MATERIAL SAFETY DATA SHEET

SHEET-FED OFFSET INK

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SECTION. 1 PRODUCT IDENTIFICATION

COMMON NAME; Sheet-Fed Offset Printing ink PRODUCT NAME; Dense Black, XL-R Dense Black, NS TKO Black

SECTION. 2 HAZARDOUS INGREDIENTS

COMPONENTS	CAS No.	WT. %	
Hydrotreated Petroleum Hydrocarbon	64742-46-7	32-35	
Rosin Modified Phenolic Resin	68082-96-2	24-27	
Linseed Oil Modified Alkyd Resin	67700-81-6	10-14	
C.I. Pigment Blue 18	1324-77-2	5.5-6	
C.I. Pigment Black 7	12001-26-2	19-20	
Lanoline	8006-54-0	2	
Polyetylene Wax	9002-88-4	1	
Manganese Octate	19556-58-8	0.5 >	
Cobalt Octate	136-52-7	0.5 >	

Generally Classified as Non Toxic

SECTION. 3 PHYSICAL DATA

APPEARANCE ; Viscous Paste

COLOR; Black ODOR; Oily Odor MOLECULAR WEIGHT; NE PH; NE SPECIFIC GRAVITY ; $1.01-1.03 (25^{\circ}C)$ 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.
HAZARDOUS DECOMPOSITION 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 ($40^{\circ}C$ <), direct sunlight and excessive moisture.

AVERAGE SHELF LIFE ; 6 months or more

NE; Not Established.