SAFETY DATA SHEET

NOTICE: Judgment may be based on indirect test and technical literature. The OSHA Hazard Communication Standard only requires SDS's and special labeling for materials defined as "HAZARDOUS"; see 29 CFR 1910.1200 (c). This document may be about a product which is NOT hazardous but is provided as information for our customers. See references for information.

SECTION 1. IDENTIFICATION

Product Identifier: Bio-22
Product Use: Ink Remover
Manufactured by: Kor-Chem Inc.
5800 Bucknell Drive
Atlanta, GA 30336

Product Identification # (PIF): 01518
Emergency Telephone #: 1-800-255-3924
General Information #: 404-344-9580
Date Prepared: September 1, 2020

SECTION 2. HAZARD(S) IDENTIFICATION

GHS Hazard Codification



Signal Word: DANGER

Hazard Statement	Category	Code	Hazard Class
Flammable liquid and vapor	4	H227	Flammable Liquid
May be fatal if swallowed and enters airways	1	H304	Aspiration Hazard
Causes skin irritation	2	H315	Skin Irritation
Causes serious eye irritation	2A	H320	Eye Irritation
May cause respiratory irritation	3	H335	STOT: SE, Respiratory Tract Irritation
May cause drowsiness or dizziness	3	H336	STOT, SE; Narcotic effects

Precautionary Measures:

Category	Code	Statement
Prevention	P210	Keep away from heat/sparks/open flames/hot surfaces – No smoking.
	P233	Keep container tightly closed.
	P240	Ground/bond container and receiving equipment.
	P241	Use explosion-proof equipment.
	P242	Use only non-sparking tools.
	P243	Take precautionary measures against static discharge
	P261	Avoid breathing fumes/mists/vapors/sprays.
	P264	Wash thoroughly after handling.
	P271	Use only outdoors or in a well-ventilated area.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response	P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P331	Do NOT induce vomiting.
	P303+P361+P353	IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.
	P352	Wash with soap and water.
	P321	Specific treatments: See Section 4 First Aid Measures.
	P332+P313	If skin irritation occurs: Get medical advice/attention.
	P362	Take off contaminated clothing and wash before reuse.
	P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if easy to do so. Continue rinsing.
	P337+P313	If eye irritation persists: Get medical advice/attention.
	P370+P378	In case of fire: Use foam, dry chemical, carbon dioxide fire extinguishers or water spray for extinction.
Storage	P403+P233+P235	Store in a well-ventilated place. Keep container tightly closed. Keep cool.
	P405	Store locked up.
Disposal	P501	Dispose of contents/container in compliance with all Federal, State/Provincial and local laws and regulations.

Hazards not otherwise classified: Repeated or prolonged exposure may cause dermatitis (drying of skin).

Product VOC: 7.3%
Potential Health Effects:
Eye Contact: Liquid and vapor causes serious eye irritation, including redness, itching, burning and visual disturbances.
Skin Contact: Causes primary skin irritation, including dryness, itching, cracking, burning, redness and swelling.
Inhalation: Vapors irritate nose and throat. Prolonged exposure may cause CNS depression.
Ingestion: May be harmful if swallowed.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS #	Max. %

Dibasic Ester	Mixture	<95
Tetrahydrofurfuryl Alcohol	97-99-4	<10

SECTION 4. FIRST AID MEASURES

Eyes: Flush well with water for at least 15 minutes. Remove any contact lenses. Seek medical attention.
Skin: Wash with soap and water. Remove contaminated clothing and launder before reuse. If irritation persists, seek medical attention.
Inhalation: Move to fresh air. If breathing is difficult, have trained person administer oxygen. If respiration stops, have a trained person administer artificial respiration and call a physician.
Ingestion: Rinse mouth with water. Never give anything by mouth to an unconscious person. DO NOT INDUCE VOMITING. Call a physician immediately.

SECTION 5. FIRE-FIGHTING MEASURES

Flammability: Combustible
Flash Point: 185ºF (85ºC)
Extinguishing Media: Foam, dry chemical, carbon dioxide fire extinguishers, water fog or spray. Do not spray water directly on fire. Use water spray to cool containers.
Specific hazards arising from chemical: Vapors are heavier than air and may travel along the ground to an ignition source. Never use welding or cutting torch on or near drum (even empty) because product can ignite explosively.
Hazardous combustion products: Carbon monoxide and carbon dioxide.
Firefighting protective equipment: Wear a self-contained breathing apparatus with a full face piece operated with appropriate turn-out gear and chemical resistant personal protective equipment.
Sensitivity to static discharge: Electrostatic charge may build up during handling. Grounding equipment is recommended.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment. Eliminate all ignition sources. Ventilate area.
For Small Spills: Spilled material is slippery. Avoid dispersal of material and runoff into soil, waterways, drains and sewers. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste using non-sparking tools. Wash walking surfaces with water to reduce slipping hazard. Dispose of contaminated absorbent material in accordance with local, state and federal regulations.
For Large Spills: Large spills cannot occur due to packaging.

SECTION 7. HANDLING AND STORAGE

Handling: Wear personal protection equipment. Use with adequate ventilation. Do not handle around sources of ignition. Follow US NFPA 30 on safe handling of flammable and combustible liquids. Use proper bonding and grounding during product transfer as described in document NFPA 77. Vapors are heavier than air and may travel along the ground to an ignition source. Never use welding or cutting torch on or near drum (even empty) because product can ignite explosively. Do not premix with other chemicals.
Storage: Keep away from heat, flame, or sunlight. Keep container closed when not in use. Protect from physical damage. Incompatible with strong oxidizing agents, acids, reducing agents and bases.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredient	CAS #	OSHA/PEL	TLV	STEL
Dibasic Ester	Mixture	NE	NE	NE
Tetrahydrofurfuryl Alcohol	97-99-4	NE	NE	NE

Engineering Controls: Provide adequate ventilation. Keep the risk of exposure to a minimum.
Personal protective equipment:
Eye: Safety glasses with side shields or splash proof goggles.
Skin : Chemical resistant gloves
Respirator: Use NIOSH approved protection if vapors are causing irritation.
Clothing: Normal materials handling clothing
Other: Use only in a well ventilated area.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Odor	Cherry	Vapor pressure	>0.1 mmHg
Odor threshold	Not determined	Vapor density (Air = 1)	Not determined
pH	Not applicable (solvent)	Specific gravity (water = 1.0)	1.080 g/ml
Melting point	Not determined	Solubility	Negligible in water
Freezing point	Not determined	Partition coefficient	Not determined
Boiling point	Not determined	Auto-ignition temperature	Not determined
Flash point	185ºF (85ºC)	Decomposition temperature	Not determined
Evaporation rate (n-butyl acetate=1)	>1	Viscosity	Not determined
Flammability	Class III Combustible	VOC by weight	7.3%

SECTION 10. STABILITY AND REACTIVITY

Chemical stability: Stable.
Reactivity: Not reactive under normal conditions.
Hazardous polymerization: Will not occur.
Conditions to avoid: Heat, flame and sparks. Do not mix with other chemicals
Incompatibility with other substances: Avoid strong oxidizing agents, acids, reducing agents and bases.
Hazardous combustion products: Carbon monoxide and carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity:
Oral (LD50 Rat): Not determined
Dermal (LD50 Rabbit): Not determined
Inhalation (LC50 Rat): Not determined
Irritating to eyes and skin.
Chronic Toxicity:
Prolonged exposure may cause CNS depression.

SECTION 12. ECOLOGICAL INFORMATION

Acute Aquatic Effects:
96h LC-50 (fish): Not determined
96h EC-50 (invertebrates): Not determined
48h LC-50 (algae): Not determined
Biodegradability: Not determined
Bioaccumulation: No data available
Mobility: This product is not soluble in water. This product is volatile and may spread in the atmosphere.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal of Wastes: Do not dump into sewers, on the ground or into any waterways. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations.
Contaminated Packaging: Since emptied containers retain product residue, follow label warnings even after container is emptied. Do not cut, drill, grind or weld on or near the container.
RCRA: A waste containing this product may have the RCRA hazardous waste no. D001 (Ignitable) (40 CFR 261.22).

SECTION 14. TRANSPORT INFORMATION

United States DOT:

Container of 119 gallons or less:

Combustible Liquid (49 CFR 173:120(b)(2): This material is not regulated under 49 CFR if in a container of 119 gallon capacity or less for ground transportation. Exception CFR 173.150(f)(2): Combustible liquids. This exception does not apply to transportation by vessel or aircraft.

Container of 120 gallons or more:

UN/ID No.: UN1993
Proper Shipping Name: Flammable liquid, n.o.s., (Tetrafurfuryl Alcohol))
Hazard Class: 3
Packing Group: III

IATA and IMDG:

UN/ID No.: UN1993
Proper Shipping Name: Flammable liquid, n.o.s., (Tetrafurfuryl Alcohol))
Hazard Class: 3
Packing Group: III
Marine Pollutant (IMDG Code): Not listed (49 CFR 172.101).
Transportation in bulk (IMDG - Annex II of MARPOL 73/78 and IBC Code): Not offered in bulk for transport overseas.
IATA: Quantity limitations, passenger = 60L, cargo =220L
IMDG: Location A

SECTION 15. REGULATORY INFORMATION

TSCA: All components of this product are on the TSCA inventory or are exempt from TSCA inventory requirements under 40 CFR 720.30.
SARA Section 302: The components of this product are either not regulated or regulated, but present in negligible concentrations.
SARA Section 311/312:
Immediate (Acute) Health = Yes
Delayed (Chronic) Health = Yes
Fire Hazard = Yes
Reactive Hazard = No
SARA Title 313: This material does not contain any chemical components with known CAS numbers that exceed the De Minimis reporting levels (40 CFR 372).
CERCLA: This product does not have reportable quantity.
United States Right-To-Know: None known.
Proposition 65: This material does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
RCRA: A waste containing this product may have the RCRA hazardous waste no. D001 (Ignitable)(40 CFR 261.22).

SECTION 16. OTHER INFORMATION

Date Prepared: September 1, 2020
Hazard Ratings (HMIS): Health 2, Flammability 2, Reactivity 0 (Scale 0 – 4). Personal Protection Rating to be supplied by user based on use conditions.
Carefully read all instructions on label before handling this product.
Keep out of reach of children.
"FOR INDUSTRIAL USE ONLY"

Abbreviation	Full Name/Explanation
ACGIH	American Conference of Government Industrial Hygienists

CAS	Chemical Abstract Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CNS	Central Nervous System
CFR	Code of Federal Regulations
DOT	Department of Transportation
EC	Effective Concentration
HMIS	Hazardous Material Information System
IARC	International Agency for Research on Cancer
LC	Lethal Concentration
LD	Lethal Dose
NA	Not Applicable
ND	Not Determined
NE	Not Established
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation Recovery Act
SARA	Superfund Amendments and Reauthorization Act
SE	Single Exposure
STEL	Short-Term Exposure Limit
STOT	Specific Target Organ Toxicity
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
VOC	Volatile Organic Compounds

The information contained herein is based on data available to us and is believed to be correct. We make no warranty, however, expressed or implied regarding the accuracy of these data or the results obtained from the use thereof.
Regulatory Standards: DOT TITLE 49, Code of Federal Regulations 172.101: Parts 100 to 177, Revised 10/1/92.
SUPER FUND AMENDMENTS REAUTHORIZATION ACT OF 1986, TITLE III TOXIC SUBSTANCE CONTROL ACT LIST (TSCA)- INGREDIENTS LISTED. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES NATIONAL TOXICOLOGICAL PROGRAM (NTP) REPORT OF CARCINOGENS INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) MONOGRAPHS, OCCUPATIONAL SAFETY & HEALTH REGULATIONS. CODE OF FED. REGS. FOOD & DRUG, 21 PARTS 170 to 199, Revised 4/1/91, 173.310.