

**Material Safety Data Sheet****Product MICR-TJN-400**

January 1, 2004

**1.0 Preparation and company identity**

Identification of the preparation

**MICR-TJN-400**

Company identification

**microMICR Corporation**  
**35 S.W. 12th Avenue Suite 112**  
**Dania, FL 33004**

Telephone number

**954-922-8044****2.0 Composition/information on ingredients****This product is a toner preparation that is used for Magnetic Ink Character Recognition (MICR) applications and general printing in laser printer models Hewlett-Packard LJ 4000, 4050 series**

Ingredients

<u>Substance</u>	<u>CAS number</u>	<u>Percent (wt)</u>	<u>Symbol</u>	<u>R Phrase</u>
<b>Styrene Acrylate Copolymer</b>				
<b>Styrene Butadiene Resin</b>				
<b>Iron Oxide</b>	<b>(1317-61-9)</b>			
<b>Polypropylene Wax</b>				
<b>Charge Control Agent</b>				
<b>Fumed Silica</b>				

**THE SPECIFIC CHEMICAL IDENTITIES AND PROPORTIONS ARE TRADE SECRETS.****3.0 Hazards identification**

Potential Health Effects

**Ingestion effects:** Low acute toxicity. Ingestion is a minor route of entry for intended use of this product.

**Inhalation effects:** Minimal respiratory tract irritation may occur with exposure to large amounts of dust.

**Eye Effects:** May cause transient slight irritation.

**Skin effects:** Unlikely to cause skin irritation.

**Chronic Effects:** Prolonged inhalation of excessive amounts of any dust may cause lung damage. Use of this product as intended does not result in inhalation of excessive amounts of dust.

Environmental hazards

**No particular hazards known.**

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## 4.0 First-aid measures

### Ingestion

**Rinse mouth with water. Drink one to two glasses of water. If symptoms occur, consult a physician immediately.**

### Inhalation

**Move person to fresh air immediately. If symptoms occur, consult a physician.**

### Eye Contact

**Do not rub eyes. Immediately flush with large amounts of clean, lukewarm water (low pressure) for at least 5 minutes or until particles are removed. If irritation persists, consult a physician.**

### Skin Contact

**Wash affected areas thoroughly with soap and water. If irritation persists, consult a physician.**

## 5.0 Fire-fighting measures

Extinguishing Media:	<b>CO<sub>2</sub>, water, dry chemical</b>
Unsuitable Extinguishing Media:	<b>None</b>
Special Fire Fighting Procedures:	<b>None</b>
Unusual Fire & Explosion Hazards:	<b>Like most organic material in powder form, toner can form explosive dust-air mixtures when finely dispersed in air.</b>
Flash Point (method used):	<b>Not applicable</b>
Flammable Limits:	<b>Not applicable</b>
Autoignition Temperature:	<b>Not available</b>
Flammability:	<b>Non-flammable solid (according to test methods of EU Directive 92/69/EEC, A10 Flammability (Solids))</b>
Autoflammability:	<b>Not applicable</b>
Explosive Properties:	<b>Like most organic material in powder form, toner can form explosive dust-air mixtures when finely dispersed in air.</b>
Oxidizing Properties:	<b>Not available</b>
Hazardous Combustion Products:	<b>CO<sub>2</sub>, CO</b>
Other Properties:	<b>Not known</b>

## 6.0 Accidental release measures

### Spill and Leakage Procedures

**Avoid breathing dust. Minimize the release of particles. Slowly sweep the material into a bag or other sealed container. Clean remainder with a damp cloth or vacuum cleaner. If a vacuum is used, the motor must be rated as dust tight. Dispose of waste toner in accordance with local requirements.**

### Environmental precautions

**Do not discharge into drains (See also Section 13, Disposal Considerations).**

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## 7.0 Handling and storage

Advise on safe handling and protection against fire

**Keep material out of reach of children. Avoid inhalation of dust and contact with eyes.  
Use with adequate ventilation. Keep away from excessive heat, sparks, and open flames.**

Requirements for storage rooms and advice on storage compatibility

**Keep out of the reach of children. Keep container closed and store at room temperature.  
Keep away from strong oxidizers.**

## 8.0 Exposure controls / personal protection

Exposure Limits For Toner:

USA OSHA (TWA<sup>5</sup>)/PEL):

**15 mg/m<sup>3</sup> (Total Dust)**

**5 mg/m<sup>3</sup> (Respirable Fraction)**

ACGIH (TWA/TLV):

**10 mg/m<sup>3</sup> (Inhalable Particulate)**

**3 mg/m<sup>3</sup> (Respirable Particulate)**

DFG (MAK):

**4 mg/m<sup>3</sup> (Inhalable Fraction)**

**1.5 mg/m<sup>3</sup> (Respirable Fraction)**

(Also refer to Section 2.)

Respiratory Protection:

**Not required under intended use.**

Ventilation:

**Good general ventilation should be sufficient under intended use.**

Protective Gloves:

**Not required under intended use.**

Eye Protection:

**Not required under intended use.**

Other Protective Equipment:

**Not required under intended use.**

## 9.0 Physical and chemical properties

Boiling Point:

**Not applicable**

Melting Point:

**100 - 150°C (Softening Point)**

Decomposition Temperature:

**>200°C**

Vapor Pressure (mmHg.):

**Not applicable**

Vapor Density (Air=1):

**Not applicable**

Solubility in Water:

**Negligible**

Solubility in Organic Solvents:

**Partially soluble in toluene and xylene.**

Specific Gravity (H<sub>2</sub>O=1):

**1.4 - 1.8**

Percent Volatile by Volume:

**Negligible**

Evaporation Rate (Butyl Acetate=1):

**Not applicable**

pH:

**Not applicable**

Appearance and Odor:

**Fine black powder, slight plastic odor.**

## 10.0 Stability and reactivity

Stability:

**Stable**

Incompatibility:

**Strong oxidizers**

Hazardous Decomposition Products:

**CO<sub>2</sub>, CO**

Hazardous Polymerization:

**Will not occur.**

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## 11.0 Toxicological information

Inhalation: **LC<sub>50</sub>:inh-rat>5mg/L/4 hrs., not harmful.**  
Ingestion: **LD<sub>50</sub>:orl-rat>2000 mg/kg, not harmful.**  
Eye Contact: **Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC.**  
Skin Contact: **Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC.**  
Chronic Toxicity: **No data available.**  
Sensitization: **Not classified as a sensitizer according to EU Directive 67/548/EEC and OSHA HCS (US).**  
Mutagenicity: **Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium)**  
Carcinogenicity: **Not a known or suspected carcinogen according to any IARC Monograph, NTP, OSHA Regulations (USA), EU Directive, or Proposition 65 (California).**  
Reproductive Toxicity: **Not classified as toxic according to EU Directive 67/548/EEC, California Prop. 65, or DFG (Germany).**

## 12.0 Ecological information

**No data available for ecological and wastewater treatment (sewage) systems. Avoid spills and dispose of in accordance with applicable laws and regulations.**

## 13.0 Disposal considerations

**Do not put toner or toner cartridge into fire; heated toner may cause severe burns. Do not shred toner cartridge, unless dust-explosion prevention measures are taken. Finely dispersed particles may form explosive mixtures in air. Dispose of in compliance with federal, state, and local regulation.**

## 14.0 Transportation information

### International Transport Information:

UN No.: **None**  
UN Shipping Name: **None**  
Hazards Class: **None**  
Packing Group: **None**  
Special Precautions: **None**

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## 15.0 Regulatory information

### USA Label Information:

Signal Word:	<b>Not required</b>
Hazard Warning:	<b>Not required</b>
Safety Advice:	<b>Not required</b>
Hazardous Component(s):	<b>None</b>

Chemicals Required to Report Under Sara Title III Section 313 (USA):

**None**

Chemicals Required to Report Under California Proposition 65 (USA):

**None**

Label Information According to the Directives 88/379/EEC and 67/548/EEC (EU):

Symbol and Indications:	<b>Not required.</b>
R Phrases:	<b>Not required.</b>
S Phrases:	<b>Not required.</b>
Dangerous Components (CAS No.) wt%:	<b>None</b>
Other:	<b>None</b>

Special provisions in relation to protection of man or the environment:

(EEC) 2455/92:	<b>Not regulated.</b>
76/769/EEC:	<b>Not regulated.</b>
(EC)3093/94	<b>Not regulated.</b>
Other:	<b>None</b>

## 16.0 Other information

**This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products as described or their suitability for a particular application.**

**For general information, contact microMICR at 954-680-8856.**