



Lanier Worldwide, Inc.

2300 Parklake Dr., N. E.

Atlanta, GA 30345-2979

Emergency Telephone: (800) 526-4371

MATERIAL SAFETY DATA SHEET

Section 1: Chemical Product and Company Information

Identity:	Toner for M5112	MSDS No.	FX-066
Product ID:	480-0006	Issued:	01/11/2001
Synonyms & Common		Supersedes:	09/09/97
Names:	Toner for Lanier 5112, 4900 MFD	Date:	01/11/2001
Uses:	Lanier 5112, 4900 MFD	Prepared by:	Lanier Worldwide, Inc. EH&S Department (770) 496-9500
Chemical Formula:	Mixture	Approved by:	Larry Choskey, Manager, EH&S
		European Contact:	Lanier Worldwide, Inc., Manager, Safety & Environment, Walter Fricke, Im Taubental D-41468 Neuss, Germany +49-2131-387-177

Section 2: Composition / Information on Ingredients

	PERCENT	CAS No.	EXPOSURE LIMITS	SOURCE
Styrene acrylate copolymer	86 – 90	25767-47-9	Not listed	n/a
Carbon black	5 – 6	1333-86-4	3.5 mg/m ³ , 3.5 mg/m ³ 6 mg/m ³	OSHA TWA, ACGIH TLV MAK
Polypropylene	4 – 5	9003-07-0	Not listed	N/a
Organic pigment	2	31714-55-3	Not listed	N/a

*PEL as the product: 15mg/m³ (total dust), 5mg/m³ (respirable dust)

*TLV as the product: 10mg/m³ (total dust), 5mg/m³ (respirable dust)

Section 3: Hazards Identification

HMIS Rating:

FLAMMABILITY = 1

REACTIVITY = 0

HEALTH = 1

SPECIAL = none

Health Hazards (Acute, Chronic, Immediate and Potential): Minimum irritation to respiratory tract may occur as with exposure to any non-toxic dust. May cause gasping if inhaled. Inhalation should be avoided. May cause temporary eye discomfort.

Health Hazards of Long Term exposure (Chronic): A manufacturer sponsored chronic inhalation study in rats using a special test toner revealed there were no lung changes at all in the lowest exposure level (1mg/m³), the most relevant level to potential human exposures. A very slight degree of fibrosis was noted in 25% of the animals at the middle exposure level (4mg/m³), while a slight degree of fibrosis was observed at the highest exposure level (16mg/m³) in all animals. These findings are attributed to "Lung Overloading", a generic response to excessive amount of any dust retained in the lungs for a prolonged interval. The special test toner was ten times more respirable than commercially available toner to comply with EPA testing protocol and would not function properly in Xerographic equipment.

Carbon Black is listed on the IARC Monograph and the Massachusetts Substance List. The IARC has evaluated the evidence for the carcinogenicity of Carbon Black as inadequate to determine a carcinogenic risk for humans.

This product contains no known hazardous materials as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Section 4: First Aid Measures

Inhalation:	Remove to fresh air if effects occur. Get medical attention if needed.	Eye Contact:	In case of contact, immediately flush eyes with water for 15 minutes. Get medical attention if needed.
Skin Contact:	Wash with soap and water.	Ingestion:	Dilute stomach contents with several glasses of water. Get medical attention.

Section 5: Fire Fighting Measures

Suitable extinguishing media: CO₂, dry chemical, foam or water.

Explosion limits: n/a

Extinguishing media which may not be used for safety reasons: none

This material will burn in case of fire. The decomposition products are CO, CO₂, and NO_x. Avoid inhalation of smoke.

Special protective equipment for fire fighters: none

LEL: n/a

UEL: n/a

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Section 6: Accidental Release Measures

Spill / leak Procedures: If spilled, sweep up using an approved toner vacuum with a 0.5 micron filter or smaller, such as the Atrix AAA Toner Vacuum or 3M Toner Vacuum. Use of a vacuum cleaner not rated for toner particles, could result in a fire or personal injury. Remove residue with soap and cold water.

Miscellaneous: Keep product out of sewers and watercourses.

Personal protection: Avoid inhalation of dust.

Section 7: Handling and Storage

Special Handling: Cleanse skin after contact before breaks or meals, and end of workday.

Special Storage: Avoid direct sunlight. Keep out of reach of children. Store in a cool, dry place.

Section 8: Exposure Control and Personal Protection Information:

Ventilation: Local exhaust

Respiratory Protection: Nuisance dust respirator.

Hand Protection: none required under normal use.

Eye Protection: Safety goggles.

Skin Protection: Gloves.

Section 9: Physical and Chemical Properties

CHARACTERISTICS:

Appearance:	Black	Melting point:	116°C
Form:	Powder	Vapor pressure:	n/a
Odor:	Odorless	Vapor density:	n/a
Solubility in Water:	Negligible	Evaporation rate:	n/a
Specific gravity:	1.2	Boiling point:	n/a

Section 10: Stability and Reactivity

Conditions to avoid: none Materials to avoid: none Stability: Stable

Hazardous decomposition products: CO and CO₂ and other decomposition products when burned.

Section 11: Toxicological Information:

Acute oral toxicity (rat) LD₅₀: Over 2.0 g/kg Ames Test result: Negative Skin irritation (rabbit): none. Eye irritation (rabbit): mild

Acute inhalation (rat) 4 hour: LC₅₀ and LC₀₁ are in excess of 5.46 mg/L

Carcinogenicity: In 1996, the IARC reevaluated carbon black as a GROUP 2B carcinogen (possible human carcinogen). This evaluation is given to carbon black for which there is inadequate human evidence, but sufficient animal evidence. The latter is based upon the development of lung tumors in rats receiving chronic inhalation exposures to free carbon black at a level that induce particle overload of the lungs. Studies performed in mice have not demonstrated an association between carbon black and lung tumors. Moreover, a two-year cancer bioassay using a typical toner preparation containing carbon black demonstrated no association between toner and tumor development in rats.

Section 12: Environmental / Ecological Information

None

Section 13: Disposal Consideration

Used Toner should be disposed of under conditions that meet all federal, state and local environmental regulations. Disposal regulations vary from locality to locality; therefore consult your local Lanier office or the EPA to determine the proper method for disposal.

Section 14: Transportation Information

None. This is not a hazardous product.

Section 15: Regulatory Information

This product consists of chemical substances, which are included in the TSCA inventory.

Marking according to EC-Directive:

Not required, no R-phrases, no S-phrases

Information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. On the basis of the data available to us, this product is not a dangerous substance. One should, however, observe the usual precautionary measures for dealing with chemicals.

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National Regulations:

No special regulations and restrictions. WHMIS Legislation (Canada): This product is not a controlled product.

Section 16: Miscellaneous Information

Judgment as to the suitability of information contained herein for user's purposes is the responsibility of the purchaser. Therefore, although reasonable care has been taken in the preparation of this information, Lanier Worldwide, Inc. extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to user's intended purposes or for consequences of its use. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we do not guarantee that these are the only hazards that exist.

Information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. On the basis of the data available to us, this product is not a dangerous substance. One should, however, observe the usual precautionary measures for dealing with chemicals.