

Sheet-fed Offset Printing Ink

1. Product and company identification

Product class	Offset Printing Ink, Sheet-fed
Product name	Tuff Dry Process Series & Tuff Dry Dense Black
Manufactured for and Distributed by	Tokyo Printing Ink Corporation U.S.A.
Address	18710 South Wilmington Ave., Suite 101 Rancho Dominguez, CA 90220
Telephone	(310) 604-0495

2. Composition / information on ingredients

Ingredients		CAS Number	Content (w/w)
Petroleum Hydrocarbons		Various	25-35
Synthetic Resins		Various	20-45
Vegetable Oils	Linseed Oil	8001-26-1	0-10
	Soybean Oil	8001-22-7	0-10
Polyethylene Wax		9002-88-4	0-5
Manganese Octoate		15956-58-8	0-1
Cobalt Octoate		136-52-7	0-1
Yellow	C.I. Pigment Yellow 12	6358-85-6	5-15
Magenta	C.I. Pigment Red 57:1	5281-04-9	10-20
Cyan	C.I. Pigment Blue 15:3	147-14-8	10-20
C.I. Pigment Blue 18		1324-77-2	0-10
C.I. Pigment Black 7		1333-86-4	15-25

Generally Classified as Non Toxic

3. Hazards identification

None if used properly.

4. First-aid measures

Inhalation	Move to fresh air condition. Aid in breathing and get medical attention, if necessary.
Skin	Remove contaminated clothing and wash well with soap and water.
Eye	Flush with plenty of water immediately for at least 15 minutes and get medical attention.
Ingestion	Drink a large quantity of water. If available, milk is better. Get medical attention.

5. Fire-fighting measures

Flash point	150-160°C (Open air)
Explosion limits	Upper : N/A Lower : N/A
Extinguish media	Fog, Carbon Dioxide, Foam, Dry Chemical
Special fire fighting procedures	Self contained breathing apparatus is recommended.
Unusual fire and explosion hazards	N/A

6. Accidental release measures

Wipe out and placed in a suitable covered container for disposal. Dispose in accordance with local, country, state and federal regulation.

7. Handling and storage

Precaution in handling and storing	Store in sealed container and keep away from high temperature (under than 40°C), direct sunlight and excessive moisture.
Average shelf life	More than 6 months

8. Exposure controls / personal protection

Respiration	Use respirator, if necessary.
Ventilation	Use general and local exhaust ventilation.
Skin	Rubber gloves are recommended.
Eye	Safety glasses are recommended.
Other	Use apron, coverall and boots, if necessary.

9. Physical and chemical properties

Appearance	Viscous paste	Specific gravity	0.95-1.05 (25°C)
Color	Black	Boiling point	N/A
Odor	Oily odor	Vapor density	N/A
Molecular weight	N/A	Vapor pressure	N/A
pH	N/A	Solubility in water	Insoluble

10. Stability and reactivity

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.

11. Toxicological information

Carcinogen	None
Mutagen	None

Teratogen	None
Reproductive toxicity	None

12. Ecological information

There is no evidence to cause environmental problem.

13. Disposal considerations

Dispose in accordance with local, country, state and federal regulation. Do not discharge into sewer systems.

14. Transport information

There is no hazardous information.

15. Regulatory information

TSCA (Toxic Substance Control Act)	All ingredients are listed.
CERCLA / Superfund, 40 CFR 117.302 (Comprehensive Environment Response, Compensation, and Liability Act)	Contains no reportable components.
SARA Title III (Superfund Amendments and Reauthorization Act)	Cobalt compound is used as drier.
FDA (Food and Drug Administration)	These inks would not be approved to contact directly with food.
EINECS (European Economic Community)	All materials are listed.
California Proposition 65	Carbon black is included as pigment.
CONEG Legislation (Coalition of Northeastern Governors)	Meets all current state and heavy metal limitations.

16. Other information

This information is based on our current level of knowledge. It is intended describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.