SAFETY DATA SHEET

SECTION 1 – PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTIFIER: EPOVIT 11 20 11 / 12 / 15 / 16 / 18 / 19
CAS NUMBER: N/A (all components are TSCA listed)
PRODUCT USE: Embedding Medium for Metallographic Use

CHEMICAL NAME: NA (mixture)
CHEMICAL FAMILY: Phenolic Molding Compound

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 NAME	CAS NO.	%	OSHA PEL	ACGIH TLV
Phenol*	108-95-2	<2.5	5 ppm	5 ppm
Carbon Black*	1333-86-4	<1.0	3.5 mg/m^3	3.5 mg/m^3
Glass Fiber (respirable nuisance dust)	65997-17-3	<50	5 mg/m^3	10 mg/m^3
Amorphous Silica (respirable nuisance dust)	61790-53-2	<15	5 mg/m^3	2 mg/m^3
Alumina Trihydrate (respirable nuisance dust)	21645-51-2	<5	5 mg/m^3	5 mg/m^3
Phenolic Resin	9003-35-4	<40	NE	NE
Melamine-Formaldehyde Polymer	9003-08-1	<5	5 mg/m^3	5 mg/m^3
Hexamethylenetetramine	100-97-0	<6	15 mg/m^3	10 mg/m^3
Stearic Acid	57-11-4	<1.5	5 mg/m^3	3 mg/m^3
Hydrated Lime	1305-62-0	<2	5 mg/m^3	5 mg/m^3

The remaining ingredients are not hazardous as defined in OSHA's Hazard Communication Standard 29 CFR 1910.1200.
* See Sections 3 and 11

SECTION 3 – HAZARDS IDENTIFICATION

EFFECTS OF OVEREXPOSURE: *Phenol, formaldehyde, and ammonia vapors may be released during molding processes. Overexposure to these vapors may cause irritation to eyes, nose, throat and skin. Sensitized individuals may experience allergic skin reactions. Exposure to dust from machining operations may cause nose and throat irritation. The glass fiber and mineral filler components are considered a mechanical irritants and nuisance dust.

*IARC has listed carbon black as a Class 2B possible human carcinogen based on laboratory studies with animals.

INHALATION: Dusts and vapors may cause irritation of the respiratory tract.

EYE CONTACT: Dusts and vapors may cause irritation.

SKIN CONTACT: May cause irritation and/or allergic reactions in sensitized individuals.

INGESTION: None known.

CHRONIC: Yes

SECTION 4 – FIRST AID MEASURES

INHALATION: Remove to fresh air. If respiration stops, apply appropriate emergency resuscitation techniques. Get medical attention.

EYE CONTACT: Flush eyes with water for at least 15 minutes. Call a physician if irritation persists.

SKIN CONTACT: Wash with soap and water at first opportunity. See physician if irritation persists.

INGESTION: If accidentally swallowed, dilute by drinking large quantities of water. Immediately contact poison control center or hospital emergency room for any other treatment directions.

SECTION 5 – FIRE FIGHTING MEASURES

FLASH POINT:	NA NE LEL NE UEL
METHOD USED:	NA
AUTOIGNITION TEMPERATURE:	Typically >550°C by Pensky-Martens method.
EXTINGUISHING MEDIA:	Water Fog, Foam, CO_2, Dry Chemical
SPECIAL FIRE FIGHTING PROCEDURES:	Firefighters should be equipped with a self-contained breathing apparatus as decomposition in a fire may produce toxic fumes.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	CAUTION: high concentration of airborne dust may form an explosive mixture with air. Ensure that good house keeping practices are followed, as well as applicable guidelines such as National Fire Protection Association (NFPA) 654, "Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids.
HAZARDOUS DECOMPOSITION PRODUCTS:	May include: phenol, formaldehyde, ammonia, carbon monoxide, carbon dioxide, hydrogen cyanide, particular matter, and other organic compounds including benzo(a)pyrene.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:	Avoid breathing dust and vapors. Avoid eye contact. Avoid repeated or prolonged skin contact. Use proper PPE for the situation (see Section 8). Eye wash stations should be easily accessible to areas where product is used.
ENVIRONMENTAL PRECAUTIONS:	None needed.
CLEANING METHODS:	Sweep or vacuum spills. To minimize dust, vacuum cleaning is preferred.

SECTION 7 – HANDLING AND STORAGE

HANDLING: Avoid breathing fumes from molding or other processes involving heat. Avoid breathing dusts from cutting, machining or deflashing operations. Guard against dust accumulation of this material. High concentrations of airborne dust may form explosive mixture with air. As with all chemicals, good industrial hygiene practices should be followed when handling this material.

STORAGE: Keep container closed and sealed when not in use. Store in a cool, dry place below 25°C.

SECTION 8 – ENGINEERING CONTROLS / PERSONAL PROTECTION

VENTILATION

LOCAL:	At points of emission to maintain exposure below regulatory action levels.
GENTRAL:	Ventilation should be sufficient to effectively remove and prevent buildup of any vapors, dusts, or fumes that may be generated during handling or thermal processing.

PERSONAL PROTECTION:

HAND:	Impervious gloves should be worn to prevent skin contact (neoprene, latex, rubber, milled nitrite, and butyl).
EYE:	Wear safety glasses with side shields.
SKIN:	Wear appropriate protective clothing to minimize skin contact.
OTHER:	Use MSHA/NIOSH approved respiratory protection if level of air contaminants exceeds action levels set by OSHA.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Black colored granules
ODOR:	Mild and Characteristic
PHYSICAL STATE:	Solid
BOILING POINT:	NA
MELTING POINT:	NE
FREEZING POINT:	NE
WATER SOLUBILITY:	Negligible
VAPOR PRESSURE:	NA
SPECIFIC GRAVITY:	1.70 – 1.80 g/cm^3
PARTITION COEFFICIENT:	N/A
EXPLOSIVE PROPERTIES:	Mixtures of fine dust and air can create an explosion hazard.
EVAPORATION RATE:	N/A
DENSITY:	1.70 – 1.80 g/cm^3
VISCOSITY:	NA
IGNITION:	Typically >550°C by Pensky-Martens method.
pH:	Not determined

SECTION 10 – STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable
CONDITIONS TO AVOID:	High temperatures.
MATERIALS TO AVOID:	Strong oxidizing agents, strong acids.
HAZARDOUS POLYMERIZATION:	Does not occur.
HAZARDOUS DECOMPOSITION PRODUCTS:	May occur during fire or at very high temperatures (see Section IV for hazardous decomposition products).

SECTION 11 – TOXICOLOGICAL INFORMATION

CARCINOGENIC HAZARDS: *Carbon black is listed under California's Proposition 65 as a human carcinogen.

REPRODUCTIVE HAZARDS: None known.

SECTION 12 – ECOLOGICAL INFORMATION

Based on current information, there are no special regulations.

SECTION 13 – DISPOSAL CONSIDERATION

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

DOT SHIPPING NAME: Not regulated.
DOT HAZARD CLASSIFICATION: Non-hazardous.
PACKAGING GROUP: Not regulated.
UN/NA CODE: Not regulated.

SECTION 15 – REGULATORY INFORMATION

TSCA *(Toxic Substances Control Act):* All ingredients are TSCA listed.

CERCLA *(Comprehensive Emergency Response, Compensation, and Liability Act):* Release of phenol above RQ level requires reporting.

SARA TITLE III *(Superfund Amendments and Reauthorization Act):* Release of phenol above TPQ level requires reporting.

311/312 HAZARD CATEGORIES: Release of phenol and carbon black may require reporting depending on the amount released.

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR 372:

CAS #	CHEMICAL NAME	PERCENT BY WEIGHT
108-95-2	Phenol	<2.5

SECTION 16 – OTHER INFORMATION

NA = Not applicable
NE = Not established

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the result to be obtained from the use thereof.

Micro Star 2000 Inc. assumes no responsibility for personal injury or property damage to vendees, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of the material.

SECTION 17 – PREPARATION OF SAFETY DATA SHEET

PREPARED BY: R. Dickertmann PHONE NUMBER: 905-660-1754 REVISED: September 1, 2023