

THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BELIEVED TO BE ACCURATE - HOWEVER NO GUARANTEE OR WARRANTY EXPRESSED OR IMPLIED IS GIVEN

SECTION 1 PRODUCT IDENTIFICATION AND MANUFACTURE

NAME: FERRIC NITRATE ETCHANT FOR SILVER
PART NO: 600-050 (500g)

MANUFACTURER'S/SUPPLIERS NAME, REGISTERED ADDRESS AND

EMERGENCY TEL NO:

MEGA ELECTRONICS LTD., TELEPHONE: +0044 01223 893900
THE GRIP INDUSTRIAL ESTATE,
LINTON, CAMBRIDGE.
ENGLAND, CB21 4XN.

ORGANISATIONS NAME & ADDRESS AT WHICH MANUFACTURED

BRECKLAND SCIENTIFIC SUPP TEL: 01842 766203
11 & 13 BRUNEL WAY FAX: 01842 753188
THETFORD
NORFOLK
IP24 1HP.

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	%BY WT	CAS & EEC Nos:	HAZARD	R PHRASE NOS:
IRON (III)	100	10421-48-4		Irritating to eyes
NITRATE 9				& skin.
WATER LR		EINECS NUMBER: 233-899-5		

SECTION 3 HAZARDS IDENTIFICATION

CONTACT WITH COMBUSTIBLE MATERIAL MAY CAUSE FIRE. IRRITATING TO EYES AND SKIN

SECTION 4 FIRST AID MEASURES

INHALATION:

THERE MAY BE CONGESTION OF THE LUNGS CAUSING SEVERE SHORTNESS OF BREATH. ABSORPTION THROUGH THE LUNGS CAN OCCUR CAUSING SYMPTOMS SIMILAR TO THOSE OF INGESTION. REMOVE CASUALTY FROM EXPOSURE ENSURING YOUR OWN SAFETY WHILE DOING SO. CHECK FOR BREATHING. IF RECOVERY IS NOT RAPID, SEEK MEDICAL ATTENTION.

SKIN CONTACT:

THERE MAY BE IRRITATION AND REDNESS AT THE SITE OF CONTACT. REMOVE ALL CONTAMINATED CLOTHES AND FOOTWEAR - UNLESS STUCK TO SKIN. DRENCH THE AFFECTED SKIN WITH RUNNING WATER FOR 10 MINS. OR LONGER. IF IRRITATION OCCURS AND PERSISTS, SEEK MEDICAL ATTENTION.

EYE CONTACT:

THERE MAY BE IRRITATION AND REDNESS. CORNEAL BURNS MAY OCCUR. BATHE THE EYE WITH RUNNING WATER FOR 15 MINS. SEEK MEDICAL ATTENTION IMMEDIATELY

INGESTION:

DO NOT INDUCE VOMITING. GIVE 1 CUP OF WATER TO DRINK EVERY 10 MINS. CHECK FOR BREATHING, PLACE IN RECOVERY POSITION IF NECESSARY. NAUSEA AND STOMACH PAIN MAY OCCUR. THERE MAY BE VOMITING AND DIARRHOEA. SEVERE POISONING CAN CAUSE SHOCK, UNCONSCIOUSNESS AND CONVULSION. THE CASUALTY MAY BECOME BLUE AROUND THE MOUTH. THE URINE MAY BECOME REDDISH DUE TO BLOOD AND BE PAINFUL TO PASS. DAMAGE TO LIVER AND KIDNEYS MAY DEVELOP LATER. SEEK MEDICAL ATTENTION IMMEDIATELY.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

CARBON DIOXIDE

COMBUSTION PRODUCTS

IN COMBUSTION EMITS TOXIC FUMES

FIRE/EXPLOSION SCENARIOS

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS

SELF CONTAINED BREATHING APPARATUS SHOULD BE WORN. WEAR PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN & EYES.

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTION

REFER TO SECTION 8; PERSONAL PROTECTION

ENVIRONMENTAL PRECAUTIONS

AVOID ENTRY INTO DRAINS & WATERWAYS.

WORKPLACE PRECAUTIONS N/A

METHODS FOR CLEARING UP: TRANSFER TO SUITABLE CONTAINER. WET SOLID WITH WATER TO PRODUCE A SLURRY. WASH DOWN THE DRAIN WITH LARGE AMOUNTS OF WATER.

SECTION 7 HANDLING AND STORAGE

HANDLING PRECAUTIONS

ENSURE THERE IS SUFFICIENT VENTILATION OF THE AREA. AVOID DIRECT CONTACT WITH THE SUBSTANCE.

STORAGE INCLUDING ANY SPECIAL REQUIREMENTS

(TEMPERATURE, VENTILATION, ETC) STORE IN COOL, WELL VENTILATED AREA. KEEP CONTAINER TIGHTLY CLOSED.

SECTION 8 EXPOSURE CONTROL/PERSONAL PROTECTION

ENGINEERING CONTROLS/ VENTILATION

ENSURE THERE IS SUFFICIENT VENTILATION OF THE AREA

RESPIRATORY PROTECTION

SELF-CONTAINED BREATHING APPARATUS MUST BE USED.

EYE PROTECTION

SAFETY GOGGLES. FACE SHIELD. ENSURE EYE BATH IS TO HAND.

HAND PROTECTION

RECOMMENDED IMPERVIOUS GLOVES e.g. NITRILE.

SKIN PROTECTION

PROTECTIVE CLOTHING WITH ELASTICATED CUFFS AND CLOSED NECK. BOOTS MADE OF PVC. PVC APRON COVERING THE TOP OF THE BOOTS. ENSURE SAFETY SHOWER IS TO HAND.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: CRYSTALS **COLOUR:** PALE PURPLE

ODOUR: NONE **ACIDITY/ALKALINITY pH:**
(Molar aqueous solution)

BOILING POINT 1m1-°C:

MELTING POINT °C:

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

AUTOIGNITION TEMP °C: N.A.

THERMAL DECOMPOSITION TEMP °C:

OXIDISING PROPERTIES: OXIDISING (BY EC CRITERIA)

EXPLOSIVE PROPERTIES:

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

LOWER: **UPPER:**

RELATIVE DENSITY: **SOLID CONTENT %:**

SOLUBILITY IN WATER:
INSOLUBILITY IN ALCOHOL,
VOLATILE CONTENT

VAPOUR PRESSURE mmHg at 20°C

RELATIVE VAPOUR DENSITY (air = 1):

(of principle component and name):

EVAPORATION RATE

(n-butyl acetate = 1):

CONDUCTIVITY:

SECTION 10 STABILITY AND REACTIVITY PROPERTIES

CONDITIONS TO AVOID: SOURCES OF IGNITION

MATERIALS TO AVOID: ORGANIC MATERIALS

HAZARDOUS DECOMPOSITION PRODUCTS: N/A

HAZARDOUS POLYMERISATION WILL NOT OCCUR: N/A

SECTION 11 TOXICOLOGICAL INFORMATION

EFFECT OF EYE CONTACT: SEE SECTION 4

EFFECT OF SKIN CONTACT: SEE SECTION 4

EFFECT OF INHALATION: SEE SECTION 4

EFFECT OF INGESTION: SEE SECTION 4

SECTION 12 ECOLOGICAL INFORMATION

N/A

SECTION 13 DISPOSAL CONSIDERATIONS

Safe disposal of product, its residues and packaging materials:

In accordance with local regulations via licensed contractor.

See also Sections 7 & 8 for handling precautions and personal protection where applicable.

SECTION 14 TRANSPORT INFORMATION

UN 1466 ADR Class: 5.1 Packing Group: III Hazard ID No: 50 Shipping Name: FERRIC NITRATE

SECTION 15 REGULATORY INFORMATION

INDICATION OF DANGER: BLACK St. ANDREW'S CROSS, HARMFUL

CONTAINS: OXIDISING. FERRIC NITRATE

RISK PHRASE Nos. & Words:

R8 Contact with combustible material may cause fire

R36/39 Irritating to eyes and skin.

SAFETY PHRASE Nos. & Words:

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

S28 After contact with skin, wash immediately with plenty of water.

OTHER INFORMATION

RECOMMENDED USES AND RESTRICTIONS: Use only as directed.