

Material Safety Data Sheet

Product MICR-TJN-38A

June 1, 2002

1.0 Preparation and company identity

Identification of the preparation

MICR-TJN-38A

Company identification

microMICR Corporation
9116 Griffin Road
Ft. Lauderdale, FL 33328

Telephone number

954-680-8856

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 4200 series

Ingredients

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

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

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 (TWA⁵)/PEL):

15 mg/m³ (Total Dust)

5 mg/m³ (Respirable Fraction)

ACGIH (TWA/TLV):

10 mg/m³ (Inhalable Particulate)

3 mg/m³ (Respirable Particulate)

DFG (MAK):

4 mg/m³ (Inhalable Fraction)

1.5 mg/m³ (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 (H₂O=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:

CO₂, CO

Hazardous Polymerization:

Will not occur.

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11.0 Toxicological information

Inhalation:	LC ₅₀ :inh-rat>5mg/L/4 hrs., not harmful.
Ingestion:	LD ₅₀ :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:	Not required
Hazard Warning:	Not required
Safety Advice:	Not required
Hazardous Component(s):	None

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:	Not required.
R Phrases:	Not required.
S Phrases:	Not required.
Dangerous Components (CAS No.) wt%:	None
Other:	None

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

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

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.