

## Etching

Order code	Manufacturer code	Description
34-0758	n/a	FERRIC CHLORIDE SOLUTION 5L (RE)

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The enclosed information is believed to be correct, Information may change without notice due to product improvement. Users should ensure that the product is suitable for their use. E. & O. E.	Revision A 20/02/2007

**SECTION 1 PRODUCT IDENTIFICATION AND MANUFACTURE**

NAME: FERRIC CHLORIDE HEXAHYDRATE SOLUTION  
PART NO: 600-015 (5 Litres) 600-016 (25 Litres)

**MANUFACTURER'S/SUPPLIERS NAME, REGISTERED ADDRESS AND**

**EMERGENCY TEL NO:**

MEGA ELECTRONICS LTD.,  
THE GRIP INDUSTRIAL ESTATE,  
LINTON, CAMBRIDGE.  
ENGLAND, CB1 6NR.  
TELEPHONE: +0044 01223 893900

**ORGANISATIONS NAME & ADDRESS AT WHICH MANUFACTURED**

BRENNTAG (UK) LTD.  
BILTON WAY INDUSTRIAL ESTATE  
LUTTERWORTH, LEICESTERSHIRE.  
LE17 4HH  
TEL: 01865 407333

**SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS**

COMPONENT	%BY WT	CAS & EEC Nos.:	HAZARD	PHRASE NOS:
FERRIC CHLORIDE SOLUTION	40	N/A	C	R22, R34

HARMFUL IF SWALLOWED, CAUSES BURNS.

**SECTION 3 HAZARDS IDENTIFICATION**

HARMFUL IF SWALLOWED. CAUSES BURNS.

**SECTION 4 FIRST AID MEASURES**

**INHALATION:**

REMOVE TO FRESH AIR, WASH MOUTH AND NOSE WITH WATER. IF IRRITATION PERSISTS OR COUGH OR OTHER SYSTEMS DEVELOP, CONSULT DOCTOR.

**SKIN CONTACT:**

REMOVE CONTAMINATED CLOTHING AND WASH AFFECTED AREA WITH SOAP AND WATER. IF IRRITATION PERSISTS, CONSULT DOCTOR.

**EYE CONTACT:**

FLUSH WITH WATER FOR AT LEAST 15 MINUTES. SEEK MEDICAL ATTENTION IF IRRITATION PERSISTS.

**INGESTION:**

IF CONSCIOUS, RINSE MOUTH OUT WITH WATER. GIVE PLENTY OF WATER (CA..500ml) TO DRINK AND TRANSPORT TO HOSPITAL

MEDICAL NOTES: TREAT SYMPTOMATICALLY.

**SECTION 5 FIRE FIGHTING MEASURES**

**EXTINGUISHING MEDIA**

NON FLAMMABLE, IF HEATED THE MATERIAL DECOMPOSES GIVING OFF TOXIC, ACIDIC FUMES OR HCL

**COMBUSTION PRODUCTS**

WHEN HEATED TO DECOMPOSITION, EMITS TOXIC FUMES.

**FIRE/EXPLOSION SCENARIOS**

USE MEDIA SUITABLE FOR MATERIAL WHICH IS BURNING  
SELF CONTAINED BREATHING APPARATUS SHOULD BE WORN.

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

**PERSONAL PROTECTION** WEAR GLOVES, GOGGLES.

**ENVIRONMENTAL PRECAUTIONS.** CONTAIN IF MATERIAL HAS ENTERED SURFACE DRAINS, ADVISE LOCAL AUTHORITIES.

**METHODS FOR CLEARING UP:** COLLECT FOR DISPOSAL. FLUSH AWAY RESIDUES AND SMALL SIPLAGE, IF PERMITTED.

**SECTION 7 HANDLING AND STORAGE**

**HANDLING PRECAUTIONS**

MINIMISE CONTACT WITH SKIN. AVOID CONTACT WITH EYES. EYEWASH FACILITIES SHOULD BE AVAILABLE.

**STORAGE INCLUDING ANY SPECIAL REQUIREMENTS (TEMPERATURE, VENTILATION, ETC)**

DRAINAGE FROM BULK MATERIAL WILL BE ACIDIC. DO NOT STORE WITH ALKALIS. THE PRODUCT REASTCS WITH METALS WITH THE EVOLUTION OF HYDROGEN.

**SECTION 8 EXPOSURE CONTROL/PERSONAL PROTECTION**

**ENGINEERING CONTROLS/ VENTILATION**

REFER TO CURRENT EH40.

**RESPIRATORY PROTECTION**

N/A

**EYE PROTECTION**

GOGGLES GIVING COMPLETE PROTECTION TO EYES.

**HAND PROTECTION**

PLASTIC OR RUBBER GLOVES.

**SKIN PROTECTION**

PROTECT SKIN FROM PROLONGED EXPOSURE.

WEAR OVERALLS. PLASTIC APRON AND BOOTS IF HANDLING LARGE QUANTITIES.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE:** LIQUID

**COLOUR** DARK BROWN

**ODOUR:** CHARACTERISTIC

**BOILING POINT** DECOMPOSES

**MELTING POINT °C** 12°C:

**FLASH POINT °C** (Open/Closed Cup): N.A.

**AUTOIGNITION TEMP °C:** N.A.

**THERMAL DECOMPOSITION TEMP °C :**

**BOILING POINT - HCL** WILL BE RELEASED WITH HEATED

**OXIDISING PROPERTIES:**

**EXPLOSIVE PROPERTIES AT 25°C:** NON FLAMMABLE

**EXPLOSIVE LIMITS AT 25°C** (% VOL IN AIR)

**LOWER:** **UPPER:**

**RELATIVE DENSITY:** 1.43g/ml

**SOLID CONTENT %:**

**SOLUBILITY IN WATER:** MISICIBLE – pH solutions in water are acidic (<1)  
**INSOLUBILITY IN ALCOHOL –** NO DATA

**VOLATILE CONTENT:** AVOID CONTACT WITH, ALKALIS, STABLE UNDER REDOMMENDED CONDITIONS

**VAPOUR PRESSURE mmHg at 20°C**

**RELATIVE VAPOUR DENSITY (air = 1):**

(of principle component and name):

**EVAPORATION RATE**

**CONDUCTIVITY:** VISCOSITY 10mPa.s.AT 20c

(n-butyl acetate = 1):

**SECTION 10 STABILITY AND REACTIVITY PROPERTIES**

**CONDITIONS TO AVOID:** STABLE UNDER RECOMMENDED CONDITIONS

**MATERIALS TO AVOID:** REACTS WITH ALKALIS

**HAZARDOUS DECOMPOSITION PRODUCTS:** Hc1 WILL BE RELEASED WHEN HEATED.

**SECTION 11 TOXICOLOGICAL INFORMATION**

**EFFECT OF EYE CONTACT:** RISK OF SERIOUS DAMAGE

**EFFECT OF SKIN CONTACT:** CORROSIVE

**EFFECT OF INHALATION:** UNLIKELY

**EFFECT OF INGESTION:** MODERATELY TOXIC

**LD50 (ORAL RAT):** 450mg / kg.

**SECTION 12 ECOLOGICAL INFORMATION**

**MOBILITY:** SOLUBLE IN WATER

**PERSISTENCE AND DEGRADABILITY:** REPORTED AS HAVING NO ADVERSE EFFECTS ON SEWAFE SYSTEMS.

**ECOTOXICITY:** IRON SALTS ARE COMMONLY ADDED TO INLAND LAKES. ESTUARIES AND WATERWAYS TO REMOVE PHOSPHATES AND THEREBY PREVENT EUTROPHICATION WHICH IS EVIDENT IN EXPLOSIVE ALCAL GROWTH DUE TO HIGH PHOSPHATE LEVELS.

**SECTION 13 DISPOSAL CONSIDERATIONS**

**Disposal of product –** approved landfill

**Dispose of packaging:** approved landfill site.

**National or regional legislation:** Classified as special waste for controlled disposal

**SECTION 14 TRANSPORT INFORMATION**

**UN No:** 2582 **UK ROAD – HAZCHEM CODE** 2Z

**CLASSIFICATION** 8 **PACKING GROUP** III

**RID-ADR. CLASS** 8 **LABEL** FERRIC CHLORIDE SOLUTION

**MATERIAL CODE** 5c **KEMMLER CODE** 80

**IMO CLASS** III **LABEL:** FERRIC CHLORIDE SOLUTION

**IMDG PAGE** 8173 **PACKING GROUP** III

**MARPOL ANNEX II–** NOT CLASSIFIED

**ICAO: CLASS** 8 **LABEL:** FERRIC CHLORIDE SOLUTION

**PACKING GROUP** III

**SECTION 15 REGULATORY INFORMATION**

**THE CHEMICALS (HAZARD INFORMATION & PACKIAGING FOR SUPPLY) REGULATION 1994.**

**EINECS No.** 231-729-4

**INDEX No:** not listed.

**RISK PHRASE Nos. & WORDS:**

**R22** Harmful if swallowed

**R34** Causes burns

**SAFETY PHRASE Nos. & WORDS:**

**S36/37/39** Wear suitable protective clothing, gloves and eye / face protection

**CLASSIFICATION / SYMBOL** C=CORROSIVE

**EXPOSURE LIMITS:** refer to current EH40

**NATIIONAL LEGISLATION**

The following are some of the Regulations which should be considered when dealing with this product:

Control of Pollution (special wastes) Regulation 1980

The Chemicals (Hazard Information & Packaging for Supply) Regulation 1994

Control of Pollution Act 1974

Environmental Protection Act 1990

Environmental Protection (Duty of Care) Regulation 1991

**OTHER INFORMATION**

**RECOMMENDED USES:** Pigment, iron sales, water treatment, catalyst, feed additive, reducing agent. Not supplied for use by the general public.

**SOURCES OF DATA USED TO COMPILE DATA SHEET.** Manufacturers data sheets, National and International regulations.