MATERIAL SAFETY DATA SHEET

SHEET FED OFFSET PROCESS COLOR INK

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SECTION. 1 PRODUCT IDENTIFICATION

COMMON NAME ; Sheet-Fed Offset-Printing Process-Color Ink Series PRODUCT NAME ; NS TF, FF Process Series, Non Skin GP-1 Series, XL-Process Series

SECTION. 2 HAZARDOUS INGREDIENTS

COMPON	ENTS	CAS No.	WT. %
Hydrotreated Petroleum Hydrocarbon		64742-46-7	25-30
Rosin Modified Phenolic Resin		68082-96-2	22-26
Linseed Oil Modified Alkyd Resin		67700-81-6	5-7
Soybean Oil		8001-22-7	20-23
Lanoline		8006-54-0	1-2.5
Polyetylen	e Wax	9002-88-4	1-1.5
Manganese Octate		19556-58-8	0.5 >
Cobalt Octate		136-52-7	0.5 >
Organic Pigment			
Yellow	C.I. Pigment Yellow 12	6358-85-6	8
Magenta	C.I. Pigment Red 57: 1	5281-04-9	18
Cyan	C.I. Pigment Blue 15: 3	147-14-8	17
Black	C.I. Pigment Blue 18	1324-77-2	6
	C.I. Pigment Black 7	1333-86-4	19

Generally Classified as Non Toxic

SECTION. 3 PHYSICAL DATA

APPEARANCE ; Viscous Paste

COLOR ; Various ODOR ; Oily Odor MOLECULAR WEIGHT ; NE PH ; NE SPECIFIC GRAVITY ; $0.95-1.03 (25^{\circ}C)$ BOILING POINT ; NE VAPOR DENSITY ; NE VAPOR PRESSURE ; NE SOLUBILITY IN WATER ; Insoluble

SECTION. 4 FIRE AND EXPROSION DATA

FLASH POINT ; 150-160°C (Open Air) FLAMMABLE LIMITS / UPPER ; NE LOWER ; NE EXTINGUISH MEDIA ; Water, Fog, Foam, Dry Chemical SPECIAL FIRE FIGHTING PROCEDURES ; Keep out of smoke. Self contained breathing apparatus is recommended.

UNUSUAL FIRE AND EXPROSION HAZARDS; NE

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SECTION. 5 HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE

INHALATION; May cause respiratory irritation and dizziness.
SKIN; May cause irritation, defatting, allergic contact dermatitis and sensitization.
EYE; Will cause severe irritation.
INGESTION; May cause gastrointentional irritation, nausea, vomitting and diarrhea.

EMERGENCY FIRST AID PROCEDURE

INHALATION; Move to fresh air. Aid in breathing and get medical attention, if necessary.
SKIN; Remove contaminated clothing and wash well with soap and water.
EYE; Flush with plenty water immediately for at least 15 min. and get medical attention.
INGESTION; Drink a large quantity of water. If available, milk is better. Get medical attention.

SECTION. 6 REACTIVITY DATA

STABILITY ; Stable
CONDITION TO AVOID ; Heat, Spark, Open flame
INCOMPATIBILITY ; May react with strong oxidizing agents.
HAZARDOU DECOMPOSITIO PRODUCTS ; may evolve noxious fumes such as carbon oxide, nitrous oxide when involved in a fire burning.
HAZARDOUS POLYMERIZATION ; Not expected.

SECTION. 7 SPILL OR LEAK PROCEDURE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED AND SPILLED; Wipe out and placed in a suitable covered container for disposal.

DISPOSAL METHOD; Dispose in accordance with local, country, state and federal regulation.

SECTION. 8 PROTECTION MEASURES

RESPIRATION; Use respirator, if necessary. VENTILATION; Use general and local exhaust ventillation. SKIN; Rubber gloves is recommended. EYE; Safety glasses is recommended. OTHER; Use apron, coverall and boots, if necessary.

SECTION. 9 SPECIAL PRECAUTIONS AND STORAGE DATA

PRECAUTION IN HANDLING AND STORING; Store in sealed container and keep away from

high temperature (40 \degree C<), direct sunlight and excessive moisture.

AVERAGE SHELF LIFE ; 6 months or more