MATERIAL SAFETY DATA SHEET

Revision date: January 8, 2015

SECTION 1: IDENTIFICATION

Product Identifier: Black reinking ink

Product Code(s): RFBK05, RFBK01, RFBK25

Product Use: This product is intended for use in the reinking of pre-inked handstamps.

Chemical Family: Mixture

Manufacturer's name and address:
Identity Group
1480 Gould Drive
Cookeville, TN, USA 35806

Information Telephone #: 931-432-4000 (Monday – Friday 8:00 am – 5:00 pm Central Standard Time)

24 Hr. Emergency Telephone #:
Chemtrec 1-800-424-9300 (Within Continental U.S.)
Chemtrec 1-703-527-3887 (Outside U.S.)

SECTION 2: HAZARDS IDENTIFICATION

Classification:

Acute toxicity, Oral	Category 4
Serious eye damage	Category 1
Skin irritation	Category 2
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1
Specific target organ toxicity – Repeated exposure – Oral - Kidney	Category 2
Germ cell mutagenicity	Category 2

Labeling:

Symbols:

Signal Word: **Warning**

Hazard statements:

H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H341	Suspected of causing genetic defects
H373	May cause damage to organs through prolonged or repeated exposure
H410	Very toxic to aquatic life with long lasting effects

Precautionary statements:

P264	Wash skin thoroughly after handling.
P273	Avoid release to the environment.
P281	Wear personal protective equipment as required.

P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P305+351+338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P314	Get medical advice/attention if you feel unwell.
P330	Rinse mouth

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS #	Wt. %
Tricresyl Phosphate	1330-78-5	1 – 5
Cocoamide DEA	68603-42-9	15 – 25
Diethanolamine	111-42-2	1 – 10
C.I. Basic Orange 2	532-82-1	0.5 – 1.0

SECTION 4: FIRST AID MEASURES

Inhalation: Immediately remove person to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. Seek immediate medical attention/advice.

Skin contact: Immediately flush with plenty of water, while removing contaminated clothing. Wash contaminated clothing before reuse. When symptoms persist or in all cases of doubt, seek medical advice.

Eye contact: Flush eyes with low pressure water for at least 15 minutes while holding eyelids open. When symptoms persist or in all cases of doubt, seek medical advice.

Ingestion: Seek immediate medical attention/advice. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration.

Notes for physician: Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, foam, carbon dioxide and water fog

Fire hazards/conditions of flammability: This material is not flammable.

Explosion data: Sensitivity to mechanical impact / static discharge: Not expected to be sensitive to mechanical impact or static discharge.

.**Special fire-fighting procedures/equipment:**
Firefighters should wear protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame.

Hazardous combustion products: Oxides of carbon and nitrogen, irritating fumes and smoke.

NFPA Rating: Health: 2 Flammability: 1 Instability: 0 Special Hazards: 0

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: All persons dealing with clean-up should wear the appropriate protective equipment. Do not eat, drink or smoke while participating in clean up.

Environmental precautions: Ensure spilled product does not enter drains, sewers, waterways or confined spaces. For large spills, dike the area to prevent spreading of appropriate.

Spill response/cleanup: Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section 13). Notify the appropriate authorities as required.

Prohibited materials: None specific

Special spill response procedures: In case of a transportation accident, in the United States contact CHEMTREC at 1-800-424-9300 or International at 1-703-527-3887.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling: Do not ingest. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

Conditions for safe storage: Store in a cool, dry, well-ventilated area. Store away from incompatibles, temperature extremes and out of direct sunlight.

Incompatible materials: Strong oxidizing agents; strong reducing agents; acids

Special packaging materials: Always keep in original packaging.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters

Component	CAS No.	Value	Control Parameters	Source
Diethanolamine	111-42-2	TWA	3 ppm 15 mg/m3	USA OSHA Table Z-1 Limits for Air Contaminants 1910.1000
		TWA	1 mg/m3	USA ACGIH Threshold Limit Values (TLV)
		TWA	3 ppm 15 mg/m3	USA NIOSH Recommended Exposure Limits
			Remarks	Liver and kidney damage Confirmed animal carcinogen with unknown relevance to humans Danger of cutaneous absorption

Ventilation and engineering measures:	Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits if appropriate.
Respiratory protection:	If the TLV is exceeded, a NIOSH/MSHA-approved respirator is advised. Confirmation of which type of respirator is most suitable for the intended application should be obtained from respiratory protection suppliers.
Skin protection:	Impervious gloves must be worn when using this product if direct contact with skin is unavoidable. Advice should be sought from glove suppliers.
Eye / face protection:	Good industrial hygiene practices should be used when handling this product including preventing eye contact and minimizing skin contact and inhalation.
Other protective equipment:	As needed to prevent eye contact and minimizing skin contact and inhalation.
General hygiene considerations:	Avoid breathing vapor or mist. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke or use cosmetics while working with this product. If direct contact occurs, wash hands before eating, drinking, smoking or use of toilet facilities. Remove and wash contaminated clothing before re-use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Appearance:	Slightly viscous black liquid
Odor:	Mild to negligible
Odor Threshold:	N/Av
Specific Gravity:	0.9
pH:	Not applicable
Boiling point:	>300 ºF
Melting/Freezing point:	Not available
Coefficient of water/oil distribution:	Not available
Vapor pressure (mm Hg @ 20ºC / 68ºF):	Not available
Vapor density (Air = 1):	Heavier than air
Evaporation rate (n-Butyl acetate = 1):	Slower than n-Butyl acetate
Solubility in water:	Negligible
Flash Point	>200 ºF, TCC
Auto-ignition temperature	Not applicable
Lower flammable limit (% by vol)	Not applicable
Upper flammable limit (% by vol)	Not applicable
Flame Projection Length	Not available
Flashback observed	Not available

SECTION 10: STABILITY AND REACTIVITY

Chemical stability:	Stable under the recommended storage and handling conditions prescribed.
Possibility of hazardous reactions:	None are known.
Conditions to avoid:	Avoid heat and open flame.
Materials to avoid and incompatibility:	See Section 7 (Handling and Storage) for further details.
Hazardous decomposition products:	None known; refer to hazardous combustion products in Section 5.

SECTION 11: TOXICOLOGICAL INFORMATION

Target organs: Eyes, skin

Routes of exposure:

Inhalation:	Not likely with intended use
Skin absorption:	Not likely with intended use
Skin & Eyes:	Not likely with intended use
Ingestion:	Not likely with intended use

Toxicological data: There is no available data for the mixture itself, only for the ingredients. See below for individual ingredient acute toxicity data.

Ingredient		LD_{50} Inhalation, rat	Oral, rat	Rabbit, dermal	Intraperitoneal, rat	Intravenous, rat
Tricresyl Phosphate		No data available	3,000 mg/kg	No data available		
Diethanolamine		No data available	710 mg/kg	12,200 mg/kg	120 mg/kg	778 mg/kg

Tricresyl phosphate:	Eye damage/eye irritation:	Eyes – rabbit – Mild eye irritation – 24 hours
Diethylene glycol:	Skin corrosion/irritation:	Skin – rabbit – No skin irritation – 24 hours
	Eye damage/eye irritation:	Eyes – rabbit - No eye irritation – 24 hours
Diethanolamine	Skin corrosion/irritation:	Skin – rabbit –Mild skin irritation – 24 hours
	Eye damage/eye irritation:	Eyes – rabbit - Severe eye irritation – 24 hours

Carcinogenic status

IARC: 3-Group 3: Not classifiable as to its carcinogenicity to humans (C.I. Basic Orange 2)
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

C.I. Basic Orange 2: Carcingenicity – Mouse - Oral

Reproductive effects: This substance has not been evaluated as a mixture.

Teratogenicity: This substance has not been evaluated as a mixture.

Germ Cell Mutagenicity: In vitro tests show mutagenic effects (C.I. Basic Orange 2)
Histidine reversion (Ames) (C.I. Basic Orange 2)
This substance has not been evaluated as a mixture.

Epidemiology: This substance has not been evaluated as a mixture.

Conditions aggravated by overexposure: This substance has not been evaluated as a mixture.

Specific target organ toxicity – repeated exposure: Diethylene glycol — May cause damage to organs through prolonged or repeated exposure.
Oral - Kidney

This substance has not been evaluated as a mixture.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: No data is available on the mixture itself.

Tricresyl phosphate:	Acute toxicity to fish:	LC_{50}	Rainbow trout	0.26 mg/l	96 hr
	Toxicity to aquatic invertebrates:	EC_{50}	Daphnia magna	2.3 mg/l	48 hr
	Acute algae toxicity:	EC_{50}	Scenedesmus pannonicus Growth inhibition	1.3 mg/l	96 hr
Diethanolamine:	Toxicity to fish:	LC_{50}	Pimephales promelas	1,460 mg/l	96 hr
	Toxicity to aquatic invertebrates:	EC_{50}	Daphnia magna	55 mg/l	48 hr

Mobility: No data is available on the mixture itself.

Persistence: Diethanolamine Biodegradability Result: > 90% Readily biodegradable

No data is available on the mixture itself.

Bioaccumulation potential: No data is available on the mixture itself.

Other adverse environmental effects: The ecological characteristics of this mixture have not been fully investigated.
No data is available on the mixture itself, but it is expected to be very toxic to aquatic life.

SECTION 13: DISPOSAL CONSIDERATIONS

Methods of disposal: Dispose of in accordance with federal, provincial and local hazardous waste regulations.

SECTION 14: TRANSPORT INFORMATION

This material is not UN / IATA regulated.

This material is not classified as ICAO/IATA-DGR Dangerous Goods.

This material is not classified as hazardous per the IMDG Code.

This material is not classified as hazardous per ADR.

This material is not classified as hazardous per the U.S. Department of Transportation (DOT).

SECTION 15: REGULATORY INFORMATION

Inventory Status: All listed ingredients appear on the Toxic Substances Control Act (TSCA) Inventory, EINECS/ELINCS, AICS, and DSL.

This material is classified as hazardous under OSHA regulations (29CFR 19410.1200). See Section 2.

SARA TITLE III: Sec. 302, Extremely Hazardous Substances, 40 CFR 355:
No Extremely Hazardous Substances are present in this mixture.

SARA TITLE III: 311/312 Acute Health Hazard, Chronic Health Hazard

SARA TITLE III: 313 Diethanolamine CAS 111-42-2

CERCLA: No chemicals in this mixture with known CAS numbers are subject to the reporting requirements of CERCLA.

RCRA CODE: None

Hazardous Air Pollutants (HAPS): Diethanolamine CAS 111-42-2

California Proposition 65: This product does not contain any chemicals known to the state of California to cause cancer, birth defects, or any other reproductive harm.

Other US State "Right To Know" Lists:

The following chemicals are specifically listed by individual states:	Tricresyl phosphate	(PA, NJ)
	Diethanolamine	(PA, NJ, MA)
	C.I. Basic Orange 2	(PA, NJ)

International Information:

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

This product is a WHMIS Controlled Product. It meets one or more of the criteria for a controlled product provided in Part IV of the Canadian Controlled Products Regulations (CPR). See Section 2.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

SECTION 16: OTHER INFORMATION

HMIS Rating: Health: * 2 Flammability: 1 Reactivity: 0

* Chronic hazard 0-Minimal 1- Slight 2- Moderate 3- Serious 4- Severe

Legend:

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HMIS	Hazardous Material Identifications System
HSDB	Hazardous Substances Data Bank
IARC	International Agency for Research on Cancer
Inh	Inhalation
MSHA	Mine Safety and Health Administration
NFPA	National Fire Protection Association
NIOSH	National Institute of Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible exposure limit
RCRA	Resource Conservation and Recovery Act
RTECS	Registry and Toxic Effects of Chemical Substances
SARA	Superfund Amendments and Reauthorization Act
STEL	Short Term Exposure Limit
TDG	Canadian Transportation of Dangerous Goods Act and Regulations
TLV	Threshold Limit Values
TPQ	Threshold Planning Quantity
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Identification System

References:

1. ACGIH, Threshold Limit Values and Biological Exposure Indices
2. International Agency for Research on Cancer Monographs
3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases (Chempendium, HSDB and RTECs)
4. Material Safety Data Sheets for manufacturers
5. US EPA Title III List of Lists
6. California Proposition 65 List