SENO 4006 LIQUID DEVELOPER CONCENTRATE

Part Nos. 600-010 - 1 Litre up to 20 Litres

Description

A safe liquid developer for the processing of Mega's Fotoboard, FPC-16, Microtrak and other alkaline developed positive photoresists. Supplied as a 1 litre concentrate to make 10 litres of working solution.

Features

4006 Seno developer is very stable and is safe to use as it contains no Sodium Hydroxide (NaOh).
The developer has a long life especially when used in a PCB processing tank.

Health and Safety

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 EXHAUST VENTILATION IS REQUIRED using this developer in Mega's PCB processing tanks. Copies of the report are available upon request.

Mixing & Usage

Fotoboard and FPC 16

Mix 1 part developer with 19 parts cold tap water (250ml with 4.75L to make 5L). With this mix and using our Fotoboard image will appear in 5-10 seconds. Board should be fully developed in 20-30 seconds depending on temperature. (Should be 18-24ºC.)
Then rinsed immediately.
If not developing properly or takes a long time add a little more concentrate to your working solution.

Please note the warmer the developer, the quicker it will develop and to ensure a margin of safety and the image not being stripped off dilute the developer further to suit.
Where developer is highly diluted, it may result in a shorter working life.

Associated Products

A range of associated products for use with this developer are featured in our free product catalogue.
Please telephone us for your free copy or download a copy from our website at: http://www.megauk.com/downloads/mega_catalogue.pdf

Created 10.10.1999 (updated 25.03.10)

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SAFETY DATA SHEET
4006 Liquid Developer Concentrate (Part: 600-010)

1. IDENTIFICATION OF SUBSTANCE AND COMPANY

TRADE NAME **4006 Liquid Developer Concentrate (600-010)**

Producer/Distributor	Kepets GmbH	Mega Electronics Ltd
Address:	Nordstrasse 24,	Mega House, Grip Industrial Estate
	Schoffengrund	Linton, Cambridge
Country:	Laufdorf, Germany	ENGLAND
Postal Code:	D-35641	CB21 4XN
Telephone:	0049 644 55023	+44 (0) 1223 893900
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Email:		sales@megauk.com

2. COMPOSITION / INFORMATION ON INGREDIENTS

No	Ingredient name	EC No:	CAS No:	Conc.(wt%)		Classification:
1	Sodium Metasilicate	NCC	NCC	33%		Xn, R36/37/38, R22

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

Harmful: Harmful by inhalation and if swallowed, Inorganic substance. Avoid entry into drainage system.

4. FIRST AID MEASURES

GENERAL INFO. Remove affected person from source of contamination. Get medical attention if discomfort continues.

INHALATION Remove From Exposure area to Fresh Air.

SKIN CONTACT Irrigate Thoroughly With Soap And Water. Remove Contaminated Clothing.

EYE CONTACT Irrigate Thoroughly With Water. Obtain Medical Attention.

INGESTION Rinse Mouth Out With Water. Do Not Induce Vomiting. Seek Medical Attention.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA Water Spray, Foam, Dry Powder Co2

FIRE & EXPLOSION HAZARDS N/A

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS Wear Respiratory Protection. Avoid Contact With Skin And Eyes
Do not eat, drink or smoke.

ENVIRONMENTAL PRECAUTIONS Avoid Entry Into Drainage System And Earth

METHODS FOR CLEANING 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.

7. HANDLING AND STORAGE

HANDLING PRECAUTIIONS: Harmful If Swallowed. Always Wear Suitable Protective Clothing (Sec. 8)
No Local Exhaust Ventilation Is Required If Used According To Instructions.

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

STORAGE: Store Only In Suitable Polyethylene Containers Ensuring They Are Tightly Closed. Store At Room Temperature. Keep From Freezing When Mixed. No Local Exhaust Ventilation Required If Used According To Instructions

8. EXPOSURE CONTROL / PERSONAL PROTECTION

PROTECTIVE EQUIPMENT

ENGINEERING MEASURES No Local Exhaust Ventilation Required If Used According To Instructions.

HAND PROTECTION Wear Protective Rubber Gloves

EYE PROTECTION Wear Protective Glasses.

PROTECTIVE CLOTHING Protective Mask Required When Mixing.

HYGENIC MEASURES

DO NOT SMOKE IN WORK AREA

Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. No eating or drinking while working with this material

9. PHYSICAL AND CHEMICALS PROPERTIES

Physical State:	Liquid	Colour:	Clear
Odour:	No characteristic odour	Oxidising Properties:	Strong Oxidiser
Melting Point / range:		Relative Density:	1.50g / Cm^3
Expl. limit LEL-UEL%:		Solubility in water	Unlimited
Vapour Pressure:		Saturation conc:	
Decomposition temp:		Rel. dens. sat. air (air=1)	
pH Solution		Boiling point / range	90°C
Flash Point	N/A	pH-VALUE, CONC. SOLUTION	13.5

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID Observe Usual Precautions When Handling Chemicals
MATERIAL TO AVOID Avoid Contact With Concentrated Acids

11. TOXICOLOGICAL INFORMATION

INHALATION No specific health warnings noted.
SKIN CONTACT Irritating Effect, No Acute Toxicity.
EYE CONTACT Irritating Effect, No Acute Toxicity.
INGESTION Ld50 (Oral Rat): 1490mg / 1 Kg.

12. ECOLOGICAL INFORMATION

TOXICITY No Acute Toxicity But Avoid Entry Into Drainage System. Inorganic Preparation.
MOBILITY N/A

13. DISPOSAL INFORMATION

GENERAL REGULATIONS	Always Dispose Of According To Local Government Regulations. Neutralisation Of Spent Solution. Neutralise To Ph Of 8.5 – 9.0 By Addition Of Acidic Solution. Solids Will Separate Out. Decant / Filter The Liquid. Solids May Be Incinerated. Before Putting Liquid To Drain Neutralise To Ph Of 6.5 – 8 By Addition Of Acidic Solution.

14. TRANSPORT INFORMATION

Classified as Dangerous Goods **Yes** ☐ **No** ☒ **Not applicable** ☐

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

ADR.RID:	Class		**Packing Group:**		**Not translated:**		**Hazard id**:
IMDG:	Class		**Packing Group:**		**Sub Risk: EMS:**		**Marine Pollutant**: NO
IATA:	Class		**Packing Group:**		**Sub Risk: Label:**		

15. REGULATORY INFORMATION

R-PHRASES

R22	Harmful If Swallowed
R36 / 37 / 38	Irritating To Eyes. Irritating To Respiratory System. Irritating To Skin. Harmful If Swallowed

S-PHRASES

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 Soap and Water
S/36/37	Wear Suitable Protective Clothing And Gloves

Recommended Uses And Restrictions: Use Only As Directed.

UK REGULATORY REFERENCES Health and Safety at Work Act 1974.
The Control of Substances Hazardous to Health Regulations.

STATUTORY INSTRUMENTS
Chemicals (Hazard Information and Packaging) Regulations. Control of Substances Hazardous to Health.

GUIDANCE NOTES Workplace Exposure Limits EH40.

16. OTHER INFORMATION

INFORMATION SOURCES: This safety data sheet has been prepared on the basis of information given by raw material suppliers

Release date: 10.10.1999 **Updated**: 25.03.2010