin POTASSIUM PYROPHOS Threshold Limit Value Type TLV-ACGIH Predicted no-effect concentrat Normal value in fresh water Normal value in marine water Normal value for water, interm Normal value of STP microorg	Country ion - PNEC ittent release anisms t level - DNEL / D	mg/m3 10	ppm Chronic local	STEL/15min mg/m3 0,05 0 0,5	mg/ mg/ mg/	1	Acute	Chronic systemic

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Inhalation

0,68 mg/m3

2,79 mg/m3

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

### 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

If the product may or must come into contact or react with acids, suitable technical and/or organisational measures should be taken to prevent the development of toxic and/or inflammable gases.

#### HAND PROTECTION

In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves (see standard EN 374). Suitable glove material: neoprene or nitrile rubber gloves. Recommended thickness:> 0.2 mm. Permeation time: level 2/3 permeation value For the final choice of material for work gloves, the process of using the product and any other products derived from it must also be evaluated. It should also be remembered that latex gloves can cause sensitization.

#### SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

#### EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

#### RESPIRATORY PROTECTION

Use a type P filtering facemask, whose class (1, 2 or 3) and effective need, must be defined according to the outcome of risk assessment (see standard EN 149).

#### ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

### **SECTION 9.** Physical and chemical properties

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

Appearance	solid powder
Colour	white
Odour	pungent
Odour threshold	Not available

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pH	10 (sol. 10 gr/lt) work conditions
Melting point / freezing point	Not available
Initial boiling point	Not applicable
Boiling range	Not available
Flash point	Not applicable
Evaporation rate	Not available
Flammability (solid, gas)	not flammable
Lower inflammability limit	Not applicable
Upper inflammability limit	Not applicable
Lower explosive limit	Not applicable
Upper explosive limit	Not applicable
Vapour pressure	Not available
Vapour density	Not available
Relative density	0,8-0,9 kg/lt
Solubility	partially soluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	It is not considered flammable based on the experience of its use.
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	The substance is not explosive due to friction, impact or shock
Oxidising properties	not applicable
9.2. Other information	

VOC (Directive 2010/75/CE) :

0 gr/lt

### **SECTION 10. Stability and reactivity**

### 10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

Sodium dichloroisocyanurate dihydrate

The product quickly releases large quantities of chlorine if dissolved in water.

Exothermic reactions are possible in contact with strong oxidizing agents, reducing agents, strong acids or bases.

By contact with acids there is the development of chlorine gas.

#### SODIUM METASILICATE PENTAHYDRATE

The aqueous solutions act as: strong bases.Corrodes: aluminium,zinc,tin,aluminium alloys,zinc alloys,tin alloys.

### 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

### 10.3. Possibility of hazardous reactions

The powders are potentially explosive when mixed with air.

Sodium dichloroisocyanurate dihydrate

It can cause ignition of combustible or flammable materials

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SODIUM METASILICATE

Reacts violently with: acids.

### 10.4. Conditions to avoid

Damp and wet environments above 40 ° C

### 10.5. Incompatible materials

dichloroisocyanurate sodium bihydrate

Attacks metals in general. Reacts with water (in small quantities that can wet the product although large quantities of water are needed to fight fires), oxidizing agents, reducers, acids, alkalis, nitrogen products, ammonia salts, urea, amines, derivatives of quaternary ammonium, oils, fats, peroxides, cationic surfactants, etc.

### 10.6. Hazardous decomposition products

In combination with the products indicated in point 10.5 it decomposes, developing strong heat, chlorine gas, trichloroamine and chlorine oxide, etc. Explosion release if nitrogen trichloride level is high enough.

### **SECTION 11. Toxicological information**

### 11.1. Information on toxicological effects

sodium dichloroisocyanurate

The product can have harmful effects on human health

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

### ACUTE TOXICITY

LC50 (Inhalation) of the mixture: Not classified (no significant component) LD50 (Oral) of the mixture: 1935,48 mg/kg LD50 (Dermal) of the mixture: Not classified (no significant component)

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SODIUM CARBONATE

LD50 (Oral) 2800 mg/kg rat

LD50 (Dermal) > 2000 mg/kg rabbit

LC50 (Inhalation) 2300 mg/l/2h rat

SODIUM METASILICATE PENTAHYDRATE

LD50 (Oral) > 1152 mg/kg rat

LD50 (Dermal) > 5000 mg/kg rat

LC50 (Inhalation) > 2,06 g/m3 rat

### POTASSIUM PYROPHOSPHATE

LD50 (Oral) > 2000 mg/kg rat

LD50 (Dermal) > 2000 mg/kg rabbit

LC50 (Inhalation) > 1,1 mg/l/4h rat

Sodium dichloroisocyanurate dihydrate

LD50 (Oral) 1823 mg/kg (male and female rat) (EPA OPP 81-1)

LD50 (Dermal) > 5000 mg/kg (male and female rat) (EPA OPP 81-2)

LC50 (Inhalation) > 0,27 mg/l/4h (male and female rat; dust inhalation, gravimetric measurement)

Sulfuric acid, mono-C12-14-alkyl esters, sodium salts

LD50 (Oral) 1800 mg/kg rat

LD50 (Dermal) > 2000 mg/kg rat

### **SKIN CORROSION / IRRITATION**

Corrosive for the skin

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

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### RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

### GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

### CARCINOGENICITY

Does not meet the classification criteria for this hazard class

### REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

### STOT - SINGLE EXPOSURE

May cause respiratory irritation

### STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

### ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

### **SECTION 12. Ecological information**

This product is dangerous for the environment and highly toxic for aquatic organisms. In the long term, it have negative effects on aquatic environment. dicloroisocianurato sodico

### 12.1. Toxicity

SODIUM CARBONATE	
LC50 - for Fish	300 mg/l/96h lepomis macrochirus
EC50 - for Crustacea	200 mg/l/48h daphnia magna
SODIUM METASILICATE PENTAHYDRATE	
LC50 - for Fish	210 mg/l/96h brachydanio rerio
EC50 - for Crustacea	1700 mg/l/48h daphnia magna
POTASSIUM PYROPHOSPHATE	
LC50 - for Fish	> 100 mg/l/96h oncorynchus mykiss
EC50 - for Crustacea	> 100 mg/l/48h daphnia magna
EC50 - for Algae / Aquatic Plants	> 100 mg/l/72h algae
Chronic NOEC for Fish	100 mg/l oncorynchus mykiss

## MARBEC S.R.L. Revision nr. 4 Dated 27/02/2018 Printed on 27/02/2018 0030640 - ALGANET Page n. 12/17 Chronic NOEC for Algae / Aquatic Plants > 100 mg/l algae Sodium dichloroisocyanurate dihydrate LC50 - for Fish 0,23 mg/l/96h Species: lepomis macrochirus EC50 - for Crustacea 0,17 mg/l/48h daphnia magna Sulfuric acid, mono-C12-14-alkyl esters, sodium salts LC50 - for Fish 3,6 mg/l/96h Oncorhynchus mykiss EC50 - for Crustacea 4,7 mg/l/48h Daphnia magna 12.2. Persistence and degradability SODIUM METASILICATE PENTAHYDRATE Inorganic. Soluble silicates when diluted rapidly depolymerize producing molecular species that are not distinguishable from natural silica. Dichloroisocyanurate sodium bihydrate The substance is easily biodegradable. This material is believed not to persist in the environment. The chlorocyanurates both in the soil and in the water are unstable and, given that in these conditions they quickly lose the active chlorine, the cyanuric acid (or its salts) that is formed is the species to be considered in environmental impact studies. Cyanuric acid rapidly biodegrades in a wide range of natural conditions, and in particular in anaerobic or oxygen-poor environments (1-3 ppm). Cyanuric acid: Aerobic degradation: slow. Anaerobic degradation: biodegradable "readly". The available free chlorine is rapidly consumed by reaction with organic and inorganic materials for the production of chlorine ions. Biodegradation in water: in the study conditions no biodegradation was observed: 2% after 28 days (O2 consumption). Study carried out on untreated domestic waste water (OECD 301 D). Biodegradation in the soil: 100% after 23 days in agricultural land (Saldick J., 1974). SODIUM CARBONATE Solubility in water 1000 - 10000 mg/l Degradability: information not available POTASSIUM PYROPHOSPHATE Solubility in water > 10000 mg/l Degradability: information not available Dichloroisocyanurate sodium bihydrate Rapidly degradable Sulfuric acid, mono-C12-14-alkyl esters, sodium salts Rapidly degradable 12.3. Bioaccumulative potential SODIUM METASILICATE PENTAHYDRATE Inorganic. The substance has no potential for bioaccumulation. Dichloroisocyanurate sodium bihydrate Does not bioaccumulate. Log kow <1

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NaDCC hydrolyzes rapidly into cyanuric acid and is very soluble in water. Furthermore the chlorinated isocyanurates are very reactive with many biological compounds such as proteins and enzymes and consequently its bioaccumulation is considered unlikely.

Coeff. n-octanol / water part (Low Pow): -0.0056 (calculated value)

### 12.4. Mobility in soil

Dichloroisocyanurate sodium bihydrate Type of study: adsorption (soil) - Adsorption coefficient: Koc: ca. 51 (tested product: cyanuric acid)

### 12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

### 12.6. Other adverse effects

#### POTASSIUM PYROPHOSPHATE

Ecology - water: Product that does not present particular risks for the environment. Phosphate is a nutrient for plants and therefore can promote the growth of phytoplankton in water.

### **SECTION 13. Disposal considerations**

### 13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

### **SECTION 14. Transport information**

#### 14.1. UN number

ADR / RID, IMDG, 3077 IATA:

### 14.2. UN proper shipping name

ADR / RID:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (sodium dichloroisocyanurate, dihydrate)
IMDG:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (sodium dichloroisocyanurate, dihydrate)
IATA:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (sodium dichloroisocyanurate, dihydrate)

Label: 9

### 14.3. Transport hazard class(es)

ADR / RID:	Class: 9



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IMDG:	Class: 9	Label: 9		I	
IATA:	Class: 9	Label: 9			
4.4. Packing group			×		
ADR / RID, IMDG, IATA:	Ш				
4.5. Environmental	hazards				
ADR / RID:	Environmentally Hazardous				
IMDG:	Marine Pollutant				
IATA:	Environmentally Hazardous				
4.6. Special precau	tions for user				
ADR / RID:		HIN - Kemler: 90	Limited Quantities	: 5	Tunnel restriction code: (E)
		Special Provision: -	kg		
IMDG:		EMS: F-A, S-F	Limited Quantities	: 5	
ΙΑΤΑ:		Cargo:	kg Maximum quantity: 4		Packaging instructions:
		Pass.:	Kg Maximum quantity: 4	00	956 Packaging instructions:
		Special Instructions:	Kg A97, A158 A179, A19	3, 97	956

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

# **SECTION 15. Regulatory information**

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

Seveso Category - Directive 2012/18/EC: E1

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

None

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Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

### 15.2. Chemical safety assessment

A chemical safety assessment has been developed for the following substances contained in the mixture: Sodium dichloroisocyanurate, dihydrate, sodium carbonate, sodium metasilicate pentahydrate, potassium pyrophosphate.

### **SECTION 16. Other information**

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Met. Corr. 1	Substance or mixture corrosive to metals, category 1		
Acute Tox. 4	Acute toxicity, category 4		
Skin Corr. 1B	Skin corrosion, category 1B		
Eye Dam. 1	Serious eye damage, category 1		
Eye Irrit. 2	Eye irritation, category 2		
Skin Irrit. 2	Skin irritation, category 2		
STOT SE 3	Specific target organ toxicity - single exposure, category 3		
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1		
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1		
H290	May be corrosive to metals.		
H302	Harmful if swallowed.		
H314	Causes severe skin burns and eye damage.		
H318	Causes serious eye damage.		
H319	Causes serious eye irritation.		

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H315	Causes skin irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH031	Contact with acids liberates toxic gas.
<ul> <li>CAS NUMBER: C</li> <li>CE50: Effective c</li> <li>CE NUMBER: Ide</li> <li>CLP: EC Regulati</li> <li>DNEL: Derived NM</li> <li>EmS: Emergency</li> <li>GHS: Globally Ha</li> <li>IATA DGR: Internationa</li> <li>IMDG: Internationa</li> <li>IMDG: Internationa</li> <li>INDEX NUMBER</li> <li>LC50: Lethal Con</li> <li>DD50: Lethal dose</li> <li>OEL: Occupationa</li> <li>PBT: Persistent b</li> <li>PEC: Predicted ex</li> <li>PNEC: Predicted ex</li> <li>PNEC: Predicted ex</li> <li>PNEC: Predicted ex</li> <li>PNEC: Predicted ex</li> <li>PEL: Predicted ex</li> <li>PEL: Predicted ex</li> <li>PLO: Threshold Li</li> <li>TLV CEILING: Co</li> <li>TWA STEL: Short</li> <li>TWA: Time-weigf</li> <li>VOC: Volatile org</li> <li>vPVB: Very Persist</li> </ul>	o Effect Level ' Schedule armonized System of classification and labeling of chemicals ational Air Transport Association Dangerous Goods Regulation ion Concentration 50% hal Maritime Organization : Identifier in Annex VI of CLP icentration 50% e 50% al Exposure Level ioaccumulative and toxic as REACH Regulation nvironmental Concentration kposure level no effect concentration ulation 1907/2006 concerning the international transport of dangerous goods by train imit Value oncentration that should not be exceeded during any time of occupational exposure. t-term exposure limit thed average exposure limit
2. Regulation (EC) 3. Regulation (EU) 4. Regulation (EU) 5. Regulation (EU) 6. Regulation (EU) 7. Regulation (EU) 9. Regulation (EU) 9. Regulation (EU) 10. Regulation (EU) 11. Regulation (EU) 12. Regulation (EU) 13. Regulation (EU) 13. Regulation (EU) 14. Regulation (EU) 15. Regulation (EU) 16. Regulation (EU) 17. Regulation (EU) 18. Regulation (EU) 19. Regulation (EU) 19. Regulation (EU) 10. Regulation (EU) 11. Regulation (EU) 12. Regulation (EU) 13. Regulation (EU) 14. Regulation (EU) 15. Regulation (EU) 16. Regulation (EU) 17. Regulation (EU) 18. Regulation (EU) 19. Regulation (EU) 19. Regulation (EU) 10. Regulation (EU) 11. Regulation (EU) 12. Regulation (EU) 13. Regulation (EU) 14. Regulation (EU) 15. Regulation (EU) 16. Regulation (EU) 17. Regulation (EU) 18. Regulation (EU) 19. Regulation (EU) 10. Regulation (EU) 10. Regulation (EU) 11. Regulation (EU) 12. Regulation (EU) 13. Regulation (EU) 14. Regulation (EU) 15. Regulation (EU) 16. Regulation (EU) 17. Regulation (EU) 18. Regulation (EU) 19. Regulation (E	1907/2006 (REACH) of the European Parliament 1272/2008 (CLP) of the European Parliament 2015/830 of the European Parliament 2015/830 of the European Parliament 286/2011 (II Atp. CLP) of the European Parliament 618/2012 (III Atp. CLP) of the European Parliament 487/2013 (IV Atp. CLP) of the European Parliament 605/2014 (VI Atp. CLP) of the European Parliament 005/2014 (VI Atp. CLP) of the European Parliament 1) 2015/1221 (VII Atp. CLP) of the European Parliament 1) 2016/918 (VIII Atp. CLP) of the European Parliament 1) 2016/1179 (IX Atp. CLP) 1) 2017/776 (X Atp. CLP) - 10th Edition al Safety icologique (toxicological sheet) Hygiene and Toxicology ous properties of Industrial Materials-7, 1989 Edition
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The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses. Provide appointed staff with adequate training on how to use chemical products.

Changes to previous review: The following sections were modified: 01 / 02 / 03 / 07 / 08 / 10 / 11 / 12 / 14 / 15 / 16.