

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

CHLORINE SHOCK GRANULES 65% MIN

Version 1.1

Print Date 2011/05/16

Revision Date 2011/05/16

MSDS code: MAAD758

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : CHLORINE SHOCK GRANULES 65% MIN

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

Use of the Substance/Mixture : At this time we do not yet have information on identified uses. They will be included in this safety data sheet when available.

Recommended restrictions on use : At that time we do not yet have information on use restrictions. They will be included in this safety data sheet when available.

1.3. Details of the supplier of the safety data sheet

Company : Brenntag UK & Ireland
Albion House, Rawdon Park
GB LS19 7XX Leeds Yeadon

Telephone : 0113 3879 200
Telefax : 0113 3879 280
E-mail address : msds@brenntag.co.uk

1.4. Emergency telephone number

Emergency telephone number : Emergency only telephone number (open 24 hours):
01865 407333 (N.C.E.C. Culham)

2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Directive 67/548/EEC or 1999/45/EC	
Hazard symbol / Category of danger	Risk phrases
Oxidising (O)	R 8
Harmful (Xn)	R22
	R31
Corrosive (C)	R34
Dangerous for the environment (N)	R50

For the full text of the R-phrases mentioned in this Section, see Section 16.

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2.2. Label elements

Labelling according to EC Directives 67/548/EEC or 1999/45/EC

Hazard symbols:



Corrosive



Oxidising



Dangerous for the environment

R-phras(e)s	:	R 8 R22 R31 R34 R50	Contact with combustible material may cause fire. Harmful if swallowed. Contact with acids liberates toxic gas. Causes burns. Very toxic to aquatic organisms.
S-phras(e)s	:	S26 S36/37/39 S45 S61 S29 S1/2	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Avoid release to the environment. Refer to special instructions/ Safety data sheets. Do not empty into drains. Keep locked up out of reach of children.

Hazardous components which must be listed on the label:

- calcium hypochlorite

2.3. Other hazards

No other information is available.

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3. Composition/information on ingredients

3.2. Mixtures

Hazardous components	Amount [%]	Classification (REGULATION (EC) No 1272/2008)		Classification (67/548/EEC)
		Hazard class / Hazard category	Hazard statements	
calcium hypochlorite				
Index-No. : 017-012-00-7		Ox. Sol.2	H272	O; R 8
CAS-No. : 7778-54-3		Acute Tox.4	H302	Xn; R22
EC-No. : 231-908-7		Skin Corr.1B	H314	R31
C&L-No. : 02-2119752430-47-0000	>= 65 - < 70	Aquatic Acute1	H400	C; R34 N; R50

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. First aid measures

4.1. Description of first aid measures

General advice	: Remove from exposure, lie down. Remove to fresh air. First aider needs to protect himself. Take off all contaminated clothing immediately. Symptoms of poisoning may not appear for several hours. Keep under medical supervision for at least 48 hours.
If inhaled	: Remove to fresh air. Oxygen, if needed. If symptoms persist, call a physician. If unconscious place in recovery position and seek medical advice.
In case of skin contact	: Wash off with soap and water. If symptoms persist, call a physician.
In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.
If swallowed	: Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Call a physician immediately.

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

Symptoms	: No further information available.
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Effects : No further information available.

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

Treatment : Treat symptomatically.
No further information available.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray
Unsuitable extinguishing media : Dry powder

5.2. Special hazards arising from the substance or mixture

Specific hazards during fire fighting : Keep away from combustible material. In case of fire hazardous decomposition products may be produced such as: Hydrogen chloride gas, Oxygen

5.3. Advice for firefighters

Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus. Complete suit protecting against chemicals
Further information : Cool closed containers exposed to fire with water spray. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Avoid dust formation. Do not breathe dust. Ensure adequate ventilation, especially in confined areas. For personal protection see section 8.

6.2. Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and materials for containment and cleaning up

Methods and materials for : Provide adequate ventilation. Sweep up and shovel into

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containment and cleaning up : suitable containers for disposal.

Further information : Treat recovered material as described in the section "Disposal considerations".

6.4. Reference to other sections

For personal protection see section 8.

7. Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Avoid contact with skin, eyes and clothing. Avoid dust formation. Provide sufficient air exchange and/or exhaust in work rooms.

Hygiene measures : Take off all contaminated clothing immediately. Do not breathe dust. Avoid contact with skin and eyes. Keep away from food, drink and animal feedingstuffs. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep only in the original container. Materials to avoid: Reducing agents; Keep in an area equipped with alkali resistant flooring.

Advice on protection against fire and explosion : Contact with combustible material may cause fire. Keep away from heat.

Further information on storage conditions : Keep in a well-ventilated place. Keep tightly closed in a dry and cool place. Keep away from direct sunlight.

Advice on common storage : Do not store near acids. Keep away from combustible material.

German storage class : 5.1A Oxidising Agents

7.3. Specific end uses

Specific use(s) : No information available.

8. Exposure controls/personal protection

8.1. Control parameters

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Other OELs

(Additional) Information : Contains no substances with occupational exposure limit values.

8.2. Exposure controls

Engineering measures

Refer to protective measures listed in sections 7 and 8.

Personal protective equipment

Respiratory protection

Advice : In case of insufficient ventilation, wear suitable respiratory equipment.
Respirator with a dust filter
Particle filter:P2

Hand protection

Advice : Wear suitable gloves.
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).
Protective gloves should be replaced at first signs of wear.
The following materials are suitable:
polychloroprene
butyl-rubber

Eye protection

Advice : Tightly fitting safety goggles

Skin and body protection

Advice : Protective suit

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.
If the product contaminates rivers and lakes or drains inform respective authorities.

9. Physical and chemical properties

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9.1. Information on basic physical and chemical properties

Form	:	powder granular or tablet
Colour	:	white
Odour	:	stinging Chlorine
Odour Threshold	:	Currently we do not have any Information from our supplier about this.
pH	:	10.5 - 11.5 (10 g/l; 20 °C)
Freezing point	:	Currently we do not have any Information from our supplier about this.
Boiling point	:	Currently we do not have any Information from our supplier about this.
Flash point	:	not applicable
Evaporation rate	:	Currently we do not have any Information from our supplier about this.
Flammability (solid, gas)	:	Currently we do not have any Information from our supplier about this.
Upper explosion limit	:	Currently we do not have any Information from our supplier about this.
Lower explosion limit	:	Currently we do not have any Information from our supplier about this.
Vapour pressure	:	Currently we do not have any Information from our supplier about this.
Relative vapour density	:	Currently we do not have any Information from our supplier about this.
Density	:	0.9 g/cm ³ (20 °C)
Water solubility	:	180 g/l (25 °C)
Partition coefficient: n-octanol/water	:	Currently we do not have any Information from our

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	supplier about this.
Ignition temperature	: Currently we do not have any Information from our supplier about this.
Thermal decomposition	: ca. 175 °C
Viscosity, dynamic	: Currently we do not have any Information from our supplier about this.
Explosivity	: Product is not explosive.
Oxidizing properties	: Currently we do not have any Information from our supplier about this.

9.2. Other information

No further information available.

10. Stability and reactivity

10.1. Reactivity

Advice : No information available.

10.2. Chemical stability

Advice : Stable

10.3. Possibility of hazardous reactions

Hazardous reactions : No information available.

10.4. Conditions to avoid

Conditions to avoid : > 175 °C
Extremes of temperature and direct sunlight.
Thermal decomposition : ca.175 °C

10.5. Incompatible materials

Materials to avoid : Organic materials, Alkali metals, Alkaline earth metals, Acids, Reducing agents, Ammonia, Amines, Metal oxides, Water, flammable substances

10.6. Hazardous decomposition products

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Hazardous decomposition : Chlorine, Hydrogen chloride gas, Oxygen products

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Oral

LD50 : 850 mg/kg (rat)
Harmful if swallowed.

Irritation

Skin

Result : corrosive effects

Eyes

Result : corrosive effects

Further information

Other relevant toxicity information : Ingestion causes irritation of upper respiratory system and gastrointestinal disturbance.
Handle in accordance with good industrial hygiene and safety practice.

Component: calcium hypochlorite

CAS-No.
7778-54-3

Sensitisation

Result : Did not cause sensitization on laboratory animals.

12. Ecological information

12.1. Toxicity

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Acute toxicity

Acute aquatic toxicity

Result : Very toxic to aquatic organisms.

12.2. Persistence and degradability

12.3. Bioaccumulative potential

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

13. Disposal considerations

13.1. Waste treatment methods

Product : Do not let product enter drains. Dispose of as special waste in compliance with local and national regulations. Disposal together with normal waste is not allowed. Special disposal required according to local regulations.

Contaminated packaging : Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

European Waste Catalogue Number : No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

14. Transport information

14.1. UN number

|| 2880

14.2. UN proper shipping name

|| ADR : CALCIUM HYPOCHLORITE, HYDRATED MIXTURE

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|| RID : CALCIUM HYPOCHLORITE, HYDRATED MIXTURE
 || IMDG : CALCIUM HYPOCHLORITE, HYDRATED MIXTURE

14.3. Transport hazard class(es)

|| ADR-Class : 5.1
 (Labels; Classification Code; Hazard
 identification No; Tunnel restriction code)
 5.1; O2; 50; (E)
 || RID-Class : 5.1
 (Labels; Classification Code; Hazard
 identification No)
 5.1; O2; 50
 || IMDG-Class : 5.1
 (Labels; EmS)
 5.1; F-H, S-Q

14.4. Packaging group

|| ADR : II
 || RID : II
 || IMDG : II

14.5. Environmental hazards

|| Labeling according to 5.2.1.8 ADR : no
 || Labeling according to 5.2.1.8 RID : no
 || Labeling according to 5.2.1.6.3 IMDG : no
 Classification as environmentally
 hazardous according to 2.9.3 IMDG : no
 Classified as "P" according to 2.10 IMDG : no

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IMDG : Not applicable.

15. Regulatory information

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

|| UK ISR : calcium hypochlorite: Annual reporting level threshold: 10,000

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||

kg

15.2. Chemical Safety Assessment

Currently we do not have any Information from our supplier about this.

16. Other information

Full text of R-phrases referred to under sections 2 and 3.

R 8	Contact with combustible material may cause fire.
R22	Harmful if swallowed.
R31	Contact with acids liberates toxic gas.
R34	Causes burns.
R50	Very toxic to aquatic organisms.

Full text of H-Statements referred to under sections 2 and 3.

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H400	Very toxic to aquatic life.

Further information

Other information : 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

|| Indicates updated section.