

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	Lel	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.