

MATERIAL SAFETY DATA SHEET

OFFSET PRINTING INK

PAGE 1 OF 2

MANUFACTURER ; Tokyo Printing Ink Mfg. Co., Ltd.
ADDRESS ; 2-7-15 Tabatashinmachi, Kita-ku, Tokyo, Japan
TELEPHONE NO. ; TOKYO(03) 3893 5151
DATE PREPARED ; August 21, 2003

SECTION. 1 PRODUCT IDENTIFICATION

COMMON NAME ; Sheet-Fed Offset Printing Gold Ink
PRODUCT NAME ; Pantone - 871 Gold, 872 Gold, 873 Gold, 874 Gold, 875 Gold, 876 Gold

SECTION. 2 HAZARDOUS INGREDIENTS

COMPONENTS	CAS No.	WT. %
Hydrotreated Petroleum Hydrocarbon	64742-46-7	20-23
Rosin Modified Phenolic Resin	68082-96-2	20-23
Tung Oil	8001-20-5	8-10
Copper	7440-50-8	33-40
Zinc	7440-66-5	4-10
Aluminium	7429-90-5	0.5>
Stearic Acid	57-11-4	4-5
Polyethylene Wax	9002-88-4	1>

Generally Classified as Non Toxic

SECTION. 3 PHYSICAL DATA

APPEARANCE ; Viscous Paste
COLOR ; Gold
ODOR ; Oily Odor
MOLECULAR WEIGHT ; NE
PH ; NE
SPECIFIC GRAVITY ; 1.24-1.29 (25°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

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 gastrointestinal irritation, nausea, vomiting 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 ventilation.
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°C<), direct sunlight and excessive moisture.
AVERAGE SHELF LIFE ; 6 months or more

NE ; Not Established.