

ma-T 1046 Thinner for Photoresists

Print date : 7.3.2007

Product code : R822506

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1. Identification of the substance/preparation and of the company/undertaking

Product group : Verdünner

Identification of the substance or preparation

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Use of the substance/preparation

Chemical Speciality

Company/undertaking identification

Company name : micro resist technology GmbH
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2. Composition/information on ingredients

Chemical characterization (preparation)

Hazardous components

EC-No.	CAS-No.	Chemical name	Quantity	Classification
202-876-1	100-66-3	Anisole	60-80%	R10
203-603-9	108-65-6	2-methoxy-1-methylethyl acetate	20-40%	Xi R10-36

Full text of each relevant R phrase can be found in heading 16.

3. Hazards identification

Classification

Indications of danger : Irritant
R-phrases :
Flammable.
Irritating to eyes.

4. First aid measures

After inhalation

Provide fresh air. In case of breathing difficulties administer oxygen. If victim is at risk of losing consciousness, position and transport on their side. In case of irritation of the respiratory tract seek medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of Water and soap. Change contaminated clothing. In case of skin irritation, seek medical treatment.

After contact with eyes

Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water. Let water be swallowed in little sips (dilution effect). Immediately get medical attention.

Advice to doctor

Treat symptomatically.

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5. Fire-fighting measures

Suitable extinguishing media

Carbon dioxide (CO₂). Dry extinguishing powder. Foam.

Extinguishing media which must not be used for safety reasons

High power water jet.

Special exposure hazards arriving from substance or preparation itself, combustion products, resulting gases

In case of fire and/or explosion do not breathe fumes.

Special protective equipment for fire-fighters

In case of fire: Wear self-contained breathing apparatus. Wear chemical resistant suit.

Additional information

Contaminated fire-fighting water must be collected separately.

6. Accidental release measures

Personal precautions

Remove all sources of ignition. The following must be prevented: inhalation. skin contact. Eye contact. Provide adequate ventilation.

Environmental precautions

Do not empty into drains or the aquatic environment.

Methods for cleaning up/taking up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed containers for disposal. Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage

Handling

Advice on safe handling

Use only in well-ventilated areas. Keep away from sources of ignition. No smoking.

Advice on protection against fire and explosion

Take precautionary measures against static discharges.

Storage

Requirements for storage rooms and vessels

Keep container tightly closed and in a well-ventilated place. Storage temperature: of °C: 18 up to °C: 25 Keep away from sources of ignition. No smoking. Take precautionary measures against static discharges. Suitable material for floor covering: Solvent-proof.

Further information on storage conditions

Protect against: heating. UV-solarization/sunlight.

Storageclass (VCI) :

3 A

8. Exposure controls/personal protection

Exposure limit values

Exposure limits (EH40)

CAS No.	Substance	ml/m ³	mg/m ³	F/ml	Category	Origin
108-65-6	1-Methoxypropyl acetate	50	274		TWA (8 h)	WEL
		100	548		STEL (15 min)	WEL

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Exposure controls

Protective and hygiene measures

Do not eat, drink, smoke or sneeze at the workplace. Protect skin by using skin protective cream.
After work, wash hands and face. Immediately remove any wetted clothing, shoes or stockings.

Respiratory protection

If technical suction or ventilation measures are not possible or are insufficient, protective breathing apparatus must be worn. Respiratory protection required in case of: aerosol or mist generation. Filter respirator (full mask or mouth-piece) with filter: A

Hand protection

Tested protective gloves are to be worn: Single-use gloves.
German Industry Norms (DIN) / European Norms (EN): EN 374

Duration of wearing with permanent contact:

Suitable material: FKM (Fluoroelastomer (Viton)).

Layer thickness: 0.7 mm

penetration time (maximum wearing period): > 480 min

Recommended protective gloves brand: KCL 890 Vitoject, Manufacturer: KCL GmbH, D-36124

Eichenzell, Source of supply: www.kcl.de

Duration of wearing with occasional contact (splashes):

Suitable material: NBR (Nitrile rubber).

Layer thickness: 0.4 mm

penetration time (maximum wearing period): > 30 min

Recommended protective gloves brand: KCL 730 Camatril-Velours, Manufacturer: KCL GmbH,

D-36124 Eichenzell, Source of supply: www.kcl.de

In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer of the gloves.

Eye protection

Suitable eye protection: Tightly sealed safety glasses.

Skin protection

For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

9. Physical and chemical properties

General information

Physical state : liquid
Colour : clear
Odour : hydrocarbons, aromatic.

Important health, safety and environmental information

Changes in the physical state

Boiling point :

148-151 °C 2-methoxy-1-methylethyl acetate

Flash point :

46 °C

Lower explosion limits :

0.34 vol. % Anisole

Upper explosion limits :

6.3 vol. % Anisole

Vapour pressure :

3.1 hPa 2-methoxy-1-methylethyl acetate

(at 20 °C)

Density (at 25 °C) :

0.99 g/cm³

Water solubility :

insoluble

Test method

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Viscosity / dynamic :
(at 25 °C)

<7 mPa·s

Other information

Ignition temperature :

315 °C 2-methoxy-1-methylethyl
acetate

10. Stability and reactivity

Conditions to avoid

UV-solarization/sunlight. heating. Take precautionary measures against static discharges. Remove all sources of ignition.

Materials to avoid

Oxidizing agents.

11. Toxicological information

Acute toxicity

Acute toxicity, oral LD50: 3700 mg/kg species: rat. (Anisole)

Acute toxicity, oral LD50: 8532 mg/kg species: rat. (2-methoxy-1-methylethyl acetate)

The statement is derived from the properties of the components.

12. Ecological information

Further information

product has not been tested. Do not allow uncontrolled leakage of product into the environment.

13. Disposal considerations

Advice on disposal

Appropriate disposal / Product: Remove according to the regulations.

Contaminated packaging: Cleaned containers may be recycled.

14. Transport information

Land transport (ADR/RID)

ADR/RID class :	3
Warning plate	
Hazard-no. :	30
UN number :	1993
Hazard label :	3
ADR/RID packing group :	III

Description of the goods

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. (Anisole, 1-Methoxy-2-propyl acetate)

Inland waterways transport

Remarks (inland waterways transport)

Not classified for this carrier.

Marine transport

IMDG code :	3
UN number :	1993
EmS :	F-E, S-E
IMDG packing group :	III
Hazard label :	3

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Description of the goods

FLAMMABLE LIQUID, N.O.S. (Anisole, 1-Methoxy-2-propyl acetate)

Air transport

ICAO/IATA-DGR :	3
UN/ID number :	1993
Hazard label :	3
IATA-packing instructions - Passenger :	309
IATA-max. quantity - Passenger :	60 L
IATA-packing instructions - Cargo :	310
IATA-max. quantity - Cargo :	220 L
ICAO packing group :	III

Description of the goods

FLAMMABLE LIQUID, N.O.S. (Anisole, 1-Methoxy-2-propyl acetate)

15. Regulatory information

Labelling

Danger symbols : Xi - Irritant



Xi - Irritant

R phrases

10 Flammable.
36 Irritating to eyes.

S phrases

16 Keep away from sources of ignition - No smoking.
24/25 Avoid contact with skin and eyes.

National regulations

Employment restrictions :	Observe employment restrictions for young people.
Water contaminating class :	2 - water contaminating
1999/13/EC (VOC) :	This chemical is a VOC according to 99/13/EC. Volatile organic compounds (VOC) in percentage by weight: 100% (990 g/l)

16. Other information

Full text of R-phrases referred to under sections 2 and 3

10 Flammable.
36 Irritating to eyes.

Other data

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Changes

* Data changed from previous versions

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(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)