

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

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

SECTION I		9/86
MANUFACTURER'S NAME 3M		EMERGENCY TELEPHONE NO. 612-733-1110
ADDRESS (Number, Street, City, State, and ZIP Code) 3M Center, St. Paul, Minnesota 55144		
CHEMICAL NAME AND SYNONYMS		TRADE NAME AND SYNONYMS ORP-77 Electrostatic Toner
CHEMICAL FAMILY	FORMULA	

SECTION II - HAZARDOUS INGREDIENTS					
PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS Mixed isodecanes	99	300 ppm*
OTHERS	Carbon black treated with insoluble resinous mixture			0.5	
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES				%	TLV (Units)
* recommended by manufacturer					

SECTION III - PHYSICAL DATA			
BOILING POINT (°F.)	range 320-350	SPECIFIC GRAVITY (H ₂ O=1)	
VAPOR PRESSURE (mm Hg.)	approx. 36 mmHg	PERCENT, VOLATILE BY VOLUME (%)	> 98%
VAPOR DENSITY (AIR=1)	5	EVAPORATION RATE (_____ =1)	n-Butyl acetate 0.45
SOLUBILITY IN WATER	< 0.01%		
APPEARANCE AND ODOR Liquid ink appearance - petroleum distillate odor			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA			
FLASH POINT (Method used)	102-107°F T.C.C.	FLAMMABLE LIMITS	Let Uel
EXTINGUISHING MEDIA Foam type extinguishers are superior to CO ₂ extinguishers.			
SPECIAL FIRE FIGHTING PROCEDURES Avoid water.			
UNUSUAL FIRE AND EXPLOSION HAZARDS None			

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

EFFECTS OF OVEREXPOSURE

Irritation, headache, nausea, dizziness, coordination loss, fatigue and giddiness, respiratory and gastrointestinal irritation.

EMERGENCY AND FIRST AID PROCEDURES

Ingestion: Do not induce vomiting. Give water or milk and call physician or poison control. Eye: Flush with large amounts of water for at least 10 min. and call physician. Inhalation: Provide non-contaminated air. Give oxygen if needed.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	
INCOMPATIBILITY (Materials to avoid) Strong oxidants (e.g., chromic acid, chlorine)			
HAZARDOUS DECOMPOSITION PRODUCTS None			
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 Observe precautionary information from other sections. Cover the spill with an absorbent material. Clean up and place into a metal container.

WASTE DISPOSAL METHOD Dispose in accordance with federal, state and local regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type) Not normally required. NIOSH approved organic vapor respirator.

VENTILATION	LOCAL EXHAUST	SPECIAL
	X	
	MECHANICAL (General)	OTHER
	X	

PROTECTIVE GLOVES Impervious gloves EYE PROTECTION Chemical splash goggles

OTHER PROTECTIVE EQUIPMENT

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Keep away from heat, flame and other sources of ignition. Avoid breathing vapor. Avoid eye and skin contact.

OTHER PRECAUTIONS Keep out of reach of children.