SAFETY DATA SHEET

Revision date: December 15, 2015

SECTION 1 : IDENTIFICATION

	Black and Red PR42 Ink Rolls
Product Identifier:	11204
Product Code(s):	Marking on porous surfaces
Product Use:	Mixture
Chemical Family:	Identity Group
Manufacturer's name and address:	1480 Gould Drive Cookeville, TN, USA 35806
	931-432-4000 (Monday – Friday 8:00 am – 5:00 pm Central Standard Time)
Information Telephone #:	Chemtrec 1-800-424-9300 (Within Continental U.S.)
24 Hr. Emergency Telephone #:	Chemtrec 1-703-527-3887 (Outside U.S.)

SECTION 2: HAZARDS IDENTIFICATION

Classification:

Serious eye irritation	Category 2A	
Serious eye damage	Category 1	
Skin irritation	Category 2	
Acute toxicity, skin	Category 4	
Acute toxicity, inhalation	Category 4	
Acute toxicity, oral	Category 4	
Specific target organ toxicity – single exposure	Category 3	Respiratory system

Labeling:

Symbols:

Signal Word: Warning

Hazard statements:

H302 +H312	Harmful if swallowed or in contact with skin
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled

Precautionary statements:

P202 Do not handle until all safety precautions have been read and understood
P261 Avoid breathing dust/fume/gas/mist/vapours/spray
P264 Wash skin thoroughly after handling
P273 Avoid release to the environment
P281 Use personal protective equipment as required
P302+352 IF ON SKIN: Wash with plenty of soap and water.

P304+340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.
P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P501 Dispose of contents/container to an approved waste disposal plant.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS #	Wt. %	GHS Classification	Hazard Statements	Pictograms
2-Ethyl-1,3-hexanediol	94-96-2	10 - 20	Serious eye damage/eye irritation (Cat. 1)	H318 + H312	
Hydrotreated Distillate	64742-46-7	5 – 10			
Solvent Red 49	509-34-2	5 – 10	Acute toxicity, Oral (Cat. 4) Skin irritation (Cat. 2) Serious eye damage (Cat. 1) Specific target organ toxicitysingle exposure, Respiratory system (Cat. 3)	H302 H315 H318 H335	
Oleic acid	112-80-1	10 – 30	Skin irritation (Cat. 2)	H315	
Sorbitan trioleate	26266-58-0	10 – 30	Skin irritation (Cat. 2)	H315	
4-(phenylazo)benzene1,2-diamine Skin irritation (Cat. 2)	495-54-5 H315	2 - 4	Acute toxicity, Oral (Cat. 4)	H302	

Eye irritation (Cat. 2A)	H319
Specific target organ toxicitysingle exposure, Respiratory system (Cat. 3)	H335

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. When symptoms persist or in all cases of doubt, seek medical advice.

Eye contact: Flush eyes with 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.
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 1-8004249300 or International at 1-703-527-3887.

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

Components with workplace control parameters: Contains no substances with occupational exposure limit values.

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 must 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

Physical state:		Liquid in a solid foam
Appearance:		Red and black ink-impregnated foam
Odor:	**Odor**	Mild
Threshold:	**Specific**	N/Av
Gravity:	**pH:**	0.9
	Boiling	Not applicable
point:		>300 °F
Melting/Freezing point:		Not available
Coefficient of water/oil distribution:		Not available
Vapor pressure (mm Hg @ 20°C / 68°F):		Not available
Vapor density (Air = 1):		Heavier than air
Evaporation rate (n-Butyl acetate = 1):		Slower than n-Butyl acetate
Solubility in water:		Slightly
Flash Point		>200 °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:*	Vapors and spray mist may irritate throat and respiratory system and cause coughing
	Skin contact:	May be harmful in contact with skin. Defats the skin. May cause redness and pain.
	Eye contact:	Corrosive. Prolonged contact causes serious eye and tissue damage.
	Ingestion:	Not expected to be a route of exposure with proper use. May be harmful if swallowed. Liquid irritates mucous membranes and may cause abdominal pain.

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

Ingredient	LD50 Oral, rat	LD50 Rabbit, dermal	Skin corrosion/irritation Skin, rabbit	Serious eye damage/eye irritation Eyes, rabbit
2-Ethyl-1,3-hexanediol	1,400 mg/kg	2,000 mg/kg	Mild skin irritation	Severe eye irritation
2-Naphthalenol, 1-[[4phenylazo)phenyl]azo]-, arheptyl ar',ar'',-Me derivs.	500 mg/kg			
Oleic acid	74,000 mg/kg		Human – irritation – 3d	Mild eye irritation
Sorbitan trioleate			Skin irritation	Mild eye irritation
4-(phenylazo)benzene-1,2-diamine	No data available	1,650 mg/kg	No data available	Moderate eye irritation – 24 h

Carcinogenic status: No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

Reproductive effects: 2-Ethyl-1,3-hexandiol: Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Teratogenicity: No information found

Germ Cell Mutagenicity: 4-(phenylazo)benzene-1,2-diamine Rat (liver) – Unscheduled DNA synthesis

Epidemiology: No information found.

Specific target organ toxicity – single exposure:

Solvent Red 49 Inhalation – May cause respiratory irritation
4-(phenylazo)benzene-1,2-diamine Inhalation – May cause respiratory irritation

Conditions aggravated by overexposure: No information found.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: No data is available on the mixture itself.

2-Ethyl-1,3-hexanediol:	Toxicity to fish:	LC_{50}	Ictalurus punctatus	624 mg/l	96 h
	Toxicity to aquatic invertebrates:	EC_{50}	Daphnia magna (water flea)	>100 mg/l	72 h
	Toxicity to algae:	EC_{50}	Desmodesmus subspicatus	>100 mg/l	72 h

Oleic acid	Toxicity to fish:	LC_{50}	Pimephales promelas	205 mg/l	96 h
4-(phenylazo)benzene-1,2-diamine	Toxicity to fish:	LC_{50}	Oryzias latipes	0.3 mg/l	48 hr

Mobility: No data is available on the mixture itself.

Persistence: 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.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal recommendations: Do not discharge into drains, water courses or onto the ground. Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

Hazardous Waste Code /RCRA: Not regulated.

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).

This material is not UN / IATA regulated.

Marine Pollutant: No

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 contains components classified as hazardous under OSHA regulations (29CFR 19410.1200). See Section 2.

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

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

SARA 313: Subject to reporting levels established by SARA Title III, Section 313: None

RCRA CODE: None

Hazardous Air Pollutants (HAPS): None

US State "Right to Know" Laws:

California Proposition 65: None

Other US State "Right To Know" Lists:

The following chemicals are specifically listed by individual states:	2-Ethyl-1,3-hexandiol	(PA, NJ)
	Sorbitan trioleate	(PA, NJ)
	Oleic acid	(PA, NJ)
	4-(phenylazo)benzene-1,2-diamine	(PA, NJ)

International Information:

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

SECTION 16: OTHER INFORMATION

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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

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.