



Keystone Printing Ink Company
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MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: TOP & BOTTOM DRIER

PRODUCT CODE: C-10

MANUFACTURING LOCATION:

Keystone Printing Ink Company
 2700 Roberts Avenue
 Philadelphia, Pennsylvania 19129

DATE OF PREPARATION: 06/03/08

PREPARED BY: John G. Essel

EMERGENCY TELEPHONE NUMBER:

CHEMTREC: 800-424-9300

CHEMICAL FAMILY: Metal Carboxylate

HMIS:

HEALTH: 1
FLAMMABILITY: 1
REACTIVITY: 0
PERSONAL PROTECTION: B

2. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT & CAS REG NO.	COMPOSITION/APPROX. WEIGHT %	ACGIH TLV		OSHA PEL		UNITS
		TWA	STEL	TWA	STEL	
Cobalt Tallate 61789-52-4	44	0.02	NE	0.1+	NE	mg/m3
Manganese Tallate 8030-70-4	32.4	0.2++	NE	5++Ceiling	NE	mg/m3
Heavy Distillate 68476-34-6	16	5*	10*	5*	NE	mg/m3
Mineral Spirits 8052-41-3	6.8	100	NE	500	NE	mg/m3
Diethylene Glycol Methyl Ether 111-77-3	>1	NE	NE	NE	NE	

+For metal dust and fume, as Co

++For Manganese, fume as Mn

*For oil mist, if generated

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Cobalt: Exposure to cobalt compounds may cause sensitization by inhalation and skin contact.

Manganese: Manganese compounds can cause central nervous system and pulmonary system damage by inhalation of fumes and dust.

Manganese is a known skin and eye irritant.

Both: Product may be irritating to the eyes, skin and respiratory tract. May be harmful if swallowed. Avoid contact with eyes, skin and clothing. Use with adequate ventilation. Wash hands thoroughly after handling.

EYE CONTACT:

Manganese is a known eye irritant. Avoid eye contact. This product may be irritating to the eyes upon direct contact. Based upon testing of similar products and or components, this product as has a low vapor pressure and is not expected to present a hazard to the eyes at ambient conditions. Exposure to high concentrations of vapors may be irritating to the eyes.

SKIN CONTACT:

Manganese is a known skin irritant. Cobalt compounds have been shown to produce dermatitis, and investigators have been able to demonstrate a hypersensitivity of the skin to cobalt. Avoid skin contact. This product may cause skin irritation upon direct contact. Based on testing of similar products and/or compounds, prolonged or repeated contact may result in dermatitis, which is characterized by dryness, chapping, and reddening. This condition may make the skin more susceptible to other irritants, sensitizers, and disease. Pre-existing skin conditions may make the skin more susceptible and facilitate uptake by this route.

INGESTION:

Do not ingest. Ingestion of small quantities is usually nonfatal unless aspiration occurs. Aspiration may lead to chemical pneumonitis, which is characterized by pulmonary edema and hemorrhage and may be fatal. Signs of lung involvement include increased respiratory rate, and a bluish discoloration of the skin, coughing, choking, and gagging are often noted at the time of aspiration. Gastrointestinal discomfort may develop, followed by vomiting with a further risk of aspiration. Ingestion may cause gastrointestinal distress. Severe oral intoxication will lead to intense burning of the throat and may result in drowsiness, dullness, numbness, and headache followed by dizziness, weakness, and nausea. Loss of consciousness and convulsions followed by death may result.

INHALATION:

Manganese compounds can cause central nervous system damage by inhalation of fumes and dust. Prolonged inhalation of cobalt dust, or metal dust, fume or mist containing cobalt may cause respiratory illness. Avoid prolonged inhalation of mist or vapors. This product has a low vapor pressure and is not expected to present an inhalation hazard at ambient conditions. Caution should be taken to prevent aerosolization or misting of this product. The Permissible Exposure Limit (PEL) and Threshold Limit Value (TLV) for this product as oil mist is 5 mg/m³. Exposures below 5 mg/m³ appear to be without significant health risk. The short-term exposure limit for this product as oil is 10 mg/m³. Acute and chronic overexposures may be irritating to the respiratory tract. Severe intoxication may lead to drowsiness, dullness, numbness, and headache followed by dizziness, weakness, and nausea.

4. FIRST AID MEASURES

EYES:

Immediately flush with large amounts of water and continue flushing until irritation subsides. If irritation persists, seek medical attention.

SKIN:

Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. If redness or irritation occurs, seek medical attention.

INHALATION:

This material has a low vapor pressure and is not expected to present an inhalation exposure at ambient conditions. If vapor or mist is generated when the material is heated or handled, remove victim from exposure. If breathing has stopped or is irregular, administer appropriate first aid, supply oxygen if available, and seek medical attention.

INGESTION:

Do not induce vomiting due to aspiration hazard. If vomiting occurs, lower head below knees to avoid aspiration. Seek immediate medical attention.

5. FIRE FIGHTING MEASURES

FLASH POINT (° F): 230

OSHA FLAMMIBILTY CLASSIFICATION:

Combustible Liquid – Class III B

EXTINGUISHING MEDIA:

Carbon Dioxide, Dry Chemical, Foam.

SPECIAL FIREFIGHTING PROCEDURES:

Water may be ineffective as an extinguishing agent, but may be used to cool containers exposed to heat or flame.

AUTOIGNITION TEMP (° F): 495

6. ACCIDENTAL RELEASE MEASURES

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Consult health effect information in Section 3, personal health protection information in Section 8, fire protection information in Section 5 and reactivity data in Section 10. Notify authorities of spill. Contain spill immediately. Do not allow spill to enter sewers or watercourses. Remove all sources of ignition. Provide adequate ventilation during clean up. Absorb with solvent absorbent material. Large spills may be picked up using vacuum pumps, shovels, buckets, or other means and placed in drums or other suitable containers. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

7. HANDLING AND STORAGE

HANDLING:

Do not transfer to unmarked containers. Fire extinguishers should be kept readily available.

STORAGE:

Store in a cool, well ventilated area in closed containers away from heat, sparks, open flame or oxidizing materials.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

RESPIRATORY PROTECTION EQUIPMENT:

Respiratory protection is not required under conditions of normal use. If vapor or mist is generated when the material is heated or handled, use an organic vapor respirator with a dust and mist filter. All respirators must be NIOSH certified. Do not use compressed oxygen in hydrocarbon atmospheres.

PROTECTIVE GLOVES:

No skin protection is required for single, short duration exposures. For prolonged or repeated exposures, use impervious gloves.

EYE AND FACE PROTECTION:

If material is handled such that it could be splashed into eyes, wear plastic face shield or splash proof safety goggles.

OTHER PROTECTIVE EQUIPMENT:

For prolonged or repeated exposures, use impervious clothing (boots, aprons, etc.) over parts of the body subject to exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE/POINT	313 –390 ° F
VAPOR DENSITY Vs. AIR	Heavier than
PHYSICAL STATE	Liquid
COLOR	Purple
PERCENT VOLATILE BY WEIGHT	7
EVAPORATION RATE Vs. BUTYL ACETATE	Slower than
SPECIFIC GRAVITY @ 25 ° C	98.7
WEIGHT PER GALLON	8.4 lbs.

10. STABILITY AND REACTIVITY

STABILITY:

Stable

HAZARDOUS POLYMERIZATION:

Will not occur.

INCOMPATIBILITY (MATERIALS TO AVOID):

May react with strong oxidizing agents.

11. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD:

All disposals must comply with federal, state, and local regulations. The material, if spilled or discarded, may be regulated waste. Refer to state and local regulations. Department of Transportation (DOT) Regulations may apply for transporting this material when spilled. Waste material may be landfilled or incinerated at an approved facility. Materials should be recycled if possible.

12. REGULATORY INFORMATION

TSCA STATUS:

All components of this product are on the US TSCA Inventory.

CALIFORNIA PROPOSITION 65:

This product is not known to contain any chemicals known to the state of California to cause cancer or birth defects. However, we do not conduct routine analysis for all listed materials.

SARA 302 EXTREMELY HAZARDOUS SUBSTANCES LIST:

This product does not contain greater than 1% of any chemical substance on the SARA Extremely Hazardous Substance List.

SARA (311, 312) HAZARD CLASS:

Acute health hazard. Chronic health hazard.

SARA 313 TOXIC CHEMICALS:

Cobalt Compounds	44%
Manganese Compounds	32.4%
Glycol Esters	>1%