

Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

MS. DS
SENT TO
SAFETY OFFICER
DATE 7/17/87

Required under USDL Safety and Health Regulations for Ship Repairing,
Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

900,901
815,816,825,826

SECTION I

MANUFACTURER'S NAME Tomoegawa Paper Co., Ltd.		EMERGENCY TELEPHONE NO. Japan 03-272-4111
ADDRESS (Number, Street, City, State, and ZIP Code) 5-15 Kyobashi, 1-Chome, Chuo-ku, Tokyo, Japan		
CHEMICAL NAME AND SYNONYMS N/A	TRADE NAME AND SYNONYMS SF-90DV and toner used for SF-90DV	
CHEMICAL FAMILY Toner; pigmented thermoplastic polymer.	FORMULA Dev.; Mixtures of metal iron and toner.	

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS Toner used for SF-90DV Organic Pigment	4		BASE METAL Dev. (SF-90DV) Metal iron	90	
CATALYST	N/A		ALLOYS	N/A	
VEHICLE Styrene-Acrylate Copolymer	90		METALLIC COATINGS	N/A	
SOLVENTS	N/A		FILLER METAL PLUS COATING OR CORE FLUX	N/A	
ADDITIVES	N/A		OTHERS Toner	10	
OTHERS Carbon black Iron oxide	4 2				
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES				%	TLV (Units)
None					

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	N/A	SPECIFIC GRAVITY (H ₂ O=1)	Toner; Dev.;	1.1 4.83
VAPOR PRESSURE (mm Hg.)	N/A	PERCENT VOLATILE BY VOLUME (%)		N/A
VAPOR DENSITY (AIR=1)	N/A	EVAPORATION RATE (_____ = 1)		N/A
SOLUBILITY IN WATER	Insoluble			
APPEARANCE AND ODOR	Fine, black powder, practically odorless.			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) Higher than 350°C (by JIS-K-2265)	FLAMMABLE LIMITS N/A	LeI	UeI
EXTINGUISHING MEDIA If product becomes involved in a fire, use CO ₂ .			
SPECIAL FIRE FIGHTING PROCEDURES Water, foam or dry chemical.			
UNUSUAL FIRE AND EXPLOSION HAZARDS None in normal storage and use conditions.			

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE	8mg/m ³ total dust (nuisance)
EFFECTS OF OVEREXPOSURE	Neither irritating, corrosive, volatile nor toxic.
EMERGENCY AND FIRST AID PROCEDURES	Normal washing with soap and water.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	
INCOMPATIBILITY (Materials to avoid) None			
HAZARDOUS DECOMPOSITION PRODUCTS None in normal handling and use.			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Sweep up or pick up by vacuum cleaner.
Dust filter respirator required when TLV exceeded.
WASTE DISPOSAL METHOD
This toner is insoluble in water. Don't flush to sewer. Route waste toner for landfill or incineration.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type) Normally not required.		
VENTILATION	LOCAL EXHAUST Normally not required.	SPECIAL
	MECHANICAL (General) Acceptable under normal use conditions.	OTHER
PROTECTIVE GLOVES Normally not required.		EYE PROTECTION Normally not required.
OTHER PROTECTIVE EQUIPMENT Gloves and dust filter respirator recommended when handling bulk amounts.		

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Keep containers closed. Store in a cool, dry place. Do not store combustibles or heat sources.
OTHER PRECAUTIONS
Avoid inhalation of dust.