SAFETY DATA SHEET

CRYSTAL GREEN

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name CRYSTAL GREEN

Product number S777

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

Identified uses Crystal Green is a highly concentrated powdered detergent, formulated for hot water extraction cleaning of heavily soiled and greasy carpets.

1.3. Details of the supplier of the safety data sheet

Supplier

www.prochem.co.uk
Prochem Europe Ltd
Oakcroft Road
Chessington
Surrey
KT9 1RH

Telephone: 020 8974 1515
Fax: 020 8974 1511
sales@prochem.co.uk

1.4. Emergency telephone number

Emergency telephone 020 8974 1515 (office hours 8am to 5pm Monday to Friday) Emergency Action: In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department, who may seek advice from the UK National Poisons Information Service, where our full product details are held.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards
Met. Corr. 1 - H290

Health hazards
Skin Corr. 1B - H314 Eye Dam. 1 - H318

Environmental hazards
Not Classified

Classification (67/548/EEC or 1999/45/EC)
Xi;R38,R41.

Human health
Causes severe skin burns and eye damage. Contact with concentrate or solution May cause severe eye irritation. Inhalation Dust may irritate the respiratory system. Ingestion may cause: irritation of mouth and throat. Nausea, vomiting. May cause chemical burns in mouth and throat.

Environmental
The product is expected to be biodegradable. The product is not expected to be hazardous to the environment.

Physicochemical

CRYSTAL GREEN

May be corrosive to metals.

2.2. Label elements

Pictogram

Signal word Danger

Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

Precautionary statements

P102 Keep out of reach of children.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 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/shower.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P310 Immediately call a POISON CENTER/doctor.

Contains Tetrasodium ethylene diamine tetraacetate, Disodium metasilicate, Alcohols C9-11, ethoxylated, Alcohols, C9-11, ethoxylated

Detergent labelling ≥ 30% phosphates, 5 - < 15% EDTA and salts thereof, 5 - < 15% non-ionic surfactants, < 5% NTA (nitrilotriacetic acid) and salts thereof, < 5% perfumes, Contains Hexyl cinnamal

Supplementary precautionary statements

P405 Store locked up.

P406 Store in corrosive resistant/… container with a resistant inner liner.

P501 Dispose of contents/container in accordance with national regulations.

2.3. Other hazards

See section 8 for details of exposure limits.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Sodium carbonate **10-30%**

CAS number: 497-19-8 **EC number:** 207-838-8 **REACH registration number:** 01-2119485498-19-XXXX

Classification	Classification (67/548/EEC or 1999/45/EC)
Eye Irrit. 2 - H319	Xi;R36

Tetrasodium ethylene diamine tetraacetate **5-10%**

CAS number: 64-02-8 **EC number:** 200-573-9

Classification	Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 4 - H302 Acute Tox. 4 - H332 Eye Dam. 1 - H318	Xn;R22 Xi;R41

CRYSTAL GREEN

Disodium metasilicate	**5-10%**
CAS number: 6834-92-0 **EC number:** 229-912-9	
Classification	**Classification (67/548/EEC or 1999/45/EC)**
Met. Corr. 1 - H290 Skin Corr. 1B - H314 Eye Dam. 1 - H318 STOT SE 3 - H335	C;R34 Xi;R37
Alcohols C9-11, ethoxylated	**5-10%**
CAS number: 68439-45-2 **EC number:** —	
Classification	**Classification (67/548/EEC or 1999/45/EC)**
Acute Tox. 4 - H302 Eye Dam. 1 - H318	Xn;R22. Xi;R41.
Alcohols, C9-11, ethoxylated	**1-5%**
CAS number: 68439-45-2 **EC number:** —	
Classification	**Classification (67/548/EEC or 1999/45/EC)**
Eye Dam. 1 - H318 Acute Tox. 4 - H302	Xn;R22. Xi;R41.
Trisodium nitrilotriacetate	**<1%**
CAS number: 5064-31-3 **EC number:** 225-768-6	
Classification	**Classification (67/548/EEC or 1999/45/EC)**
Carc. 2 - H351 Acute Tox. 4 - H302 Eye Irrit. 2 - H319	Carc. Cat. 3;R40 Xn;R22 Xi;R36

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Move affected person to fresh air at once. Get medical attention if any discomfort continues. If powder is accidentally inhaled then treat as ingestion. Rinse nose and mouth with water.

Ingestion

Rinse mouth thoroughly with water. Give plenty of water to drink. Never give anything by mouth to an unconscious person. Get medical attention. Do not induce vomiting.

Skin contact

Rinse immediately with plenty of water. Get medical attention if irritation persists after washing.

Eye contact

Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention.

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

Skin contact

Causes severe skin burns and eye damage.

Eye contact

May cause severe eye irritation. May cause blurred vision and serious eye damage.

CRYSTAL GREEN

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

Specific treatments

In the event of contact with eyes or ingestion seek immediate medical help. Rinse immediately with plenty of water.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire. Water spray, dry powder or carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Specific hazards

No unusual fire or explosion hazards noted.

Hazardous combustion products

Thermal decomposition or combustion products may include the following substances: Oxides of carbon.

5.3. Advice for firefighters

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions

Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

For concentrate: Collect spillage with a shovel and broom, or similar and reuse, if possible. For solution: Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely.

6.4. Reference to other sections

Reference to other sections

For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Wear protective clothing as described in Section 8 of this safety data sheet. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Do not store near heat sources or expose to high temperatures. Store in closed original container at temperatures between 5°C and 30°C. Keep out of the reach of children. Store away from the following materials: Metals.

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

CRYSTAL GREEN

Occupational exposure limits

Long-term exposure limit (8-hour TWA): NUI 4 mg/m3 resp.dust 10 mg/m3 total dust
NUI = Nuisance Dust.

Disodium metasilicate

Short-term exposure limit (15-minute): SUP 2 mg/m3
SUP = Supplier's recommendation.

8.2. Exposure controls

Protective equipment


Appropriate engineering controls

Provide adequate ventilation.

Eye/face protection

Side shield safety glasses are recommended when handling this product.

Hand protection

Wear protective gloves. It is recommended that gloves are made of the following material: Nitrile rubber. Protective gloves should be inspected for wear before use and replaced regularly in accordance with the manufacturers specifications.

Hygiene measures

Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

Respiratory protection

Not required in normal use.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance

Powder.

Colour

Green.

Odour

Herbal Lemon.

Odour threshold

Not determined.

pH

pH (diluted solution): 9.5

Initial boiling point and range

Not applicable.

Evaporation rate

Not determined.

Upper/lower flammability or explosive limits

Not applicable.

Vapour pressure

Not determined.

Vapour density

Not determined.

CRYSTAL GREEN

Relative density

1.07

Solubility(ies)

Soluble in water.

Partition coefficient

Not determined.

Auto-ignition temperature

Not determined.

Viscosity

Not determined.

Explosive properties

Not applicable.

Oxidising properties

Not applicable.

9.2. Other information

Other information

None.

SECTION 10: Stability and reactivity

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability

Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Not determined.

10.4. Conditions to avoid

Store in closed original container at temperatures between 5°C and 30°C. Protect from freezing and direct sunlight.

10.5. Incompatible materials

Materials to avoid

Strong acids. Oxidising materials.

10.6. Hazardous decomposition products

Thermal decomposition or combustion products may include the following substances: Oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects

This product is corrosive. May cause chemical burns in mouth and throat. Ingestion may cause: Gastrointestinal symptoms, including upset stomach. Nausea, vomiting. Considered to be a low inhalation hazard at normal workplace temperatures. Dust in high concentrations may irritate the respiratory system.

Acute toxicity - oral

ATE oral (mg/kg)

4,693.18315147

Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l)

23.78121284

Skin corrosion/irritation

CRYSTAL GREEN

Skin corrosion/irritation Causes severe burns.

Serious eye damage/irritation

Contact with concentrate or solution May cause severe eye irritation. Risk of serious damage to eyes. May cause possible injury if not promptly rinsed.

Skin sensitisation

Contains Hexyl cinnamal

Germ cell mutagenicity

Genotoxicity - in vitro

No effects expected based upon current data.

Carcinogenicity

No effects expected based upon current data.

Reproductive toxicity

Reproductive toxicity - fertility

No effects expected based upon current data.

CRYSTAL GREEN

Toxicological information on ingredients.

Sodium carbonate

Acute toxicity - oral

Acute toxicity oral (LD50 mg/kg)
2,800

Species
Rat

Acute toxicity - dermal

Acute toxicity dermal (LD50 mg/kg)
2000

Species
Rabbit

Tetrasodium ethylene diamine tetraacetate

Acute toxicity - oral

Acute toxicity oral (LD50 mg/kg)
1,000.0

Species
Rat

ATE oral (mg/kg)
1,000.0

Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l)
1.5

Disodium metasilicate

Acute toxicity - oral

Acute toxicity oral (LD50 mg/kg)
1,280

Species
Rat

Alcohols C9-11, ethoxylated

Acute toxicity - oral

Acute toxicity oral (LD50 mg/kg)
300

Acute toxicity - dermal

Acute toxicity dermal (LD50 mg/kg)
2000

Alcohols, C9-11, ethoxylated

Acute toxicity - oral

Acute toxicity oral (LD50 mg/kg)
300

Acute toxicity - dermal

Acute toxicity dermal (LD50 mg/kg)
2000

SECTION 12: Ecological Information

12.1. Toxicity

CRYSTAL GREEN

The product is not expected to be hazardous to the environment.

Ecological information on ingredients.

Tetrasodium ethylene diamine tetraacetate

Acute toxicity - fish

LC_{50}, 96 hours: > 100 mg/l, Fish

Acute toxicity - aquatic invertebrates

EC_{50}, 48 hours: > 100 mg/l, Daphnia magna

Acute toxicity - aquatic plants

IC_{50}, 72 hours: > 100 mg/l, Algae

Disodium metasilicate

Acute toxicity - fish

LC50, 96 hours: 210 mg/l, Brachydanio rerio (Zebra Fish)

Acute toxicity - aquatic invertebrates

EC_{50}, 48 hours: 1700 mg/l, Daphnia magna

Alcohols C9-11, ethoxylated

Acute toxicity - fish

LC50, : > 10 mg/l,

Acute toxicity - aquatic invertebrates

EC_{50}, : > 1 mg/l,

Acute toxicity - aquatic plants

IC_{50}, : > 10 mg/l,

Alcohols, C9-11, ethoxylated

Acute toxicity - fish

LC50, >: > 10 mg/l,

Acute toxicity - aquatic invertebrates

EC_{50}, >: > 1 mg/l,

Acute toxicity - aquatic plants

IC_{50}, >: > 10 mg/l,

12.2. Persistence and degradability

Persistence and degradability

The product is expected to be biodegradable.

12.3. Bioaccumulative potential

The product does not contain any substances expected to be bioaccumulating.

Partition coefficient

Not determined.

12.4. Mobility in soil

Mobility

The product is soluble in water.

12.5. Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

CRYSTAL GREEN

Disposal methods

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Empty containers should be rinsed with water then crushed and disposed of at legal waste disposal site.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	3262
UN No. (IMDG)	3262

14.2. UN proper shipping name

Corrosive solid, basic, inorganic, N.O.S. (contains disodium trioxosilicate)

14.3. Transport hazard class(es)

ADR/RID class	8
IMDG class	8

14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

None.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information

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

National regulations

The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information

Telephone 020 8974 1515

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date	16/02/2015
Revision	2
Supersedes date	13/11/2012
Signature	Aaron Saunders

CRYSTAL GREEN

Risk phrases in full

R22 Harmful if swallowed.
R34 Causes burns.
R36 Irritating to eyes.
R37 Irritating to respiratory system.
R38 Irritating to skin.
R41 Risk of serious damage to eyes.

Hazard statements in full

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.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.