SAFETY DATA SHEET

TECHNICAL INDUSTRIAL SALES
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SECTION 1 : IDENTIFICATION

Product Identifier: **Product Code(s):**	Blue Ink Roll 1”
Product Use:	For the purpose of transferring ink onto porous substrates such as paper or paperboard products.
Chemical Family:	Mixture
Manufacturer’s name and address:	Technical Industrial Sales 18574 Highway 99E Oregon City, OR 97045
Information Telephone #:	(Monday – Friday 8:00 am – 4:00 pm) Pacific Time 800-433-7826 / 503-656-5833

SECTION 2: HAZARDS IDENTIFICATION

Classification:

Acute toxicity, Oral	Category 5
Skin irritation	Category 2
Eye irritation	Category 2B
Reproductive toxicity	Category 1B
Specific target organ toxicity – repeat exposure	Category 2
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

Labeling:

Symbols:

Signal Word: Danger

Hazard statements:

H303	May be harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation

H360 May damage fertility or the unborn child
H373 May cause damage to organs through prolonged or repeat exposure
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects

Precautionary statements:

P261 Avoid breathing dust/fume/gas/vapors/spray
P264 Wash skin thoroughly after handling
P270 Do not eat, drink or smoke when using this product

P273 Avoid release to the environment
P281 Wear personal protective equipment as required
P301+312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302+352 IF ON SKIN: Wash with plenty of soap and water
P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P332+313 If skin irritation occurs: Get medical attention/advice.
P391 Collect spillage
P501 Dispose of contents to an approved waste disposal plant.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS #	Wt. %	GHS Classification	Hazard Statements	Pictograms
Cocamide DEA	68603-42-9	3 - 5	Skin irritation (Cat. 2) Eye irritation (Cat. 2)	H315 H319	
Diethanolamine	111-42-2	1 - 3	Acute toxicity, Oral (Cat. 4) Skin irritation (Cat. 2) Serious eye irritation (Cat. 2) Specific target organ toxicity – repeat exposure (Cat. 2)	H302 H315 H318 H373	
Butyl Benzyl Phthalate	85-68-7	15 - 25	Reproductive toxicity (Cat. 1B) Acute aquatic toxicity (Cat. 1) Chronic aquatic toxicity (Cat. 1)	H360 H400 H410	
Tricresyl Phosphate	1330-78-5	15 - 25	Reproductive toxicity (Cat. 2) Acute aquatic toxicity (Cat. 1) Chronic aquatic toxicity (Cat. 1)	H361 H400 H410	

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:
Spill response/cleanup:
Ensure spilled product does not enter drains, sewers, waterways or confined spaces. 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

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling: Wear suitable protective equipment during 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. Inspect periodically for damage or leaks.

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

Special packaging materials: Always keep in containers made of the same materials as the supply container.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Component	CAS No.	Value	Control Parameters	Source
Diethanolamine	111-42-4	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.

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 should be worn when using this product. 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. Upon completion of work, 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

	Solid
Physical state:	Flexible gel saturated with blue
Appearance:	ink Mild
Odor: Odor Threshold: Specific	N/Av
Gravity: pH:	0.9
	Not applicable
Boiling point:	>300 ^{o}F
Melting/Freezing point:	Not available
Coefficient of water/oil distribution:	Not available
Vapor pressure (mm Hg @ 20^{o}C / 68^{o}F): Vapor density (Air = 1):	Not available
	Heavier than air
Evaporation rate (n-Butyl acetate = 1): Solubility in water:	Slower than n-Butyl acetate Very Slightly
Flash Point	>200 ^{o}F, 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

Routes of exposure:

Inhalation:	No
Skin absorption:	YES
Eyes:	No
Ingestion:	No

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$_{50}$ Oral, rat	LD$_{50}$ Rabbit, dermal	Skin corrosion/irritation Skin, rabbit	Serious eye damage/eye irritation Eyes, rabbit
Diethanolamine	710 mg/kg	12,200 mg/kg	Mild skin irritation – 24 h	Severe eye irritation – 24 h
Tricresyl phosphate	15,750 mg/kg	3,700 mg/kg	No skin irritation – 24 h	No eye irritation – 24 hr
Butyl benzyl phthalate	2,330 mg/kg	>10,000 mg/kg	No data available	No data available

Carcinogenic status:

IARC: Group 2B: Possibly carcinogenic to humans (Cocamide DEA, Diethanolamine)
Group 3: Not classifiable as to its carcinogenicity to humans (Butyl benzyl phthalate)

ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
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.

Reproductive effects: No information found; this material has not been evaluated as a mixture.

Teratogenicity: No information found; this material has not been evaluated as a mixture.

Mutagenicity: No information found; this material has not been evaluated as a mixture.

Epidemiology: No information found; this material has not been evaluated as a mixture.

Specific target organ toxicity – single exposure: No information found; this material has not been evaluated as a mixture.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: No data is available on the mixture itself.

Tricresyl phosphate:	Toxicity to fish: LC_{50}	Oncorhynchus mykiss	0.6 mg/l	96 hr
	Toxicity to aquatic invertebrates: EC_{50}	Daphnia magna	0.146 mg/l	48 hr
	Toxicity to algae: EC_{50}	Desmodesmus subspicatus	0.404 mg/l	72 hr
	Toxicity to bacteria: EC_{50}	Sludge treatment	>1,000 mg/l	3 hr
Butyl benzyl phthalate:	Toxicity to fish: LC_{50}	Lepomis machrochirus	1.7 mg/l	96.0 hr
	Toxicity to aquatic invertebrates: EC_{50}	Daphnia magna	1.8 mg/l	48 hr
	Toxicity to algae: EC_{50}	Desmodesmus subspicatus	0.31 mg/l	72 hr
Diethanolamine	Toxicity to fish: LC_{50}	Pimephales promelas	1,460 mg/l	96 hr
	Toxicity to aquatic invertebrates: EC_{50}	Daphnia magna (Water flea)	55 mg/l	48 hr

Mobility: No data is available on the mixture itself.

Persistence: No data is available on the mixture itself.

Butyl benzyl phthalate:	Biodegradability	aerobic – Exposure time 14 d	81% - Readily biodegradable
Tricresyl phosphate:	Biodegradability	aerobic – Exposure time 28 d	24.2% - Not readily biodegradable

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

Tricresyl phosphate:	Pimephales promelas	32 d	- 31.6 ug/lmg/l	Bioconcentration Factor (BCF): 165
Butyl benzyl phthalate:	Lepomis machrochirus	21 d	-0.00973 mg/l	Bioconcentration Factor (BCF): 663

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 with long lasting effects.

SECTION 13: DISPOSAL CONSIDERATIONS

Methods of disposal: Dispose of in accordance with federal, provincial and local hazardous waste regulations. Avoid release to the environment.

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 Chronic Health Hazard
Acute Health Hazard

SARA TITLE III: This mixture does not contain any chemical components with known CAS numbers that exceed the Threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

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): None

US State “Right to Know” Laws: California Proposition 65: Butyl benzyl phthalate15 – 25%

Other US State “Right To Know” Lists:

The following chemicals are specifically listed by individual states:

Butyl benzyl phthalate	(MA, PA, NJ)
Tricresyl phosphate	(PA, NJ)
Diethanolamine	(MA, PA, NJ)

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. Material Safety Data Sheets for manufacturers
4. US EPA Title III List of Lists
5. California Proposition 65 List

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage,

transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Updated: August 4, 2016