



SAFETY DATA SHEET

Pro-fit Crystal

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

1.1. Product identifier

Product name Pro-fit Crystal
Product number 6860/22077

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

Identified uses Bleach

1.3. Details of the supplier of the safety data sheet

Supplier

Cole & Wilson Ltd
Nabbs Lane Chemical Works
Nabbs Lane
Slaithwaite
Huddersfield
HD7 5AT
info@coleandwilson.com
01484 842353

1.4. Emergency telephone number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Ox. Liq. 2 - H272 Met. Corr. 1 - H290
Health hazards Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Corr. 1A - H314 Eye Dam. 1 - H318 STOT SE 3 - H335
Environmental hazards Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

Classification (67/548/EEC or 1999/45/EC) Xn;R22. C;R34. Xi;R37. O;R7.

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

2.2. Label elements

Pictogram



Signal word

Danger

Pro-fit Crystal

Hazard statements	<p>H272 May intensify fire; oxidiser.</p> <p>H290 May be corrosive to metals.</p> <p>H302+H332 Harmful if swallowed or if inhaled.</p> <p>H314 Causes severe skin burns and eye damage.</p> <p>H335 May cause respiratory irritation.</p> <p>H410 Very toxic to aquatic life with long lasting effects.</p>
Precautionary statements	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P234 Keep only in original container.</p> <p>P260 Do not breathe vapour/ spray.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P284 [In case of inadequate ventilation] wear respiratory protection.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P310 Immediately call a POISON CENTER/ doctor.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p>
Supplemental label information	<p>EUH071 Corrosive to the respiratory tract.</p>
Contains	<p>HYDROGEN PEROXIDE SOLUTION, ACETIC ACID, PERACETIC ACID</p>
Detergent labelling	<p>15 - < 30% oxygen-based bleaching agents</p>
Supplementary precautionary statements	<p>P220 Keep away from combustible materials.</p> <p>P221 Take any precaution to avoid mixing with combustibles.</p> <p>P261 Avoid breathing vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P270 Do not eat, drink or smoke when using this product.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P273 Avoid release to the environment.</p> <p>P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.</p> <p>P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P312 Call a POISON CENTER/ doctor if you feel unwell.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P363 Wash contaminated clothing before reuse.</p> <p>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.</p> <p>P390 Absorb spillage to prevent material damage.</p> <p>P391 Collect spillage.</p> <p>P405 Store locked up.</p> <p>P406 Store in corrosive resistant/... container with a resistant inner liner.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Pro-fit Crystal

HYDROGEN PEROXIDE SOLUTION		15-30%
CAS number: 7722-84-1	EC number: 231-765-0	REACH registration number: 01-2119485845-22-XXXX
Classification Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT SE 3 - H335	Classification (67/548/EEC or 1999/45/EC) O; R5, R8. Xn; R22. C; R35	
ACETIC ACID		5-15%
CAS number: 64-19-7	EC number: 200-580-7	REACH registration number: 01-2119488154-34-XXXX
Classification Flam. Liq. 3 - H226 Skin Corr. 1A - H314 Eye Dam. 1 - H318	Classification (67/548/EEC or 1999/45/EC) R10 C;R35	
PERACETIC ACID		1-5%
CAS number: 79-21-0	EC number: 201-186-8	
M factor (Acute) = 10		
Classification Flam. Liq. 3 - H226 Org. Perox. D - H242 Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Corr. 1A - H314 Eye Dam. 1 - H318 STOT SE 3 - H335 Aquatic Acute 1 - H400	Classification (67/548/EEC or 1999/45/EC) O;R7 R10 C;R35 Xn;R20/21/22 N;R50	

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. If breathing stops, provide artificial respiration. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Give plenty of water to drink. DO NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

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

Inhalation	May cause respiratory irritation.
Ingestion	Harmful if swallowed.
Skin contact	Causes severe burns.
Eye contact	Corrosive to skin and eyes.

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

Notes for the doctor	No additional information available
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire. DO NOT USE DRY CHEMICAL OR FOAM. KEEP CONTAINERS COOL WITH WATER SPRAY.

5.2. Special hazards arising from the substance or mixture

Specific hazards Heating may cause a fire. May explode when heated or when exposed to flames or sparks. A powerful oxidiser which is combustible

5.3. Advice for firefighters

Protective actions during firefighting Containers close to fire should be removed or cooled with water. Wear self-contained breathing apparatus and full body protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid inhalation of vapours and contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Collect spilled liquid in plastic container (NOT METAL). Never return to original tank/container. Flush away small residues with excess water. Contain spillage but do not absorb in sawdust or other combustible material. If substance has entered water course or sewer, advise police. Inform authorities if large amounts are involved.

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Keep away from heat, sparks and open flame. Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Avoid contact with the following materials: Acids. Moisture. Cleanliness is essential as any contamination may cause decomposition. Never return unused material to original containers. Eye wash facilities and emergency shower must be available when handling this product. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from flammable and combustible materials. Keep only in the original container. Keep away from heat, sparks and open flame. Store cool. Protect from light.

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Storage class Oxidiser storage.

7.3. Specific end use(s)

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

HYDROGEN PEROXIDE SOLUTION

Long-term exposure limit (8-hour TWA): WEL 1 ppm 1.4 mg/m³

Short-term exposure limit (15-minute): WEL 2 ppm 2.8 mg/m³

ACETIC ACID

Short-term exposure limit (15-minute): 37 mg/m³ 15 ppm

Long-term exposure limit (8-hour TWA): 25 mg/m³ 10 ppm

WEL = Workplace Exposure Limit

HYDROGEN PEROXIDE SOLUTION (CAS: 7722-84-1)

DNEL

Workers - Inhalation; Short term local effects: 3 mg/m³

Workers - Inhalation; Long term systemic effects: 1.4 mg/m³

Consumer - Inhalation; Short term local effects: 1.93 mg/m³

Consumer - Inhalation; Long term systemic effects: 0.21 mg/m³

PNEC

- Fresh water; 0.0126 mg/l

- Marine water; 0.0126 mg/l

- Intermittent release; 0.0138 mg/l

- STP; 4.66 mg/l

- Sediment (Freshwater); 0.47 mg/kg

- Sediment (Marinewater); 0.47 mg/kg

- Soil; 0.0023 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

All handling should only take place in well-ventilated areas.

Eye/face protection

The following protection should be worn: Chemical splash goggles or face shield.

Hand protection

Wear protective gloves made of the following material: Polyvinyl chloride (PVC).

Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination. Provide eyewash station and safety shower.

Hygiene measures

Provide eyewash station and safety shower. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Keep away from food and drink. Wash hands and face before break and the end of a shift. Avoid contact with the skin and eyes. Remove dirty clothes.

Respiratory protection

No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Pro-fit Crystal

Appearance	Liquid.
Colour	Colourless.
Odour	Acrid.
pH	pH (concentrated solution): 0-1 pH (diluted solution): 2.2-3.2 1
Melting point	<-20°C
Initial boiling point and range	100-110°C @ 760 mm Hg
Flash point	65°C CC (Closed cup).
Vapour pressure	22 mbar @ °C
Relative density	~1.115 @ 20°C
Solubility(ies)	Soluble in water. Aqueous solutions are acidic. Very soluble in the following materials: Alcohols.
Auto-ignition temperature	>250°C
Viscosity	<30 mPa s @ 20°C

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No additional information available

10.2. Chemical stability

Stability Contact with alkaline products gives an exothermic reaction. Avoid contamination with organic substances. Can decompose violently when heated or in contact with heavy metals, aluminium, acids, bases and organic materials. CONDITIONS/MATERIALS TO AVOID: Organic matter, alkaline solutions, reducing agents, contamination by oxides of iron, including rust, copper, manganese, nickel and chromium. Heating can release gases.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid direct sunlight.

10.5. Incompatible materials

Materials to avoid Strong acids. Strong alkalis. Metals, salts of metals, organic materials, flammable substances. Other metals or alloys. Reducing Agents Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Rapid decomposition will release large quantities of oxygen (health and fire risk). Decomposition is exothermic causing temperature rise which will further increase the rate of decomposition creating explosive situations. On decomposition irritating gases, vapours and oxygen are released.
Decomposition will not occur if product is stored and used correctly.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 1,736.11

Acute toxicity - dermal

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ATE dermal (mg/kg) 22,916.67

Acute toxicity - inhalation

ATE inhalation (gases ppm) 15,625.0

ATE inhalation (vapours mg/l) 38.19

ATE inhalation (dusts/mists mg/l) 5.21

Inhalation	May cause respiratory system irritation. Vapours may irritate throat/respiratory system. Symptoms following overexposure may include the following: Coughing.
Ingestion	May cause severe internal injury. May cause stomach pain or vomiting. May cause chemical burns in mouth, oesophagus and stomach.
Skin contact	Causes burns.
Eye contact	This product is strongly corrosive. Causes severe skin burns and eye damage. Immediate first aid is imperative.
Route of entry	No route of entry noted.
Target organs	Eyes Gastro-intestinal tract Skin

HYDROGEN PEROXIDE SOLUTION

Acute toxicity - oral

ATE oral (mg/kg) 500.0

Inhalation May cause respiratory irritation.

Ingestion Harmful if swallowed.

Skin contact Irritating to skin.

Eye contact Risk of serious damage to eyes.

SECTION 12: Ecological Information

Ecotoxicity Not regarded as dangerous for the environment.

HYDROGEN PEROXIDE SOLUTION

Ecotoxicity The product is mildly toxic to aquatic organisms.

12.1. Toxicity

Toxicity May be dangerous to fish at high concentrations due to this being an unnatural aquatic environment, but not classified as being Toxic or Very Toxic to aquatic organisms.

HYDROGEN PEROXIDE SOLUTION

Acute toxicity - fish LC₅₀, 96 hours: 16.4 mg/l, Algae

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 2.4 mg/l, Daphnia magna

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Acute toxicity - aquatic plants IC₅₀, 72 hours: 3.7 to 160 mg/l, Fish

ACETIC ACID

Acute toxicity - fish LC₅₀, 96 hours: 75 mg/l, Lepomis macrochirus (Bluegill)
LC₅₀, 96 hours: 88 mg/l, Pimephales promelas (Fat-head Minnow)
LC₅₀, 96 hours: >300.82 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: >300.82 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: >300.82 mg/l, Fish

Acute toxicity - microorganisms EC10, 0.5 hours: 1000 mg/l, PSEUDOMONAS PUTIDA

PERACETIC ACID

Acute aquatic toxicity

LE(C)₅₀ 0.01 < L(E)C₅₀ ≤ 0.1

M factor (Acute) 10

12.2. Persistence and degradability

Persistence and degradability Readily biodegradable.

HYDROGEN PEROXIDE SOLUTION

Persistence and degradability Readily biodegradable but will inhibit action of biological treatment plant.

12.3. Bioaccumulative potential

HYDROGEN PEROXIDE SOLUTION

Bioaccumulative potential The product is not bioaccumulating.

12.4. Mobility in soil

HYDROGEN PEROXIDE SOLUTION

Mobility The product is non-volatile. The product is soluble in water.

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods WASTE/UNUSED PRODUCTS: Collect all waste in suitable and labelled containers and dispose of according to legislation.
CONTAMINATED PACKAGING: Empty containers should be taken for recycling, recovery or waste in accordance with local regulations. For recycling, ensure container is empty and bungs are replaced. Arrange disposal as a special waste by licensed disposal company in consultation with Local Waste Disposal Authority and in accordance with the Control of Pollution Act 1974.

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EURAL Code

SECTION 14: Transport information

Road transport notes TREM CARD: ZR2

14.1. UN number

UN No. (ADR/RID) 3149

14.2. UN proper shipping name

Proper shipping name (ADR/RID) HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE with acid, water and not more than 5% peroxyacetic acid, STABILISED

Proper shipping name (IMDG) HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE with acid, water and not more than 5% peroxyacetic acid, STABILISED

Proper shipping name (ICAO) HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE with acid, water and not more than 5% peroxyacetic acid, STABILISED

Proper shipping name (ADN) HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE with acid, water and not more than 5% peroxyacetic acid, STABILISED

14.3. Transport hazard class(es)

ADR/RID class 5.1

Transport labels



14.4. Packing group

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

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

SECTION 15: Regulatory information

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

National regulations The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).
Health and Safety at Work etc. Act 1974 (as amended).

15.2. Chemical safety assessment

SECTION 16: Other information

Key literature references and sources for data Material Safety Data Sheet, Misc. manufacturers.

Revision comments Data sheet is in accordance with the CHIP regulations in force on the revision date given below. Revision is due to 29th ATP of the Approved Supply List (CHIP3.1) Includes Detergent Regulation labelling information. Revision is due to change in name Revision is due to REACH Revision is due to REACH regulations; all revisions start again at Rev 0, dated 020409

Pro-fit Crystal

Revision date	020409
Revision	Revision 0
SDS number	6860/22077
Risk phrases in full	R10 Flammable. R20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R20/22 Harmful by inhalation and if swallowed. R22 Harmful if swallowed. R34 Causes burns. R35 Causes severe burns. R37 Irritating to respiratory system. R5 Heating may cause an explosion. R50 Very toxic to aquatic organisms. R7 May cause fire. R8 Contact with combustible material may cause fire.
Hazard statements in full	H226 Flammable liquid and vapour. H242 Heating may cause a fire. H271 May cause fire or explosion; strong oxidiser. H272 May intensify fire; oxidiser. H290 May be corrosive to metals. H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H332 Harmful if inhaled. H335 May cause respiratory irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.