



Order Code:

141 311 (500g)

149 080 (2½kg)

#### PREPARATION

The required concentration is approximately 500g ferric chloride per litre of working solution. Pour half the required volume of clean water at 20 degrees C to 30 degrees C into a suitable vessel, and slowly add the appropriate weight of ferric chloride, stirring until the granules are completely dissolved. Make up with water to the required volume. Transfer the made-up-solution to the etching tank or tray, taking care not to splash.

**CAUTION!** BOTH SKIN AND EYE PROTECTION SHOULD BE WORN WHEN USING OR MIXING FERRIC CHLORIDE.

#### DIRECTIONS FOR USE

if using tray:

Immerse prepared printed circuit board, copper side up, in solution for approximately 10 minutes, the tray should be gently rocked so as to provide a constant flow of etchant over the surface of the board. Warming the solution reduces etching time.

if using pcb etching tank:

Follow instructions supplied with the tank. 1 litre of solution will etch approximately 0.4m<sup>2</sup> of 305g/m<sup>2</sup> (1oz/ft<sup>2</sup>) copper clad laminate.

#### STORAGE

if using tray:

Transfer the solution to an unbreakable well stoppered container.

if using pcb etching tank:

The solution may remain in the tank, but the tank heater must be switched OFF and the tank lid must remain firmly in position to prevent loss by evaporation. NOTE THAT VAPOUR FROM THE SURFACE OF FERRIC CHLORIDE SOLUTION WILL CORRODE TOOLS AND OTHER METAL OBJECTS IN THE VICINITY.

#### DISPOSAL

The solution must be disposed of in accordance with Local Authority regulations and in such a way as not to endanger personnel, animals,

#### HEALTH AND SAFETY DATA

##### DESCRIPTION

Ferric Chloride 6H<sub>2</sub>O pure.

##### STATUTORY HAZARD WARNING

Irritating to eyes and skin.

##### OTHER HAZARDS

When heated to decomposition, emits toxic fumes.

##### SPILLAGE PROCEDURE

Dissolve in water and flush to drain with copious volumes of water.

##### FIRST AID

STANDARD PROCEDURES - in case of skin contact wash with water followed with 2.5% Sodium Bicarbonate solution.

The above Health and Safety data has been prepared from the most relevant current information available to us.

##### FIRST AID

###### SPLASHES TO THE SKIN

Flood splashed surface with large amounts of water and continue for at least 10 minutes or until satisfied that no chemical remains.

Remove all contaminated clothing, taking care not to contaminate yourself in the process.

###### SPLASHES TO THE EYE

Flood eye with large amounts of gently running water either from eyewash bottle or tap and continue for at least 10 minutes.

Ensure water bathes the eyeball by gently prising open eyelids and keeping them apart until treatment is complete.

All eye injuries from chemicals require medical advice. Arrange transport to hospital and supply data to accompany casualty on the chemical involved and brief details of treatment already given.

###### INHALATION OF GASES

Remove casualty out of danger area after first ensuring your own safety.

Loosen clothing. Administer oxygen if available. If emergency warrants it remove patient to hospital and provide date on gas responsible with brief details of first aid treatment given.

###### INGESTION OF POISONOUS CHEMICALS

If chemical has been confined to mouth give large amounts of water as mouth wash. Ensure mouth wash is not swallowed.

If chemical has been swallowed give copious amounts of water or milk to dilute it in the stomach.

Do not induce vomiting.

Arrange for transport to hospital. Provide data to accompany casualty on chemical swallowed with brief details of treatment given and if possible an estimate of quantity and concentration of chemical consumed.