

SAFETY DATA SHEET

SECTION 1 – PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTIFIER: TECHNOVIT 4000 Powder 11 10 10
PRODUCT USE: Resin for metallographic testing

DISTRIBUTOR'S NAME: MICRO STAR 2000 INC. **EMERGENCY PHONE NUMBER:** 905-660-1754
DISTRIBUTOR'S ADDRESS: 225 Bradwick Drive, Unit 21
Concord, Ontario
L4K 1K7

SECTION 2 – COMPOSITION / INFORMATION INGREDIENTS

CHEMICAL CHARACTERIZATION DESCRIPTION:

DANGEROUS COMPONENTS:			
	silanised quartz (SiO ₂)	Xn; R 48/20	>90%
CAS: 94-36-0 EINECS: 202-327-6	dibenzoyl peroxide	Xi; E; R 2-36-43	0-5%
CAS: 84-61-7 EINECS: 201-545-9	dicyclohexyl phthalate		0-5%

WHMIS: Not controlled under WHMIS (Canada)

SECTION 3 – HAZARD IDENTIFICATION

HAZARD DESIGNATION:
Xn Harmful

Information pertaining to particular dangers for man and environment:

Product contains fine quartz powder. Longer inhalation may cause silicose. 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 43 May cause sensitization by skin contact.

R 48/20 Harmful: Danger of serious damage to health by prolonged exposure through inhalation.

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

INHALATION: Supply fresh air and call for doctor for safety reasons.

SKIN CONTACT: Instantly rinse with water.

EYE CONTACT: Rinse opened eye for several minutes under running water.

INGESTION: Do not induce vomiting; instantly call for medical help.

SECTION 5 – FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING AGENTS: N/A
PROTECTIVE EQUIPMENT: No special measures required.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTION: Avoid causing dust.
 Wear protective equipment. Keep unprotected persons away.
 Use breathing protection against the effects of fumes/dust/aerosol.

ENVIRONMENTAL PRECAUTIONS: No special measures required.

CLEANING METHOD: Collect mechanically.

ADDITIONAL INFORMATION: No dangerous materials are released.

SECTION 7 – HANDLING AND STORAGE

HANDLING: Carry out filling operations only at sites with extractors available.

EXPLOSION AND FIRES: No special measures required.

STORAGE: Store cool (not above 25°C).

SECTION 8 – ENGINEERING CONTROLS / PERSONAL PROTECTION

Components with critical values that require monitoring at the workplace:

silanised quartz (SiO₂)

OEL ()	Long-term value: 0.3 mg/m ³
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94-36-0 dibenzoyl peroxide

OES ()	Long-term value: 5 mg/m ³
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84-61-7 dicyclohexyl phthalate

OES ()	Long-term value: 5 mg/m ³
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PERSONAL PROTECTIVE EQUIPMENT:

GENERAL PROTECTIVE AND HYGIENE MEASURES: Keep away from beverages and food.
 Instantly remove any soiled and impregnated garments.
 Wash hands during breaks and at the end of the work.

RESPIRATORY EQUIPMENT: Filter P2.

SKIN CONTACT: If skin contact cannot be avoided, protective gloves are recommended to avoid possible sensitization.
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

PRODUCT IDENTIFIER:

TECHNOVIT 4000 Powder

11 10 10

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.

FOR THE PERMANENT CONTACT IN WORK AREAS WITHOUT HEIGHTENED RISK OF INJURY (E.G. LABORATORY) GLOVES MADE OF THE FOLLOWING MATERIAL ARE SUITABLE: PVC or PE gloves.

PENETRATION TIME OF GLOVE MATERIAL:

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

FOR PERMANENT CONTACT OF A MAXIMUM OF 15 MINUTES GLOVE MADE OF THE FOLLOWING MATERIALS ARE SUITABLE: PVC or PE gloves.

EYE PROTECTION:

Not absolutely necessary.

BODY PROTECTION:

Light weight protective clothing.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

General Information:

Form:	Powder
Color:	Colorless
Smell:	Odorless

Change in Condition:

Melting point/Melting range:	Not determined
Boiling point/Boiling range:	Not determined

Flash Point:

Not applicable

Self-inflammability:

Product is not self-igniting

Danger of Explosion:

Product is not explosive

Density at 20°C:

2.650 g/cm³

Settled apparent density at 20°C:

900 kg/m³

Solubility in / Miscibility with Water: Insoluble

Solvent Content:

Organic Solvents:	0.0%
Water:	0.1%

Solids Content

100.0%

SECTION 10 – STABILITY AND REACTIVITY

CONDITIONS TO AVOID:

No decomposition if used and stored according to specifications.

DANGEROUS REACTIONS:

No dangerous reactions known.

HAZARDOUS COMPOSITIONING:

None.

SECTION 11 – TOXICOLOGICAL INFORMATION

**ACUTE TOXICITY:
PRIMARY IRRITANT EFFECTS:**

SKIN: No irritant effect.
EYES: No irritant effect.
SENSITIZATION: Sensitization possible by skin contact.

ADDITIONAL 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 : Generally not hazardous for water.

SECTION 13 – DISPOSAL CONSIDERATIONS

ENVIRONMENTAL TOXICITY DATA: See regulatory information below.
WASTE DISPOSAL METHOD: In accordance with all local, state, and federal regulations.
CONTAINER DISPOSAL: In accordance with all local, state, and federal regulations.

SECTION 14 – TRANSPORT INFORMATION

Land Transport :
ADR/RID-GGVS/E Class: -

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 Materials (GefStoffV)

CODE LETTER AND HAZARD DESIGNATION OF PRODUCT : Xn Harmful

HAZARD-DETERMINING COMPONENTS OF LABELING : silanised quartz (SiO₂)
dibenzoyl peroxide

RISK PHRASES

- 43 May cause sensitization by skin contact.
48/20 Harmful: Danger of serious damage to health by prolonged exposure through inhalation.

SAFETY PHRASES

- 22 Do not breathe dust.
24 Avoid contact with skin.
37 Wear suitable gloves.
38 In case of insufficient ventilation, wear suitable respiratory equipment.

NATIONAL REGULATIONS:

WATER HAZARD CLASS: Generally not hazardous for water.

SECTION 16 – OTHER 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

- 2 Risk of explosion by shock, friction, fire or other sources of ignition.
36 Irritating to eyes.
43 May cause sensitization by skin contact.
48/20 Harmful: Danger of serious damage to health by prolonged exposure through inhalation.

SECTION 17 – PREPARATION OF SAFETY DATA SHEET

PREPARED BY: R. Dickertmann

PHONE NUMBER: 905-660-1754

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