Trade Name: Negative Tone Photoresist ma-N 1410

1. Identification of preparation and company

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04/19/07

Product identification

Negative Tone Photoresist ma-N 1410

Identification of manufacturer/address

micro resist technology GmbH
Koepenicker Str. 325 **Tel. +49 - 30 - 6576 2192**
D-12555 Berlin **Fax +49 - 30 - 6576 2193**

2. Composition / Information on ingredients

Photoactive compound and novolak dissolved in mixture of organic liquids.
The product contains the following dangerous components:

2.1. 1-Methoxy-2-propyl acetate
CAS: 108-65-6 EINECS: 203-603-9 UN: 1993

2.2. Ethyl methyl ketone
CAS: 78-93-3 EINECS: 201-159-0 UN: 1193

2.3. Anisole
CAS: 100-66-3 EINECS: 202-861-1 UN: 2222

3. Hazards identification

The handling of this product has to be carefully. Injury can be excluded if manipulation is mindful.
The product is flammable.

4. First-Aid Measures

After inhalation:
Fresh air, if necessary breath donation, in case of uncosciousness: stable side position for transport.

After skin contact:
Wash off with plenty of water and soap.

After eye contact:
Rinse out with plenty of water, consult a doctor.

If swallowed:
Drink plenty of water, in case of persistent symptoms consult a doctor.

5. Fire fighting measures

Suitable extinguishing media:
Foam, CO2, Powder.

Extinguishing media to be avoided:
Water.

Protective firefighting equipment:
Self-contained breathing apparatus with full facepiece operated in positive pressure mode.

6. Accidental release measures

Person-related safety precautions:
Ensure well ventilation, do not inhatate aerosols, remove ignition sources.

Environmental protection measures:
Prevent reaching drainage system, holes, cellars, ground or ground water. If needed alarm neighbourhood.

Cleaning measures:
Take up with liquid-bindind material. Forward for disposal. Do not flush away with water.
Pay attention to item 8 and 13.

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7. Handling and storage

Handling

Ensure well ventilation/exhaustion at workplace.

Storage

Tightly closed in well-ventilated place. Protect from light. Store at room temperature. Keep away from sources of ignitation and heat. Protect against electrostatic charges.

Pay attention to regulation on inflammable liquids.

8. Exposure controls / personal protection

Limit values at workplace

Exposure limits [ml/m³ / mg/m³]

50 / 270	1-Methoxy-2-propyl acetate
200 / 600	Ethyl methyl ketone
- / -	Anisole

Personal protective equipment

Breathing protection	not required if room is well-ventilated
Hand protection	required
Eye protection	required
Body protection	Protective work clothing
Industrial hygiene	Don扶drink, eat or smoke. Change contaminated clothing. Wash hands and face after working with substance.

9. Physical and chemical properties

Form	liquide	
Colour	red-brown	
Odour	aromatic	
Density (25 筷)	1.010 g/cm³	
Viscosity (25 筷, D= 1000 s⁻¹)	12 mPas	
Flash point	31.0癈	
Solubility in Water (25 筷)	insoluble	
Boiling point	148 - 151 筷	1-Methoxy-2-propyl acetate
	80 筷	Ethyl methyl ketone
	153 - 155 筷	Anisole
Vapour pressure	3.1 hPa (20 筷)	1-Methoxy-2-propyl acetate
	105 hPa (20 筷)	Ethyl methyl ketone
	1.33 hPa (20 筷)	Anisole
Ignition temperature	315 筷	1-Methoxy-2-propyl acetate
	505 筷	Ethyl methyl ketone
	475 筷	Anisole
Explosion limits	1.5 - 10.8 Vol-%	1-Methoxy-2-propyl acetate
	1.8 - 11.5 Vol-%	Ethyl methyl ketone
	0.34 - 6.3 Vol-%	Anisole

10. Stability and reactivity

Conditions to avoid:

Sunlight, heating, igition sources, electro-static charge

Materials to avoid:

Oxidizing agents

Hazardous decomposition products:

Not known

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11. Toxicological information

Acute toxicity:

LD50 (oral,rat):	7964 mg/kg	1-Methoxy-2-propyl acetate
	3400 mg/kg	Ethyl methyl ketone
	3700 mg/kg	Anisole

Further toxicological information:

Poison class CH: 3 1-Methoxy-2-propyl acetate
5 Ethyl methyl ketone
4 Anisole

12. Ecological information

Quantitative ecological data are not availeble.
Avoid release to environment.

13. Disposal

Product:

Disposal as halogen-free organic solvent.
EAK-Key: 140503

Packaging:

If contaminated like the substance itself.
EAK-Key: 150199D1
Not contaminated: Recycling/Household waste.

Dispose in accordance with all applicable federal, state and local environmental regulations.

14. Transport information

UN-No.: 1866

Land transport:	Designation: Resin Solution
	GGVE/GGVS: 3/31c RID/ADR: 3/31c Kemler number: 30
Maritime transport:	Designation: Resin Solution
	Packaging group III
	IMDG: 3.3/III EMS: 3-07 MFAG: 330
Air transport:	Designation: Resin Solution
	Packaging group III
	IATA-DGR CAO: 3 Packaging instruction: 310
	IATA-DGR PAX: 3 Packaging instruction: 309

15. Regulatory information

Germany:

Pack-Kat.:	A	
LGK:	3A	
WGK:	2	
VbF:	AII	
Hs-No.:	29153990	1-Methoxy-2-propyl acetate
	29141200	Ethyl methyl ketone
	29093090	Anisole

EU Classification:

Danger symbol:	Xi ? irritant
R-Phrases:	10-36-66-67 Flammable. Irritating to the eyes. Repeated exposure may cause skin dryness or cracking. Vapors may cause drowsiness and dizziness.
S- Phrases:	9-16-24/25 Keep container in a well ventilated place. Keep away from sources of ignition - No smoking. Avoid contact with skin and eyes.

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16. Other information

Replaces version of 06-Dez-00

Reason of revision: Update of physical properties

All information in this paper is based on the present state of our knowledge but may vary in certain limits and does not have the meaning of a guarantee of any product features.