

# MATERIALS SAFETY DATA SHEET

## SECTION 1 – PRODUCT IDENTIFICATION AND USE

**PRODUCT IDENTIFIER:** MICROTEC P20 POWDER 11 10 15 & 11 10 45  
**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 ON INGREDIENTS

**CHEMICAL CHARACTERIZATION:**  
Acrylic polymer on the basis of methyl methacrylate

### HAZARDOUS INGREDIENTS:

<b>di benzoyl peroxide</b>		
<b>CAS number</b>	94-36-0	< 1% (no obligation for labeling)
<b>Hazard symbols</b>	Xi, E	
<b>R-phrases</b>	2, 7, 36, 43 / 2,36,43	

**WHMIS:** Not controlled under WHMIS (Canada)

## SECTION 3 – HAZARD 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 43 May cause sensitization by skin contact.

### 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

**GENERAL INFORMATION:** Remove soiled, soaked clothing immediately.  
Medical treatment is necessary, if symptoms occur which are obviously caused by skin or eye contact with the product.

**SKIN CONTACT:** Instantly wash with water and soap and rinse thoroughly. If skin irritation occurs, seek medical attention.

**EYE CONTACT:** Rinse opened eye for several minutes under running water and seek medical advise.

**INGESTION:** Initiate vomiting and consult a doctor.

## SECTION 5 – FIRE FIGHTING MEASURES

**SUITABLE EXTINGUISHING AGENTS:** CO<sub>2</sub>, extinguishing dry powder or water jet spray. Fight larger fires with water jet or alcohol-resistant foam.

**FOR SAFETY REASONS USUITABLE EXTINGUISHING AGENTS:** Full water jet

**SPECIAL HAZARDS CAUSED BY THE MATERIAL,  
ITS PRODUCUTS OF COMBUSTION OF THE 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

**PERSONAL PROTECTION:** Not required.

**ENVIRONMENTAL PRECAUTIONS:** No special measures required.

**CLEANING METHODS:** Absorb mechanically. Dispose of in accordance with regulations.

## SECTION 7 – HANDLING AND STORAGE

**HANDLING:** Avoid dust formation.

**STORAGE:** Store cool (not above 25°C).  
Store dry.

**EXPLOSION AND FIRES:** Take precautionary measures against static discharges. In the event of fire, cool the endangered product with water.

## SECTION 8 – ENGINEERING CONTROLS / PERSONAL PROTECTION

### Compoents with critical values that require monitoring at the work place:

#### TLV (short term)- value for:

CAS number	80-62-6		
Methyl methacrylate	510 mg/m <sup>3</sup>	125 ml/m <sup>3</sup>	(1989)

#### TLV (long term)- value for:

CAS number	80-62-8		
Methyl methacrylate	410 mg/m <sup>3</sup>	100 ml/m <sup>3</sup>	(1989)

#### TLV (long term)- value for

CASE number	94-36-0		
Dibenzoyl peroxide	5 mg/m <sup>3</sup>		(1989)

**PERSONAL PROTECTIVE EQUIPMENT**

**GENERAL PROTECTIVE AND HYGIENIC MEASURES:** Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work. Do not inhale dust.

**INHALATION PROTECTION:** Not required.

**SKIN PROTECTION:** protective gloves are recommended to avoid possible sensitization .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 cannot 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:** Butyl rubber, BR  
Fluorocarbon rubber (Viton)  
Nitrile rubber, NBR  
Natural rubber, NR  
Chloroprene rubber, CR

**FOR THE PERMANENT CONTACT OF MAXIMUM MINUTES**

**GLOVES MADE OF THE FOLLOWING MATERIALS ARE SUITABLE:** PVC or PE gloves.

**EYE PROTECTION:** Goggles

**BODY PROTECTION:** Light weight protective clothing.

**RESPIRATORY PROTECTION:** Filtering half mask in case of dust formation

**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES****APPEARANCE:**

Form Powder  
Colour White  
Smell Odourless

**Melting point/Melting range:** Not determined

**Boiling point/Boiling range:** Not determined

**Softening temperature:** Approx. 102 C

**Flash Point:** Method ATTM-D 1929-68 > 250 C

**Ignition Temperature:** Method ASTM-D 1929-68 >400 C

**Self-inflammability:** Product is not selfigniting

**Danger of explosion:** Product is not explosive

**Density:** 1.16 G/CM<sup>3</sup> at 20C

**Bulk density:** 600 to 650 g/cm<sup>3</sup>

**Solubility in / Miscibility with Water:** Insoluble

**Solubility / qualitative:** in eg. ester, ketones, and chlorinated hydrocarbons, readily soluble

**Organic Solvents:** 0.0

**Water:** 0.1%

**Solids content:** 99.9%

**Further information:** Dust explosions are generally to be expected with dust-forming organic products.

## SECTION 10 – STABILITY AND REACTIVITY

<b>THERMAL DECOMPOSITION:</b>	>250
<b>CONDITIONS TO AVOID:</b>	No decomposition if used and stored according to specifications.
<b>HAZARDOUS REACTIONS:</b>	No dangerous reactions known.
<b>HAZARDOUS PRODUCTS OF COMPOSITION:</b>	None when used as directed. During thermal decomposition combustible, the eyes and respiratory system irritating vapour are formed, consisting mainly of methyl methacrylate.

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>ACUTE ORAL TOXICITY:</b>	There are no toxicological data available for this product.
<b>CARCINOGENICITY:</b>	The substance shows tumor promoting properties in animal tests. The data mentioned above refer to the component debenzoyl peroxide.
<b>PRIMARY IRRITANT EFFECTS: SKIN:</b>	May cause irritation
<b>EYES:</b>	May cause irritation
<b>MUCOUS MEMBRANES:</b>	May cause irritation
<b>SENSITIZATION:</b>	Sensitization possible by skin contact.
<b>ADDITIONAL INFORMATION :</b>	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

<b>GENERAL NOTES:</b>	Water hazard class 1 (calculated according to VwVwS): Slightly hazardous for water and soil. Do not allow undiluted product or large quantities of it to reach ground water, water bodies, sewage system or soil.
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## SECTION 13 – DISPOSAL CONSIDERATIONS

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

## SECTION 14 – TRANSPORT INFORMATION

### Land Transport

**ADR/RID-GGVS/E Class:** - Not a hazardous material within the meaning of transport regulations.

### Air Transport ICAO-TI and IATA-DGR:

**ICAO/IATA Class:** - Not a hazardous material within the meaning of transport regulations.

## 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:

Xi irritant

### Hazard-determining components of labeling:

Benzoyl peroxide

### Risk Phrases:

43 May cause sensitization by skin contact.

### Safety Phrases:

24 Avoid contact with skin.

25 37 Wear suitable gloves.

**Water hazard class:** Water hazard class 1 (calculated according to VwVwS): Slightly 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.

## SECTION 17 – PREPARATION OF MATERIAL SAFETY DATA SHEET

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