

# Cleaning Foras Stone with the Foras Cleaning Pack.

Natural stone like all materials exposed to the elements will attract dirt and algae over time, unlike man made materials natural stone can be cleaned again and again bringing back as good as new.

We recommend chlorine granules for cleaning and here are some recommendations for a trouble free

application. Please read instructions below before

you start the cleaning process.

The kit should include a container of chlorine granules, a pair of disposable gloves and eye protection and a mask. Care should be taken when using chlorine as it can cause skin irritation and bleach clothing please read chemical labelling page 2 and attached data sheet.

You will need a pressurised spray applicator available from any DIY store.

- 1: Put on the gloves and eye protection.
- 2: For badly affected areas fill the applicator/rose sprayer bottle with 5 litres of warm water and add a full cap full of Chlorine granules.

Reduce the chlorine granules by half on regular treatments or for dosing water features.

3: Screw the lid back on the applicator and shake vigorously to ensure all the granules have

dissolved. The solution will be milky. In sure all the granules have dissolved to prevent a nozzle blockage, this may require another shake.



**4**: Pressurise the applicator and apply generously to the affected areas, wetting the area with clean water before the chlorine mix sometimes helps to speed the chlorine reaction time.

The chlorine solution will start to act immediately; care should be taken around plants and grass especially if any wind is blowing.

Leave for at least one hour, badly affected areas may need another dose. Regular treatments are the best way to stop algae build up. Regular treatments allow the dosage rate to be reduced.

- **5**: When the cleaning process is complete we recommend washing the treated area with clean water.
- **6**: Clean out the applicator with clean water to prevent any damage to the seals.





If you have a water feature that is suffering from a build up of algae we recommend simply repeating steps 1 to 3 remembering to half the dosage of granules in a 3 litres of warm water, then unscrew container and

pour in solution.



Chlorine has been tested on rainbow, teak, beige, fossil and king stone we recommend a trial on all other stones before application.

Chlorine can be used as a patio cleaner and to running water features to prevent algae build up. Tester kits for swimming pools are available to check the chlorine levels in water features which will insure the levels are completely safe for

Foras Stone Cleaning Pack

Our Foras Stone Cleaning Pack contains:-

- 1 x container of chlorine granules
- 1 x pair of protective gloves
- 1 x pair of protective goggles
- 1 x protective mask.

Packs can be ordered from us direct.



For further information, help or ordering contact us on 01366 381069.

Foras West Head Stow Bridge Kings Lynn Norfolk PE34 3NJ

Phone: +44 (0)1366 381069 Email info@foras.co.uk

Foras have put together a helpful video which you can view via our website; https://foras.co.uk/adviceand-support/removing-green-algae/

#### Chlorine Shock Granules 65% (Calcium Hypochlorite) 20 grams **CONTAINS CALCIUM HYPOCHLORITE** 65% UN 2880 OXIDISING CONTACT WITH CONBUSTABLE MATERIAL MAY CAUSE FIRE. HARMFUL IF SWALLOWED. CONTACT WITH ACIDS LIBERATES TOXIC GAS. CAUSES BURNS. VERY TOXIC TO AQUATIC ORGANISMS. KEEP LOCKED UP AND OUT OF REACH OF CHILDREN. IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY CORROSIVE OF WATER AND SEEK MEDICAL ADVICE. WEAR SUITABLE PRODECTIVE CLOTHING, GLOVES AND EYE/FACE PRODECTION. DO NOT EMPTY INTO DRAINS AVOID RELEASING TO THE ENVIROMENT. REFER TO SPECIAL INSTRUCTIONS/SAFELY DATA SHEET. IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MENDICAL DANGEROUS ADVICE IMMEDIATLEY (SHOW THE LABEL WHENEVER POSSIBLE). FOR THE ENVIROMENT 231-908-7 In Emergency dial 999 Chemical Emergency 01865 407333 FC LABEL

Please ensure you read and understand the safety labelling provided on this document and on the container of granules.

TPX Calcium Hypochlorite Granules





## **SAFETY DATA SHEET**

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

#### 1.1 Product identifier

Product Name: TPX Calcium Hypochlorite Granules Datasheet Number: TPC152/162/163/164 1. 1. 0

Product Part Number: TPC152/162/163/164
Chemical Name: TPC152/162/163/164
Calcium hypochlorite

Index Number: 017-012-00-7 CAS No.: 7778-54-3

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

Pool / spa treatment

## 2 Hazards identification

- 2 .1 Classification of the substance or mixture
  - Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]
  - Ox. Sol. 2, H272
  - Acute Tox. 4, H302
  - Skin Corr. 1B, H314
  - Aquatic Acute 1, H400
  - EUH031
  - Classification (67/548/EEC, 1999/45/EC)
  - O; R8
  - C: R34
  - Xn; R22
  - R31
  - N; R50
  - Additional information: For full text of R-phrases and Hazard- and EU Hazard-statements: see section 16

### 2 .2 Label elements

#### TPX Calcium Hypochlorite Granules





# 2 Hazards identification (....)









- Signal Word: Danger
- Symbols: GHS03, GHS05, GHS07, GHS09

#### Hazard phrases

- May intensify fire; oxidizer.
- Harmful if swallowed.
- Causes severe skin burns and eye damage.
- Very toxic to aquatic life.
- Contact with acids liberates toxic gas.
- Warning! Do not use together with other products. May release dangerous gases (chlorine).

#### **Precautionary Phrases**

- Store locked up/Keep out of reach of children.
- Wear protective gloves/protective clothing/eye protection/face protection.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
- IF exposed or concerned: Get medical advice/attention.
- Avoid release to the environment.

#### 2.3 Other hazards

- Marine pollutant

# 3 Composition/information on ingredients

#### 3.1 Mixtures

 Chemical Name
 Concentration
 CAS Number
 EC Number
 R/H Phrases\*
 Symbols
 Index No.

 calcium hypochlorite
 100
 7778-54-3
 231-908-7
 H272, H302, GHS03, GHS05, GHS07, 017-012-00-7 H314, H400, GHS09, R8, R22, R31, O, C, N R34, R50
 GHS09, O, C, N R34, R50

\*See Section 16

#### 4 First aid measures

- 4 .1 Description of first aid measures
  - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  - If breathing is difficult, oxygen should be given by a trained person
  - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - Wash with plenty of soap and water.
  - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

#### TPX Calcium Hypochlorite Granules





# 4 First aid measures (....)

do. Continue rinsing.

- Get immediate medical advice/attention.
- IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
- Give plenty of water to drink
- Mucosal damage may contraindicate the use of gastric lavage
- 4 .2 Most important symptoms and effects, both acute and delayed
  - Can cause damage to the eyes
  - Can cause damage to the skin
  - Prolonged skin or eye contact may cause chemical burns
  - In cases of severe exposure, breathing difficulty may develop
- 4.3 Indication of immediate medical attention and special treatment needed
  - Treat symptomatically

# 5 Fire-fighting measures

- 5 .1 Extinguishing media
  - In case of fire: use water for extinction
  - DO NOT USE dry extinguishers containing ammonium compounds such as dry powder.
- 5 .2 Special hazards arising from the substance or mixture
  - See Section 10.6
  - Exposure to decomposition products may be a hazard to health.
  - Oxidising and Corrosive
- 5.3 Advice for firefighters
  - Wear protective clothing as per section 8
  - In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.
  - Wear full protective clothing including chemical protection suit

### 6 Accidental release measures

- 6 .1 Personal precautions, protective equipment and emergency procedures
  - Wear protective clothing as per section 8
  - Evacuate the area and keep personnel upwind
  - Avoid raising dust
  - Damp down to avoid dust generation
  - Avoid contact with combustible material
- 6 .2 Environmental Precautions
  - Avoid release to the environment.
  - Do not allow to enter public sewers and watercourses
  - If contamination of drainage systems or water courses is unavoidable, immediately inform appropriate authorities
- 6 .3 Methods and material for containment and cleaning up
  - Remove by mechanical means
  - Collect as much as possible in clean container for reuse or disposal
  - Do not absorb spillage in sawdust or other combustible material
  - Seek expert advice for removal and disposal of all contaminated materials and wastes

TPX Calcium Hypochlorite Granules





# 6 Accidental release measures (....)

- 6 .4 Reference to other sections
  - See Section 7 & 8

# 7 Handling and storage

- 7 .1 Precautions for safe handling
  - Avoid raising dust
  - Ensure adequate ventilation
  - Avoid contact with combustible material
  - Avoid breathing dust/fume/gas/mist/vapours/spray.
  - Do not eat, drink or smoke when using this product.
  - Wash thoroughly after handling.
- 7 .2 Conditions for safe storage, including any incompatibilities
  - Store away from other materials.
  - Keep/Store away from clothing/.../combustible materials.
  - Store in a dry place. Store in a closed container.
  - Store in a well-ventilated place. Keep cool.
  - Do not store above 30 °C
  - Keep only in original container.
- 7 .3 Specific end use(s)
  - No information available.

## 8 Exposure controls/personal protection

- 8 .1 Control parameters
  - WEL (inhalable dust) 10 mg/m3
  - WEL (respirable dust) 4 mg/m3

# calcium hypochlorite

- WEL (short term) 0.5 ppm
- WEL (short term) 1.5 mg/m3
- 8 .2 Exposure controls
  - Engineering controls should be provided which maintain airborne concentrations below the relevant guidelines

# Occupational exposure controls

- In case of inadequate ventilation wear respiratory protection.
- Wear suitable protective clothing, including eye/face protection and gloves (rubber are recommended)
- When handling this substance, e.g. sampling, wear goggles giving complete eye protection









Respirator

Goggles

Suit

#### TPX Calcium Hypochlorite Granules





# 9 Physical and chemical properties

- 9 .1 Information on basic physical and chemical properties
  - Odour: chlorine
  - Appearance: Solid, white, tablets, granules
  - pH 9 at 1 % concentration
  - Boiling point not applicable
  - Vapour pressure not applicable
  - Vapour density not applicable
  - Melting point 180 deg C with decomposition
  - Water solubility 20 g/l
  - Specific gravity 1.1 g/cm3
  - Not flammable but will support combustion
  - Oxidising
  - Partition coefficient : n-Octanol/water not known
  - Evaporation rate not known
  - Viscosity not applicable

#### 9.2 Other information

- Molecular weight 142.99

# 10 Stability and reactivity

#### 10 .1 Reactivity

- Strong oxidising agent
- Warning! Do not use together with other products. May release dangerous gases (chlorine).

#### 10 .2 Chemical stability

- Decomposes above 180 °C
- Heating may cause an explosion.

#### 10 .3 Possibility of hazardous reactions

- Contact with acids liberates toxic gas.
- Exothermic reaction on heating

#### 10 .4 Conditions to avoid

- Avoid contact with acids and alkalis
- Avoid contact with combustible material
- Avoid contact with foodstuffs
- Avoid contact with reducing agents
- Keep away from heat and sources of ignition
- Avoid contact with moisture

#### 10 .5 Incompatible materials

- Incompatible with acids and alkalis
- Incompatible with reducing agents
- Contact with water may form explosive gases
- Contact with acids liberates toxic gas.
- Avoid contact with aluminium, zinc, copper and tin
- Avoid contact with mild or stainless steel
- Avoid contact with moist air

#### **TPX Calcium Hypochlorite Granules**





# 10 Stability and reactivity (....)

#### 10 .6 Hazardous Decomposition Products

- Decomposition products may include considerable amounts of gas
- Decomposition products include chlorine.

# 11 Toxicological information

#### 11 .1 Information on toxicological effects

- LD50 (oral,rat) 790-1260 mg/kg
- Irritation to eyes (rabbit): Corrosive

#### Inhalation

- May cause dizziness
- Causes coughing
- Can cause damage to the mucous membranes
- In cases of severe exposure, burning sensation may develop
- In cases of severe exposure, delayed pulmonary oedema may develop

#### Contact with skin

- In cases of severe exposure, burning sensation may develop
- In cases of severe exposure, dermatitis may develop
- Can cause damage to the skin
- Causes blistering of the skin

#### Contact with eyes

- Causes severe irritation
- Can cause damage to the eyes

### Ingestion

- The ingestion of significant quantities may cause damage to digestive system
- The ingestion of significant quantities may cause burning sensation

#### Carcinogenicity

- No evidence of carcinogenic effects

#### Teratogenicity

- No information available

#### Mutagenicity

- Mutagenicity (Ames Test): None

# 12 Ecological information

# 12 .1 Toxicity

- Very toxic to aquatic life.
- LC50 (fish) 0.15 mg/l (96 hr)

#### 12 .2 Persistence and degradability

- No information available





# 12 Ecological information (....)

- 12 .3 Bioaccumulation Potential
  - No information available
- 12 .4 Mobility in soil
  - Marine pollutant
  - Large volumes may penetrate soil and contaminate groundwater
- 12 .5 Results of PBT and vPvB assessment
  - Not a PBT according to REACH Annex XIII
- 12 .6 Other Adverse Effects
  - No information available

# 13 Disposal considerations

- 13 .1 Waste treatment methods
  - Disposal should be in accordance with local, state or national legislation
  - Do not reuse empty containers
  - Uncontaminated material may be returnable. Contact supplier

#### Classification

- The waste must be identified according to the List of Wastes (2000/532/EC)

# 14 Transport information







Oxidizing Agent

Corrosive

Marine Pollutant

14.1 UN Number 3487

14.2 UN Proper Shipping Name

CALCIUM HYPOCHLORITE, HYDRATED, CORROSIVE

14.3 Transport hazard class(es) 5.1 (8)

14.4 Packing group

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- 14 .5 Environmental hazards
  - Marine pollutant
- 14 .6 Special precautions for user
  - See Section 7
- 14 .7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
  - Not applicable

#### TPX Calcium Hypochlorite Granules





# 14 Transport information (....)

Road/Rail (ADR/RID)

Proper Shipping Name: CALCIUM HYPOCHLORITE, HYDRATED, CORROSIVE

ADR UN No.: 3487

ADR Hazard Class: 5.1 (8) ADR Packing Group: II

Tunnel Code: E

Sea (IMDG)

Proper Shipping Name: CALCIUM HYPOCHLORITE, HYDRATED, CORROSIVE

IMDG UN No.: 3487

IMDG Hazard Class.: 5.1 (8) IMDG Pack Group.: II

Air (ICAO/IATA)

Proper Shipping Name: CALCIUM HYPOCHLORITE, HYDRATED, CORROSIVE

ICAO Un No.: 3487

ICAO Hazard Class.: 5.1 (8) ICAO Packing Group.: II

# 15 Regulatory information

15 .1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- Refer to current ADR Regulations
- Refer to current CPL Regulations
- Refer to current EC Directive 82/501/EEC (the Seveso Directive)
- The List of Wastes (England) Regulations 2005 apply in the UK

#### 15 .2 Chemical Safety Assessment

No information available

#### 16 Other information

Version 1.0.0 created 19/10/12 by ChemRegs

Version 1.1.0 revised 07/01/14 by ChemRegs. Minor amendments made.

Text of R and S phrase codes used in this safety data sheet:- H272: May intensify fire; oxidizer.; H302: Harmful if swallowed.; H314: Causes severe skin burns and eye damage.; H400: Very toxic to aquatic life.; R22: Harmful if swallowed; R31: Contact with acids liberates toxic gas; R34: Causes burns; R50: Very toxic to aquatic organisms; R8: Contact with combustible material may cause fire.

The statements made herein are based on our best present experience and are intended to describe product safety requirements. They should not therefore be considered as a warranty of specific properties.

King's Lynn - West Head Farm, Stowbridge, King's Lynn, Norfolk PE34 3NJ Tel: 01366 381069

Burnham Market - 55 The Townhouse, Market Place, Burnham Market, Norfolk PE31 8HD Tel: 01328 738304