


MATERIAL SAFETY DATA SHEET (MSDS)		PIGMENT ROLLER	
PRODUCERS <input checked="" type="checkbox"/> FOR SUPPLIER <input type="checkbox"/> WAREHOUSERS <input type="checkbox"/>		RED INK INK& F&R	
Section I GENERAL INFORMATION			
Manufacturer's Name OHTO Co.,Ltd. (JAPAN) Address #364-1 Namiki-nishi, Hokunan-moro, Youki-city, Ibaraki Pref., 307-01 JAPAN		Emergency Tel.No. TOKYO 03 3864 7441 Telephone Number 0296-35-2311 Tele.Fax. Number 0296-35-2319 Date Prepared 11 NOV, 1999 Signature  ZENSUKE KOKUTA	
SECTION II HAZARDOUS INGREDIENTS/IDENTITY INFORMATION			
Hazardous Ingredients (Chemical or common name)	CAS No.	TLV	wt%
C-1 Pigment Red 170	CAS #	2786-76-7	
Acrylic acid copolymer	CAS #	25609-90-9	
1,2-Benzisotiazol-3(2H)-one	CAS #	2634-33-5	
Diethanol amine	CAS #	111-42-2	
Glycerin	CAS #	56-81-5	
1,2-Ethan diol	CAS #	107-21-1	
Propylene glycol	CAS #	57-55-6	
Potassium Olate	CAS #	143-18-0	
Polyethylene glycol #4000	CAS #	25327-68-3	
Polyoxyethylene nonylphenyl ether	CAS #	9106-45-9	
Benzotriazole	CAS #	95-14-7	
Water			
SECTION III - PHYS./CHEM.CHARACTERISTICS (specify component)			
Appearance and odour: Red Liquid, Odorless		Component : Water based Ink	
Boiling point (°C) : 100°C		Density (g/cm³) : 1.054	
Vapour density (Air=1) : n.d		Melting point (°C) : 0°C	
Solubility in water : 100%		Evaporation rate (Butylacetate=1) : n.d	
pH (at-20°C) : 8.64		Viscosity (cp at-20°C) : 4.74	
Surface tension (dyne/cm) : 36.4			
Pressurized	yes <input type="checkbox"/> no <input type="checkbox"/>	% volatile ^(*)	n.d
SECTION IV - FIRE AND EXPLOSION HAZARD DATA			
Flash point method used : n.a		Explosion limits (Vol.%) LEL n.a UEL n.a	
Extinguishing media : n.a		Autoignition temp. (°C) : n.a	
Special fire fighting precautions: n.a			
List hazardous products of decomposition			
Other advice : NONE			
IMPORTANT			
(*) Part of the mixture which evaporates.			
Not applicable = n.a.			
Not determined = n.d.			

SECTION V - STORAGE HAZARDS			
Stability unstable <input type="checkbox"/>	Conditions		
stable <input checked="" type="checkbox"/>	to avoid		NONE
Incompatibility (materials to avoid)			NONE
List hazardous products of decomposition			n.d.
Hazardous polymerization	May occur <input type="checkbox"/>	Condition	
	Will not occur <input checked="" type="checkbox"/>	to avoid	NONE
SECTION VI - HEALTH HAZARDS			
1. Acute	NONE	2. Chronic	NONE
Signs and symptoms of overexposure:			NONE
Medical conditions generally aggravated by exposure:			NONE
Chemical listed as carcinogen:			NONE
Emergency and first aid procedures:			n.a.
Routes of entry	Emergency procedure		Seek medical advice
Inhalation	NONE		<input type="checkbox"/>
Eyes	Wash with water .		<input checked="" type="checkbox"/>
Skin	Wash with soap water.		<input type="checkbox"/>
Ingestion	Give water, and person vomit		<input type="checkbox"/>
SECTION VII - SPECIAL PRECAUTIONS			
Environmental toxicity date :		n.a.	
Special precautions to be taken in handling storage:		Above high temperature.	
Other precautions			NONE
Steps to be taken in case material is released or spilled:		Wash off inks and wash with detergents and water.	
Waste disposal method :		Do not discharge into waterways or sewer systems without proper authority.	
SECTION VIII - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES			
Respiratory protection : (specify type)		NIOSH/MSHA-approve organic vapor respirator when vapor are generated above the permissible limit.	
Ventilation	Local exhaust	Mechanical	Other
yes	no	(general)	n.a.
			n.a.
Skin and eye protection:		Wear chemical goggles ,gloves,coveralls,apron,boots.	
Work/hygiene practices:		Shower after handling this product.Clean clothing shoud be worn daily.	