



S777

CRYSTAL GREEN



**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**Product Name:** CRYSTAL GREEN      **Product Code:** S777  
**Manufacturer:** Prochem Europe Ltd., Oakcroft Road, Chessington, Surrey KT9 1RH, UK. Telephone No (office hours 8am to 5pm, Monday to Friday only): 020 8974 1515 (UK) +44 20 8974 1515 (EC) Chemical Product Manager E, H & S  
 Website: [www.prochem.co.uk](http://www.prochem.co.uk) Email: [sales@prochem.co.uk](mailto:sales@prochem.co.uk)  
**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.

**Product Description & Directions For Use:**

Crystal Green is a highly concentrated powdered detergent, formulated for hot water extraction cleaning of heavily soiled and greasy carpets.  
**Portable extraction machines** - Mix 15ml. (1 measure scoop) of Crystal Green per 10 litres of hot water in the machine solution tank. Mix thoroughly until fully dissolved.  
**Truck-mount units** - Mix 1 kilo of Crystal Green in 20 litres of water to make metering concentrate. Set flow meter at 2 to 4 GPH.  
**Always pre-test carpet for colour fastness with ready-to-use solution before proceeding.**  
 Pretreat heavily soiled areas with S709 Multi Pro or S710 Trafficlean according to label directions, then follow up with normal extraction cleaning procedure.

**SECTION 2: HAZARDS IDENTIFICATION**

**Classification:** Risk of serious damage to eyes. Irritating to skin.  
**Eye Contact:** Contact with concentrate or solution may cause severe eye irritation.  
**Skin Contact:** Prolonged or repeated contact with concentrate or solution may cause irritation and possible dermatitis.  
**Inhalation:** Excessive exposure to powder concentrate dust may cause respiratory irritation. No hazard expected in diluted form.  
**Ingestion:** Ingestion of concentrate may produce nausea and irritation due to alkalinity.  
**Environment:** See Ecological Information for further details.

**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

SUBSTANCE	RISK (See Section 16)	EINECS NO.	CAS NO.	% W/W (EC RANGE)
Sodium carbonate	Xi R36	207-838-8	497-19-8	5 to 15%
Tetrasodium ethylenediaminetetraacetate	Xn R22 Xi R41	200-573-9	64-02-8	5 to 15%
Disodium metasilicate	C R34 Xi R37	229-912-9	6834-92-0	5 to 15%
C9-11 Alcohol ethoxylate with 9MEO	Xn R22 Xi R41	None	68439-45-2	5 to 15%
Primary alcohol ethoxylate	Xi R41	None	68439-45-2	Less than 5%

**SECTION 4: FIRST AID MEASURES**

**Eye Contact:** Flush immediately with water for 15 minutes, then seek medical attention.  
**Skin Contact:** Flush skin with plenty of water. Seek medical attention if any skin irritation persists.  
**Inhalation:** Move to fresh air and seek medical attention if irritation persists. If powder is accidentally inhaled then treat as ingestion and rinse nasal passages.  
**Ingestion:** If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. If injured party is conscious, give two glasses of water. Seek medical attention.

**SECTION 5: FIRE FIGHTING MEASURES**

**Extinguishing Media:** Product is not flammable. Use water, carbon dioxide, dry powder extinguisher, or other media appropriate for materials actually involved in fire.  
**Fire/Explosion Hazards:** No explosion hazards.  
**Decomposition Products:** Exposure to fire may liberate carbon dioxide, carbon monoxide, water and other unidentified thermal decomposition products from this product or its packaging.  
**Special Protective Equipment:** Use full protective equipment if large amounts involved in fire.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Protection:** Protective clothing, nitrile butyl rubber gloves, chemical splash goggles.

**Containment and Disposal:** Large spills should be treated with dry absorbent and disposed of at a legal waste disposal site. Small spills can be flushed with water to sewage drain linked to waste treatment facility.

**SECTION 7: HANDLING AND STORAGE**

**Handling Precautions:** Wear nitrile butyl rubber gloves and safety glasses when handling concentrate.  
**Storage Precautions:** Avoid extremes of temperature. Keep out of the reach of children. Keep in original container.

**SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Limits:** WEL 10mg/m<sup>3</sup> inhalable 4mg/m<sup>3</sup> respirable dust.  
 Disodium metasilicate (suggested) WEL-STEL 2mg/m<sup>3</sup>.  
**Environmental Controls:** For additional guidance, contact ENVIROWISE at [www.envirowise.gov.uk](http://www.envirowise.gov.uk) or telephone 0800 585794  
**Eye Protection:** Side shield safety glasses are recommended when handling concentrate.  
**Protective Clothing:** Standard work clothing and nitrile butyl rubber gloves. Protective gloves should be inspected for wear before use and replaced regularly in accordance with the manufacturers specifications.  
**Respiratory Protection:** Not required in normal use.  
**Ventilation:** Normal air circulation.

**Hygiene:** Wash hands and clothing after use or spill. Do not eat or drink when handling chemicals.

#### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance/Colour/State:** Moist Green Powder

**Odour:** Herbal Lemon

**pH Concentrate:** 12 **pH Diluted:** 9.5

**Boiling Point / Range °C:** Not applicable

**Flash Point °C:** None **Method:** Not applicable

**Flammability Limit %:** Not applicable

**Explosive Properties:** Not applicable

**Oxidising Properties:** Not applicable

**Vapour Pressure:** Not determined

**Relative Density (Water = 1):** 1.07

**Solubility:** Soluble

**Partition Coefficient (N-octanol / Water):** Not determined

**Viscosity:** Not applicable

**Vapour Density:** Not determined

**Evaporation Rate:** Not determined

**% Active:** 100

**% Solids:** Not applicable

#### **SECTION 10: STABILITY AND REACTIVITY**

**Stability:** Stable.

**Conditions to Avoid:** Extremes of temperature.

**Incompatibility (Materials to Avoid):** Strong acids and oxidising materials.

**Hazardous Decomposition Products:** Exposure to fire may liberate carbon dioxide, carbon monoxide, water and other unidentified thermal decomposition products from this product or its packaging.

#### **SECTION 11: TOXICOLOGICAL INFORMATION**

**Eye Contact:** Contact with concentrate or solution may produce severe eye irritation.

**Skin Contact:** Prolonged or repeated contact may cause irritation and possible dermatitis.

**Inhalation:** No health effects expected in diluted form. Excessive exposure to dust may cause respiratory irritation.

**Ingestion:** Product is alkaline and may produce gastrointestinal irritation and nausea.

**Acute and Chronic Effects:**

**Acute Toxicity:** LD50 4090mg/kg (oral-rat) (sodium carbonate)

LD50 >1740mg/l (oral-rat) (tetrasodium

ethylenediaminetetraacetate)

LD50 600-1350mg/kg (oral-rat) (disodium metasilicate)

LD50 770mg/kg (oral-mouse) (disodium metasilicate)

LD50 >2000mg/kg (dermal-rat) (C9-11 alcohol ethoxylate with 9MEO)

LD50 200 - 2000mg/kg (oral-rat) (C9-11 alcohol ethoxylate with 9MEO)

LD50 >2000mg/kg (oral-rat) (primary alcohol ethoxylate)

LD50 >2000mg/kg (dermal-rat) (primary alcohol ethoxylate)

**Corrosivity / Irritation:** Skin, eye and respiratory

**Sensitisation:** This product contains hexyl cinnamal.

**Repeated Dose Toxicity:** Not established.

**Mutagenicity:** None

**Carcinogenicity:** None

**Teratogenicity:** None

#### **SECTION 12: ECOLOGICAL INFORMATION**

**Ecotoxicity:** LC50 96h > 100mg/l (fish) (tetrasodium ethylenediaminetetraacetate)

EC50 24h > 500mg/l (daphnia) (tetrasodium

ethylenediaminetetraacetate)

LC50 96h 3185mg/l (fish) (disodium metasilicate)

EC50 48h 4857mg/l (daphnia) (disodium metasilicate)

EC50 48h 13.4mg/l (daphnia) (C9-11 alcohol ethoxylate with 9MEO)

LC50 96h 23.7mg/l (rainbow trout) (C9-11 alcohol ethoxylate with 9MEO)

IC50 10-100mg/l (algae) (C9-11 alcohol ethoxylate with 9MEO)

EC50 48h 5.1mg/l (daphnia) (primary alcohol ethoxylate)

LC50 96h 11.5mg/l (rainbow trout) (primary alcohol ethoxylate)

IC50 1-10mg/l (algae) (primary alcohol ethoxylate)

**Mobility:** Soluble in water.

**Persistence and Degradability:** The surfactant(s) contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to

support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

The major packaging materials of polyethylene and fibreboard are recyclable.

**Bioaccumulative Potential:** Does not bioaccumulate.

**Other Effects:** None known or no relevant data available for substances in this preparation.

#### **SECTION 13: DISPOSAL CONSIDERATIONS**

Cleaning waste effluent should be disposed of in accordance with regional and national requirements. Empty containers should be rinsed with water then crushed and disposed of at legal waste disposal site. Contact local Environment Agency office for waste holder requirements.

#### **SECTION 14: TRANSPORT INFORMATION**

**UN No:** None

**Classification:** Not classified as hazardous for transport

**Proper Shipping Name:** None

**Packing Group:** None

**Road (ADR):** None

**Sea (IMDG):** None

**Air (ICAO / IATA):** None

**Rail (RID):** None

#### **SECTION 15: REGULATORY INFORMATION**

**Classification:** Xi IRRITANT

**Risk Phrases**

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

**Safety Phrases**

S2 Keep out of the reach of children.

S24/25 Avoid contact with skin and eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37/39 Wear suitable gloves and eye/face protection.

The information given has been compiled with reference to the **CHEMICALS (HAZARD INFORMATION AND PACKAGING FOR SUPPLY) REGULATIONS (CHIP 4) 2009** (as amended), the **REGISTRATION, EVALUATION, AUTHORISATION AND RESTRICTION OF CHEMICALS (REACH) REGULATIONS** (as amended), the **CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH REGULATIONS (COSHH) 2002** (as amended), **REGULATION (EC) NO. 648/2004 ON DETERGENTS** (as amended) and the **MANAGEMENT OF HEALTH AND SAFETY AT WORK REGULATIONS 1999** (as amended). This safety data sheet does not constitute the users own assessment of workplace risk as required by other health and safety regulations.

#### **SECTION 16: OTHER INFORMATION**

**Risk Phrases for ingredients in section 3:** R22 Harmful if swallowed. R34 Causes burns. R36 Irritating to eyes. R37 Irritating to respiratory system. R41 Risk of serious damage to eyes.

For additional information on safety, training and use of this product, contact the supplier. This product is intended for professional use only.

The information given is intended to be of assistance to users but is without guarantee. Variations can occur in application and users are advised to conduct their own tests. Suggestions for use neither give nor imply any guarantee as to the intended use.

**Revisions:** Replaces SDS S777 Issue / Revision Date 24/08/09 Revised Sections: 1, 16.