

SAFETY DATA SHEET

SECTION 1 — PRODUCT IDENTIFICATION

Product identifier: S.P.I.F. II

Product Number: 1089,1090, 1092 & 1094

Product use: Ink remover for screen printing textiles. **Manufacturer's name and address:** Refer to supplier

Supplier name and address:

ALBATROSS USA INC./EXPERT WORLDWIDE

36-41 36th Street 5439 San Fernando Road West Long Island City, New York Los Angeles, California

United States United States

11106 90039

718-392-6272 818-543-5850

Emergency Telephone #: Chemtrec (Day or Night) 800-424-9300 or 703-527-3887

(For Chemical Emergency: Spill, Leak, Fire, Exposure or Accident)

This MSDS complies with 29CFR 19190.1200 (Hazard Communication Standard) and WHMIS regulations.

IMPORTANT: Read this MSDS before handling and disposing of this product. Pass this information on to employees, customers, and users of this product.

SECTION 2 — HAZARDS IDENTIFICATION





RISK STATEMENTS:

R20/21/22 Harmful by inhalation, in contact with skin, and if swallowed

R36/37/38 Irritating to eyes, respiratory system and skin

R40 Possible risk of irreversible effects

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

SAFETY STATEMENTS:

S9 Keep container in a well-ventilated place

S29 Do not empty into drains

S36/37 Wear suitable protective clothing and gloves

Avoid release to the environment. Refer to special instructions/safety data sheets.

S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or

label

SEE SECTIONS 8, 11 & 12 FOR TOXICOLOGICAL INFORMATION

SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

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<u>MATERIAL</u>	<u>CAS #</u>	EINECS#	<u>WT %</u>
1-Bromopropane	106-94-5	-	60-70
tert-Butyl Acetate	540-88-5	208-760-7	30-40
1, 2 – Epoxybutane	106-88-7	-	0-1

SECTION 4 — FIRST AID MEASURES

EYE CONTACT:

For eyes, flush with plenty of water for 15 minutes & get medical attention.

SKIN CONTACT:

In case of contact with skin immediately remove contaminated clothing. Wash thoroughly with soap & water. Wash contaminated clothing before reuse.

INHALATION:

After high vapour exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR).

SWALLOWING:

Rinse mouth, Do NOT induce vomiting. GET MEDICAL ATTENTION IMMEDIATELY. Do NOT give liquids to an unconscious or convulsing person.

SECTION 5 — FIRE FIGHTING MEASURES

FIRE & EXPLOSION PREVENTIVE MEASURES:

NO open flames, NO sparks, & NO smoking. Above flash point, use a closed system, ventilation, explosion roof electrical equipment, lighting.

EXTINGUISHING MEDIA:

Use dry powder, carbon dioxide

SPECIAL FIRE FIGHTING PROCEDURES:

Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves & rubber boots). Use NIOSH approved positive-pressure self-contained breathing apparatus.

UNUSUAL EXPLOSION AND FIRE PROCEDURES:

Isolate from oxidizers, heat, sparks, electric equipment & open flame. Closed containers may explode if exposed to extreme heat. Applying to hot surfaces requires special precautions. Empty container very hazardous! Continue all label precautions!

SECTION 6 — ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE MEASURES:

Vapors may ignite explosively & spread long distances. Prevent vapour buildup. Keep unprotected personnel way. Ventilate spill area. Remove all ignition sources. Filter respirator for organic vapors.

ENVIRONMENTAL PRECAUTIONS:

Keep from entering storm sewers and ditches which lead to waterways.

CONTAINMENT AND CLEAN-UP MEASURES:

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Stop spill at source. Dike and contain. Absorb remaining liquid in sand or inert absorbent.

SECTION 7 — HANDLING AND STORAGE

HANDLING:

Isolate from oxidizers, heat, sparks, electric equipment & open flame. Use only with adequate ventilation. Avoid breathing of vapour or spray mist. Do not get in eyes, on skin or clothing.

Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse.

Avoid free fall of liquid. Ground containers when transferring. Do not flame cut, saw, drill, braze, or weld. Empty container very hazardous! Continue all label precautions!

Drinking alcohol shortly before, during or after use can cause unwanted effects.

To minimize static discharge when transferring, ensure electrical continuity by bonding and grounding all equipment. Use an inlet line diameter of at least 3.5 inches (8.9 centimeters) with a mazimum flow rate of 1 meter/second.

STORAGE:

Isolate from strong oxidants. Do not store above 49 C/120 F.

Contact with hot surfaces can produce toxic gases.

Keep container tightly closed & upright when not in use to prevent leakage.

SECTION 8 — EXPOSURE CONTROLS AND PERSONAL PROTECTION

<u>MATERIAL</u>	CAS#	EINECS#	TWA(OSHA)	TLV(ACGIH)
1-Bromopropane	106-94-5	-	None Known	10 ppm
tert-Butyl Acetate	540-88-5	208-760-7	200 ppm	200 ppm
Nonvolatile		-	None Known	None Known

This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%

RESPIRATORY EXPOSURE CONTROLS:

A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

VENTILATION:

LOCAL EXHAUST: Necessary MECHANICAL (GENERAL): Acceptable SPECIAL: None OTHER: None

Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent Edition, for details.

PERSONAL PROTECTION:

Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse.

WORK & HYGIENIC PRACTICES:

Provide readily accessible eye wash stations & safety showers. Wash at end of each workshift & before eating, smoking or using the toilet.

Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or Discard contaminated clothing.

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SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Liquid, Water-White

ODOR: Ester

ODOR THRESHOLD:

pH (Neutrality):

Not Available

Not Applicable

MELTING POINT/FREEZING POINT:

Not Available

BOILING RANGE (IBP, 50%, Dry, Point): 97 243 243 C / 208 471 471 F **FLASH POINT (TEST METHOD):** > 93 C / > 200 F (PMCC)

EVAPORATION RATE (n-BUTYL ACETATE = 1): Not Applicable **FLAMMABILITY CLASSIFICATION:** Class III-B

LOWER FLAMMABLE LIMIT IN AIR (% by vol): 5.5

UPPER FLAMMABLE LIMIT IN AIR (% by vol): Not Available

VAPOR PRESSURE (mm of Hg) @ 20 C: 61.5 **VAPOR DENSITY (air = 1):** 4.4

GRAVITY @ 68/68 F / 20/20 C:

SPECIFIC GRAVITY (Water – 1):

POUNDS/GALLON:

9.398
WATER SOLUBILITY:
Negligible
PARTITION COEFFICIENT (n-Octane/Water):
Not Available
AUTO IGNITION TEMPERATURE:
422 C / 793 F
DECOMPOSITION TEMPERATURE:
Not Available

 VOC'S (>0.44 Lbs/Sq In):
 0.0 Vol% / 0.0 g/L / 0.000 Lbs/Gal

 TOTAL VOC'S (TVOC):
 100.0 Vol% / 1127.2 g/L / 9.3 Lbs/Gal

 NONEXEMPT VOC'S (CVOC)*:
 54.2 Vol% / 732.7 g/L / 6.1 Lbs/Gal

 HAZARDOUS AIR POLLUTANTS (HAPS):
 0.0 Wt% / 0.0 g/L / 0.000 Lbs/Gal

NONEXEMPT VOC PARTIAL PRESSURE

(mm of Hg @ 20 C): 55.3

SECTION 10 — REACTIVITY AND STABILITY DATA

STABILITY:

Stable under normal conditions.

CONDITIONS TO AVOID:

Isolate from oxidizers, heat, sparks, electric equipment & open flame.

MATERIALS TO AVOID:

Reacts with strong oxidants, causing fire & explosion hazard.

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide, Carbon Dioxide, Hydrogen Chloride, Phosgene, Hydrogen Bromide, Bromine from burning.

HAZARDOUS POLYMERIZATION:

Will no occur.

^{*} Using California South Coast Air Quality Management District (SCAQME) Rule 443.1.

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SECTION 11 — TOXICOLOGICAL INFORMATION

ACUTE HAZARDS

EYE & SKIN CONTACT:

Primary irritation to skin, defatting, dermatitis

Primary irritation to eyes, redness, tearing, blurred vision

Liquid can cause eye irritation. Wash thoroughly after handling.

INHALATION:

Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious nervous system depression which Can cause death. Vapor harmful. Concentrated vapour in confined areas may be fatal.

SWALLOWING:

Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea. The symptoms of chemical Pneumonitis may not show up for a few days.

SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

CONDITIONS AGGRAVATED

Persons with severe skin, liver or kidney problems should avoid use.

CHRONIC HAZARDS

CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:

This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date, greater or equal to 0.1%.

MAMMALIAN TOXICITY INFORMATION

MATERIAL	CAS#	EINECS #	LOWEST KNOWN LETHAL DOSE DATA
			LOWEST KNOWN LD50 (ORAL)
1, 2-Epoxybutane	106-88-7	-	500 MG/KG (Rats)
			LOWEST KNOWN LC50 (VAPORS)
1, 2-Epoxybutane	106-88-7	-	4000 PPM (Rats)
			LOWEST KNOWN LD50 (SKIN)
1, 2-Epoxybutane	106-88-7	-	2100 mg/kg (Rabbits)

SECTION 12 — ECOLOGICAL INFORMATION

AQUATIC ANIMAL INFORMATION:

No aquatic environmental information is available on this product.

MOBILITY IN SOIL:

This material is a mobile liquid

DEGRADABILITY:

This product is partially biodegradable

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ACCUMULATION:

Bioaccumulation of this product has not been determined

SECTION 13 — DISPOSAL CONSIDERATIONS

Processing, use or contamination may change the waste management options. Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws. If in doubt, contact appropriate agencies.

SECTION 14 — TRANSPORT INFORMATION

DOT SHIPPING NAME: Not Regulated Not Regulated Not Regulated IATA/ICAO: Not Regulated Not Regulated Not Regulated Not Regulated Not Regulated Not Regulated

EMERGENCY RESPONSE GUIDEBOOK NUMBER: None

SECTION 15 — REGULATORY INFORMATION

EPA REGULATION:

SARA SECTION 311/312 HAZARDS: Acute Health

All components of this product are on the TSCA list.

SARA Title III Section 313 Supplier Notification

This product contains the indicaterd <*> toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-To-Know Act of 1986 & of 40 CFR 372. This information must be included in all MSDSs that are copied and distributed for this material.

SARA TITLE III INGREDIENTS CAS # EINECS# WT% (REG. SECTION) RQ(LB)

1, 2-Epoxybutane 106-88-7 - 0-1 (311,312,313,RCRA) 100

CALIFORNIA PROPOSITION 65:

This product contains n-Propyl Bromide which is known to the state of California to cause reproductive toxicity.

INTERNATIONAL REGULATIONS:

The components of this product are listed on the chemical inventories of the following countries: Australia (AICS), Canada (DSL, NDSL), China (IECSC), Europe (EINECS, ELINCS), Japan (METI/CSCL, MHLW/ISHL), South Korea (KECI), New Zealand (NZIoC), Phillipines (PICCS), Switzerland (SWISS), Taiwan (NECSI), USA (SCA).

CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

B3: Combustible Liquid D2B: Irritating to skin / eyes

SECTION 16 — OTHER INFORMATION

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HAZARD RATINGS:

HEALTH: * 2, FLAMMABILITY: 1, PHYSICAL HAZARD: 1 PERSONAL PROTECTON: X = Ask Supervisor - Personal Protection Rating to be supplied by user based on use conditions. This information is intended solely for the use of individuals trained in the HMIS hazard rating systems.

EMPLOYEE TRAINING:

See Section 2 for Risk & Safety Statements. Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.

Prepared by: Albatross USA Inc. **Telephone number:** 718-392-6272 **Preparation Date:** March 5, 2004 **Revision Date:** February 13, 2015

NOTICE:

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

Unless updated, the Safety Data Sheet is valid until 02/13/2018.