



# Ferric Chloride Stain Remover

## Ferric Chloride Stain Remover

This unique powder may be utilised in a variety of methods for the removal of Ferric Chloride stains from clothing, PCB tanks, work benches and other affected areas.

### FOR USE AS A SCRUBBING COMPOUND

This method is best employed for removal of small stains on clothes and larger stains on equipment and floors etc.

Apply sufficient powder to cover the affected area and scrub with a wet cloth or sponge. On badly affected areas apply the powder direct, add a small amount of water and leave a while before scrubbing.

### FOR USE AS A CLEANING SOLUTION

The powder may also be employed to make a cleaning solution which is the best method for removal of larger stains on clothing or removable equipment parts.

Fill a suitable container with warm tap water, sufficient to allow immersion of items to be cleaned. Then add the Ferric stain remover at an approximate rate of 100 gr. per 500ml of water and stir until dissolved.

The solution is now ready for use. Immerse the stained items until the staining is removed. The time necessary to achieve this is dependant upon the severity of the stain. Check periodically.

Please note that the above concentration is a guideline and some staining may require a smaller or greater concentration. The powder may be used at concentrations between 100g/200ml of water and 100g/1000ml of water.

## SAFETY AT WORK

Ferric stain remover is an organic acid and wet powder and solutions have a burning effect on cuts and wounds. Always wear suitable protective gloves and goggles when handling.

All items of clothing that have been treated must be thoroughly rinsed after processing and then machine washed before wearing.

All equipment, machine parts or any other treated items or areas must also be thoroughly rinsed after cleaning.

Please see reverse for full Health and Safety data.

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**SECTION 1 PRODUCT IDENTIFICATION AND MANUFACTURE****NAME:** MEGA FERRIC CHLORIDE STAIN REMOVER**PART NO:** 600-039**MANUFACTURER'S/SUPPLIERS NAME, REGISTERED ADDRESS****AND EMERGENCY TEL NO:** +44 (0)1223 893900

Mega Electronics Ltd.,

The Grip Industrial Estate, Linton, Cambridge, England, CB21 4XN

**ORGANISATIONS NAME & ADDRESS AT WHICH MANUFACTURED:**

Bungard Elektronik,

Tel 0049 2292 5046

Rilkestr. 1, D51570 Windeck Rosbach, Germany

**SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS**

COMPONENT	%BY WT	CAS & EEC Nos.:	HAZARD	R PHRASE NOS
OXALIC ACID	100%	6153-56-6 205-634-3	Xn	21 - 22

**SECTION 3 HAZARDS IDENTIFICATION**

HARMFUL IN CONTACT WITH SKIN AND IF SWALLOWED

**SECTION 4 FIRST AID MEASURES****INHALATION:** REMOVE FROM EXPOSURE TO FRESH AIR**SKIN CONTACT:**

WASH THE AFFECTED AREA WITH LARGE QUANTITIES OF RUNNING WATER

**EYE CONTACT:**

WASH WITH WATER OR SALINE SOLUTION FOR 15 MINUTES.

**INGESTION:** IF CHEMICAL HAS BEEN CONFINED TO THE MOUTH, GIVE LARGE QUANTITIES OF WATER AS A MOUTH WASH. ENSURE THE MOUTH WASH IS NOT SWALLOWED. IF THE CHEMICAL HAS BEEN SWALLOWED GIVE ABOUT 250ml OF WATER TO DILUTE IN THE STOMACH. OBTAIN MEDICAL ATTENTION.**MEDICAL NOTES:** N/A**SECTION 5 FIRE FIGHTING MEASURES****EXTINGUISHING MEDIA**

PREFERABLY DRY CHEMICAL OR WATER SPRAY

**COMBUSTION PRODUCTS** MATERIAL IS COMBUSTIBLE. IF INVOLVED IN A FIRE IT DECOMPOSES TO EMIT TOXIC FUMES OF CARBON DIOXIDE AND CARBON MONOXIDE**FIRE/EXPLOSION SCENARIOS** NONE UNUSUAL**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS**

NONE UNUSUAL

**SECTION 6 ACCIDENTAL RELEASE MEASURES****PERSONAL PROTECTION**

WEAR EYE PROTECTION AND GLOVES.

**ENVIRONMENTAL PRECAUTIONS****WORKPLACE PRECAUTIONS**

DO NOT EAT, DRINK OR SMOKE WHILE WORKING WITH CHEMICALS

**METHODS FOR CLEARING UP**

DRY: COLLECT AND PUT INTO SUITABLE CONTAINER FOR DISPOSAL.

LIQUID: ABSORB IN SAND OR OTHER INERT MATERIAL AND PUT INTO SUITABLE CONTAINER FOR DISPOSAL.

**SECTION 7 HANDLING AND STORAGE****HANDLING PRECAUTIONS**

WEAR EYE PROTECTION AND GLOVES AND A SUITABLE DUST MASK WHEN MIXING.

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

STORE AWAY FROM OXIDISING AGENTS.

STORE AT ROOM TEMPERATURE. KEEP FROM FREEZING

**SECTION 8 EXPOSURE CONTROL/PERSONAL PROTECTION****ENGINEERING CONTROLS/VENTILATION**

NO LOCAL EXHAUST VENTILATION REQUIRED.

**RESPIRATORY PROTECTION**

PROTECTIVE MASK WHEN MIXING.

**EYE PROTECTION**

WEAR SAFETY GLASSES

**HAND PROTECTION**

WEAR PROTECTIVE RUBBER GLOVES.

**SKIN PROTECTION**

WEAR PROTECTIVE CLOTHING.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES****APPEARANCE:** CRYSTALS**COLOUR:** WHITE**ODOUR:** SLIGHT**ACIDITY/ALKALINITY pH:****BOILING POINT°C:** 100 SUBLIMES**MELTING POINT °C:**101**FLASH POINT °C (Open/Closed Cup):****AUTOIGNITION TEMP °C:****THERMAL DECOMPOSITION TEMP °C:****OXIDISING PROPERTIES:****EXPLOSIVE PROPERTIES:****EXPLOSIVE LIMITS AT at 25°C (% VOL IN AIR)****LOWER:****UPPER:****RELATIVE DENSITY:** 1.65g/cm<sup>3</sup>**SOLID CONTENT %:****SOLUBILITY IN WATER AT 20 DEGREES** 95g/L:

100 DEGREES 330g/L

**SOLUBILITY IN ORGANIC SOLVENTS** SOLUBLE IN ETHANOL GLYCEROL SLIGHTLY SOLUBLE IN DIETHYL ETHER INSOLUBLE IN BENZINE. CHLOROFORM,**VOLATILE CONTENT:** PETROLEUM**VAPOUR PRESSURE mmHg at 20°C****RELATIVE VAPOUR DENSITY (air = 1):**

(of principle component and name):

**EVAPORATION RATE****CONDUCTIVITY:**

(n-butyl acetate = 1):

**SECTION 10 STABILITY AND REACTIVITY PROPERTIES****CONDITIONS TO AVOID:****MATERIALS TO AVOID:** OXIDISING AGENTS**HAZARDOUS DECOMPOSITION PRODUCTS:****IN CASE OF FIRE:** CARBON DIOXIDE

CARBON MONOXIDE

**HAZARDOUS POLYMERISATION - MAY/WILL/NOT occur - State condition to avoid** WILL NOT OCCUR**SECTION 11 TOXICOLOGICAL INFORMATION****EFFECT OF EYE CONTACT:** IRRITATING TO THE EYES.**EFFECT OF SKIN CONTACT:**

IRRITATING TO THE SKIN, PRO-LONGED EXPOSURE MAY CAUSE DERMATITIS

ORAL LD50 (RAT) (mg/Kg) 375

**EFFECT OF INHALATION:** IRRITATING TO RESPIRATORY SYSTEM.**EFFECT OF INGESTION:** IF SWALLOWED THE SUBSTANCE CAUSES IRRITATION OF THE GASTRO INTESTINAL TRACT AND ABDOMINAL PAIN. -LD LO ORAL HUMAN 71

Any known data on sensitisation carcinogenicity, mutagenicity, teratogenicity, or narcosis. NONE KNOWN

**SECTION 12 ECOLOGICAL INFORMATION**

NOT CLASSIFIED

**SECTION 13 DISPOSAL CONSIDERATIONS**

LARGE QUANTITIES MAY BE DISPOSED OF BY DISSOLVING IN A SUITABLE SOLVENT AND BURNING IN A CHEMICAL INCINERATOR EQUIPPED WITH AFTER BURNER AND SCRUBBER OR BY BURIAL ON AN APPROVED SITE. ALWAYS DISPOSE ACCORDING TO LOCAL AUTHORITY REGULATIONS.

**SECTION 14 TRANSPORT INFORMATION****UN-Nr:** NOT CLASSIFIED FOR TRANSPORT**IATA CLASS:****SHIPPING NAME:** OXALIC ACID.**SECTION 15 REGULATORY INFORMATION****PRODUCT LABEL DETAILS - PER CHIP REGULATION 9****PRODUCT TRADE NAME/DESIGNATION:** FERRIC CHLORIDE STAIN REMOVER**CONTAINS:** OXALIC ACID**HAZARD SYMBOL:** HARMFUL**RISK PHRASE NUMBERS & WORDS:**

R21/22 HARMFUL IN CONTACT WITH SKIN AND IF SWALLOWED.

**SAFETY PHRASE NUMBERS & WORDS:**

S2 KEEP OUT OF REACH OF CHILDREN

S24 / 25 AVOID CONTACT WITH SKIN AND EYES

**OCCUPATIONAL EXPOSURE LIMITS;** Ref HSE Guidance Notes EH40 for current year

Long term exposure limit: (8 hour TWA) Short term exposure limit (10 minute period)

**SUBSTANCE IN PRODUCT FORMULA** p.p.m. mg/m<sup>3</sup>OXALIC ACID (COOH) 2.2 H<sub>2</sub>O / 1mg/m<sup>3</sup> OEL**SECTION 16****COMPILED ACCORDING TO CURRENT U.K AND EU LEGISLATION.****REVISION DATE:** 07.04.2010