



Fine Etch Crystals

Part Number: 600-014 - 5 litre mix

Part Number: 600-033- 2 litre mix

Description

Fine etch crystals for producing a clean, non-staining, solution for etching copper printed circuit boards.

Preparation

BEFORE HANDLING WEAR PROTECTIVE CLOTHING AND READ THE HEALTH AND SAFETY INFORMATION ON THE REAR OF THIS SHEET.

The powder will make 5 litres of etching solution. Add 4.5 litres of hot, 45°C – 50°C water to a suitable container. Slowly stir in the crystals until dissolved. add the remaining hot water to make up the 5 litres of etching solution. Finally transfer the liquid to a suitable etching tank such as Mega's PA series tanks.

Usage

For safe and efficient etching, always use at approximately 45°C in a Mega temperature controlled Bubble Etch Tank. Normally copper PCB laminate will etch in 5 – 10 minutes. Depending on usage the etching solution will last between 3 and 8 weeks in a tank. When the etching time becomes particularly long either replace the liquid or alternatively the solution life can be slightly extended by adding some more crystals.

Health and Safety

Always wear protective clothing. Full Health and Safety details are on the rear of this instruction sheet. A report by an occupational hygienist concluded that under the test conditions, NO LOCAL VENTILATION IS REQUIRED using this etchant in Mega's PCB processing tanks. Copies of the report are available on request.

Associated Products

A range of associated products for use with this etchant are featured in our free product catalogue. Please telephone us for your free copy.



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SAFETY DATA SHEET

SENO 3207 FINE ETCH CRYSTALS (Part: 600-014 & 600-033)

1. IDENTIFICATION OF SUBSTANCE AND COMPANY

TRADE NAME **SENO 3207 FINE ETCH CRYSTALS (Part: 600-014 & 600-033)**

Producer/Distributor	Kepets GmbH	Mega Electronics Ltd
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2. COMPOSITION / INFORMATION ON INGREDIENTS

No	Ingredient name	EC No:	CAS No:	Conc.(wt%)	Classification:
1	di-Sodium Peroxodisulphate Hexahydrate	231-892-1	7775-27-1		Xn, O

Legend: T+ = Very toxic, T= Toxic, C+ = Corrosive, Xn+ Harmful, Xi= Irritant, E= Explosive, O=Oxidising, F+ = Extremely Flammable, F= High Flammable, N=Dangerous for the environment

3. HAZARDS IDENTIFICATION

Hazardous if swallowed, irritating to eyes and skin. Danger of decomposition in extreme heat



Xn= Harmful O= Oxidising

4. FIRST AID MEASURES

GENERAL INFO. **Medical notes:** if used solution containing copper has been ingested, check kidney function.

INHALATION Move to fresh air and keep at rest. If symptoms of coughing and irritated mucous membrane persist seek medical attention.

SKIN CONTACT Remove contaminated clothing. Wash affected area with soap and water. If irritation occurs and persists, seek medical attention.

EYE CONTACT Flush with water for 15 minutes. Seek medical attention

INGESTION Rinse mouth out with water. Do not induce vomiting. Seek Medical attention.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA Water, foam, powder

FIRE & EXPLOSION HAZARDS N/A

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS Refer to section 8; personal protection

ENVIRONMENTAL PRECAUTIONS Avoid entry into drainage system and earth

METHODS FOR CLEANING UP Sweep and gather product; avoid generation of dust.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS: Store in cool dry place, avoid damp and extreme heat. Avoid dust creation when mixing.

HANDLING ADVICE: Use personal protective equipment as specified in Section 8.

STORAGE: Avoid combustibles. Keep away from alkaline

8. EXPOSURE CONTROL / PERSONAL PROTECTION

PROTECTIVE EQUIPMENT



ENGINEERING MEASURES Ensure adequate ventilation when using.

HAND PROTECTION Recommended impervious gloves e.g. Nitrile.

EYE PROTECTION Wear protective glasses.

RESPIRATORY MEASURES Wear mask when mixing. Recommended type en149 2001 ffp2

9. PHYSICAL AND CHEMICALS PROPERTIES

Physical State:	Powder	Colour:	White
Odour:	WEAK OF OXYGENE/ OZONE	Oxidising Properties:	Oxidiser
Melting Point / range:	180°C	Relative Density:	2.59gr / ccm AT 20°C
Expl. limit LEL-UEL%:		Solubility in water	556g / L IN WATER AT 20°C ph VALUE: 4.3 AT 20°C MIXED 250g / 1 litre WATER
Vapour Pressure:		Saturation conc:	
Decomposition temp:		Rel. dens. sat. air (air=1)	
pH Solution		Boiling point / range	90°C
Flash Point	N/A	ACIDITY/ALKALINITY pH	4.3

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID Avoid extreme heat and dampness
MATERIAL TO AVOID
HAZARDOUS DECOMPOSITION PRODUCTS: Include sulphur dioxide and trioxide

11. TOXICOLOGICAL INFORMATION

INHALATION High concentrations may lead to loss of consciousness
SKIN CONTACT Slight irritation when in repeated contact with skin, repeated contact can cause degreasing and lead to dermatitis
EYE CONTACT Irritating effect
INGESTION Harmful – seek immediate medical attention

12. ECOLOGICAL INFORMATION

TOXICITY Possible environmental effects and behaviour/ODP/aquatic toxicity.
EC50 357 mg /L LC50 323 mg / L

13. DISPOSAL INFORMATION

GENERAL REGULATIONS 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.

14. TRANSPORT INFORMATION

GENERAL: The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID)

ADR.RID: Class		Packing Group:	III	Not translated:		Hazard id:	
IMDG: Class		Packing Group:	III	Sub Risk: EMS:		Marine Pollutant:	NO
IATA: Class		Packing Group:	III	Sub Risk: Label:			
UN Number	1505			Hazard category	5.1		

15. REGULATORY INFORMATION

R-PHRASES
8 Contact with combustible materials may cause fire.
22 Harmful if swallowed.
36/37/38 Irritating to eyes respiratory system and skin.
42/43 May cause sensitisation by inhalation and skin contact
S-PHRASES
S17 Keep away from combustible material.
S22 Do not breathe dust
S26 In case of contact with eyes / rinse immediately with plenty of water and seek medical advice
S37 Wear suitable gloves
Recommended Uses And Restrictions: Use Only As Directed.

EEC Guideline 91/155/EEC refers

Publication refs: Compiled in accordance with CHIP Regulation 2002. HSC approved Code of Practice, Document L37

16. OTHER INFORMATION

INFORMATION SOURCES: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

Release date: 10.10.1999

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DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.