

MATERIAL SAFETY DATA SHEET

Original Release Date: 04-18-05

Issue: 1

Revised Date:

Section I - Company / Product Identity

Product Identification: PANAFAX UG5520

TN5600

Company : Turbon Group
2704 Cindel Drive
Cinnaminson, New Jersey 08077

HAZARD RANKING: 0 = Least 1 = Slight
2 = Moderate 3 = High 4 = Extreme

Telephone: 1-800-282-6650
Fax: 1-856-786-6806
Contact Person: Safety / Environmental Representative

HMIS HAZARD CLASS:

Health = 1
Flammability = 1
Reactivity = 0
PPE = Section VIII

Section II - Composition / Ingredients

This product consists of new and remanufactured parts that are originally manufactured by the OEM.

The cartridge consists of light sensitive drum, toner, a developer unit and several blades.

Main components:

Plastics: PE, PP, PS, ABS, PU, Acetal, mixed with FR
Metals: Iron, Sheet steel. Some components electrolyze nickel-plated.
Non-metals: Aluminum
Foam: Expanded polyurethane, polyester base
Elastomer: Polyurethane

The toner used in this cartridge consists of the following components.

<u>Description</u>	<u>CAS number</u>	<u>Percent</u>	<u>R+S phrase</u>	<u>Symbol</u>
Styrene-Acrylate Copolymer	25036-16-2	< 60%	None assigned	None assigned
Iron Oxide	1317-61-9	< 55%	None assigned	None assigned
Polypropylene	9003-07-0	< 5%	None assigned	None assigned

The drum used in this cartridge consists of the following components.

<u>Description</u>	<u>CAS number</u>	<u>Percent</u>	<u>R+S phrase</u>	<u>Symbol</u>
Substrate: Al-cylinder	None assigned	> 99%	None assigned	None assigned
Coating: Organic photoconductor	None assigned	< 1%	None assigned	None assigned

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Section III - Hazards Identification

Primary entry routes:

Inhalation :	Slight irritation of respiratory tract.
Ingestion:	None known.
Skin contact:	Repeated contact may cause irritation or an allergic skin reaction.
Eyes effects:	May cause irritation
Chronic effects:	Not known

Potential environmental hazard:

No particular hazards known. The cartridge is made in accordance with all known legal requirements.

Section IV - First Aid Measures

Inhalation:	Remove person to fresh air. If symptoms persists consult a physician.
Ingestion:	Rinse mouth with water and drink one or two glasses of water. If symptoms occur, call a physician. If symptoms persists consult a physician.
Skin contact:	Wash well with soap and running water.
Eyes contact:	Immediately flush with large amounts of clean lukewarm, low pressure water for at least 15 minutes. If irritation persists, consult a physician. Remove any contact lenses to facilitate flushing.

Section V - Fire and Explosion Measures

Flash point:	No data available.
Ignition temperature:	No data available.
Flammability	Non-flammable solid according to USA 16 CFR 1500.44 and 84/449/EC 5 th adaptation.
Flammability limits	No data available.
Extinguishing media:	Water, foam, CO ² , dry chemicals.
Special fire fighting procedures:	To avoid inhalation of toxic fumes, wear MSHA/NIOSH approved self-contained breathing apparatus.
Un-usual fire / explosion hazards:	Toner may cause a dust explosion. Explosive limits of toner particles suspended in air are equal to coal dust.

Section VI - Accidental Release Measures

Spill and leakage procedures:	Wear personal protective equipment. Avoid breathing dust. Minimize the release of particles. Vacuum or sweep the material into a bag or other sealed container. If a vacuum cleaner 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.

Section VII - 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. Keep away from excessive heat, sparks and open flames.

Requirements for storage rooms and advise on storage compatibility:

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

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Section VIII - Exposure Limits / Personal Protection

USA OSHA (TWA) / PEL:	15 mg/m ³ (Total Dust) 5 mg/m ³ (Respirable Fraction)
ACGIH (TWA / TLV)	10 mg/m ³ (Inhalable Particulate) 3 mg/m ³ (Respirable Particulate)
DFG (MAK)	6 mg/m ³ (Dust Concentration)
Respiratory protection:	Not required under intended use.
Ventilation:	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.

Section IX - Physical and Chemical Properties

Boiling point:	Not applicable
Melting point:	100° - 150° Celsius (softening point)
Particle size:	7 – 12 um nominal
Vapor pressure:	Negligible
Solubility in water:	Negligible
Vapor density (air =1)	Heavier than air
Evaporation rate:	Not applicable
Color:	Black
Appearance:	Very fine powder
Odor:	Slight plastic odor
Specific Gravity (H ₂ O=1, at 4° C);	1.8

Section X - Stability and Reactivity

Stability:	Stable
Incompatibility:	Strong oxidizers
Hazardous decomposition products:	Combustion will produce carbon dioxide and possibly toxic chemicals such as carbon monoxide.
Hazardous polymerization:	Will not occur.

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Section XI - Toxicological Information

Toxicological info according to OSHA Hazard communication standard and commission directive 67/548/EEG.

Toner:	Ames test:	Negative. (mutagenicity test from Prof. Ames, Berkeley University California, USA)
	Ingestion:	Not toxic.
	Eye contact:	Not toxic.
	Skin contact:	Not toxic.
	Chronic toxicity:	No data available.
	Carcinogenicity:	Not carcinogenic.
	Chronic health hazard comments	No data available.
	Exposure limit:	Not known.
	Inhalation:	Not toxic.
Drum:	Ames test:	Negative. (mutagenicity test from Prof. Ames, Berkeley University California, USA)
	Ingestion:	Not toxic.
	Eye contact:	Not toxic.
	Skin contact:	Not toxic.
	Chronic toxicity:	Not toxic.
	Carcinogenicity:	Not known.
	Chronic health hazard comments	None.
	Exposure limit:	Not known.
	Inhalation:	Not toxic.

Section XII - Ecological Information

Avoid spills and dispose of in accordance with applicable laws and regulations.

Section XIII - Disposal Considerations

Contact your local Turbon dealer for returning your used and empty cartridges.

Tel: 800 -282-6650

Fax: 800 -257-1619

Section XIV - Transport Information

International transport information:

UN no.:	None
UN shipping name:	None
Hazards class:	None
Packing group:	None
Special precautions:	None

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Section XV - Other Information

New components are purchased from international reputable producers. The information in this MSDS is based on our present state of knowledge.

In normal use there are no exceptional health, safety or fire hazards associated with this range of products. Please obey the usage and storage instructions.