

MATERIALS SAFETY DATA SHEET

SECTION 1 – PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTIFIER: TECHNOVIT 2000 LC 11 09 00
PRODUCT USE: Resin for metallographic testing

DISTRIBUTOR'S NAME: MICRO STAR 2000 INC.
DISTRIBUTOR'S ADDRESS: 225 Bradwick Drive, Unit 21
Concord, Ontario
L4K 1K7

EMERGENCY PHONE NUMBER: 905-660-1754

SECTION 2 – COMPOSITION / DATA ON COMPONENTS

Chemical Characterization Description: Product based on methacrylates

DANGEROUS COMPONENTS:			
CAS: 10595-06-9	2-Phenoxyethylmethacrylat	Xi; R 36/37/38	25-50%
	Aliphatic urethane acrylate	Xi; R 36/37/38	25-50%
CAS: 2455-24-5 EINECS: 219-529-5	Tetrahydrofurfuryl-2-methacrylat	Xi; R 36/37/38	10-25%
CAS: 7534-94-3 EINECS: 231-403-1	isobornyl methacrylate	Xi, N; R 36/37/38-51/53	5-10%

Additional Information: For the wording of the listed risk phrases refer to section 16.

SECTION 3 – HAZARDS IDENTIFICATION

Hazard Designation: Xi Irritant

Information pertaining to particular dangers for man and environment:

The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 36/37/38 Irritating to eyes, respiratory system and skin.

R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Classification System:

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

SECTION 4 – FIRST AID MEASURES

After Skin Contact: Instantly wash with water and soap and rinse thoroughly.

After Eye Contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.

After Swallowing: Initiate vomiting and consult a doctor.

SECTION 5 – FIRE FIGHTING MEASURES

Suitable Extinguishing Agents: CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam. Use fire fighting measures that suit the environment:

Special hazards caused by the material, its products of combustion or flue gases:
Formation of toxic gases is possible during heating or in case of fire.

Protective Equipment: No special measures required.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Person-related safety precautions: Not required.

Measures for environmental protection: No special measures required.

Measures for cleaning/collecting: Absorb with liquid-binding material (diatomite, universal binders, for small amounts tissues).

Additional Information: No dangerous materials are released.

SECTION 7 – HANDLING AND STORAGE

HANDLING:

Information for safe handling: Keep containers tightly sealed.

Information about protection against explosion and fires: No special measures required.

STORAGE:

Requirements to be met by storerooms and containers: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Store cool (not above 25°C).

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Additional information about design of technical systems: No further data; see item 7.

Components with critical values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional Information: The lists that were valid during the compilation were used as basis.

PERSONAL PROTECTIVE EQUIPMENT:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and food.

Instantly remove any soiled and impregnated garments.

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes and skin.

Breathing equipment: Not required.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION - CONTINUED

Protection of hands:

Solvent resistant gloves.

The glove material has to be impermeable and resistant to the product / the substance / the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:

PVA gloves

For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Butyl rubber, BR

Fluorocarbon rubber (Viton)

Nitrile rubber, NBR

Chloroprene rubber, CR

Eye protection: Protective goggles are recommended.

Body protection: Light weight protective clothing.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

General Information:

Form: Fluid
Colour: Colourless
Smell: Characteristic

Change in Condition:

Melting point/Melting range: Not determined
Boiling point/Boiling range: 66 °C

Flash Point: 127 °C
Ignition Temperature: 235.0 °C
Self-inflammability: Product is not selfigniting
Danger of Explosion: Product is not explosive
Steam pressure at 20 °C: 0 mbar
Density at 20 °C: 0 g/cm³
Solubility in / Miscibility with Water: Not miscible or difficult to mix

Solvent Content:

Organic Solvent: 0.0%
VOC EU: g/l
VOC EU: 0.00%

Solids Content: 0.3%

SECTION 10 – STABILITY AND REACTIVITY

Conditions to be avoided: No decomposition if used and stored according to specifications.

Dangerous reactions: No dangerous reactions known.

Dangerous products of composition: None

Additional Information: If stored longer than recommended and/or above recommended temperature, product may polymerize generating heat.

SECTION 11 – TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Primary Irritant Effect:

On the skin: Irritant for skin and mucous membranes.

On the eye: Irritant effect.

Sensitization: No sensitizing effect known.

Additional Toxicological Information: The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparation as issued in the latest version: Irritant

SECTION 12 – ECOLOGICAL INFORMATION

General Notes:

Water hazard class 2 (calculated according to VwVwS): Hazardous for water.

Dot not allow product to reach ground water, water bodies or sewage system.

Danger to drinking water even, if small quantities leak into soil.

SECTION 13 – DISPOSAL CONSIDERATIONS

PRODUCT:

Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Small quantities can be polymerized with the matching system component(s) and the cured solid material can be disposed of with the regular garbage. Larger quantities must be disposed of following the regulations of the local authorities.

European Waste Catalogue: 11 01 98 other wastes containing dangerous substances.

UNCLEANED PACKAGINGS:

Recommendation: Disposal must be made according to official regulations.

SECTION 14 – TRANSPORTATION INFORMATION

Land Transport ADR/RID and GGVS/GGVE (cross-border/domestic):

ADR/RID-GGVS/E Class: -

Maritime Transport IMDG/GGVSea:

IMDG/GGVSea Class: -

Marine Pollutant: No

Air Transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: -

SECTION 15 – REGULATORY INFORMATION

Designation according to EC guidelines:

The product has been classified and labeled in accordance with EC Directives / Ordinance on Hazardous Material (GefStoffV)

Code letter and hazard designation of product: Xi irritant

Risk Phrases: 36/37/38 Irritating to eyes, respiratory system and skin.
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases: 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
28 After contact with skin, wash immediately with plenty of water.
37 Wear suitable gloves.
61 Avoid release to the environment. Refer to special instructions/safety data sheet.

National Regulations:

Water hazard class: Water hazard class 2 (calculated according to VwVwS): Hazardous for water.

SECTION 15 – REGULATORY INFORMATION

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant R-phrases:

36/37/38 Irritating to eyes, respiratory system and skin.
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 16 – PREPARATION OF MATERIAL SAFETY DATA SHEET

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