



# 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 36<sup>th</sup> Street  
Long Island City, New York  
United States  
11106  
718-392-6272

5439 San Fernando Road West  
Los Angeles, California  
United States  
90039  
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

**DANGER!**



### **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
- S61 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

<u>MATERIAL</u>	<u>CAS #</u>	<u>EINECS#</u>	<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 away. 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:

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 maximum 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>	<u>CAS#</u>	<u>EINECS#</u>	<u>TWA(OSHA)</u>	<u>TLV(ACGIH)</u>
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.

## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

<b>APPEARANCE:</b>	Liquid, Water-White
<b>ODOR:</b>	Ester
<b>ODOR THRESHOLD:</b>	Not Available
<b>pH (Neutrality):</b>	Not Applicable
<b>MELTING POINT/FREEZING POINT:</b>	Not Available
<b>BOILING RANGE (IBP, 50%, Dry, Point):</b>	97 243 243 C / 208 471 471 F
<b>FLASH POINT (TEST METHOD):</b>	> 93 C / > 200 F (PMCC)
<b>EVAPORATION RATE (n-BUTYL ACETATE = 1):</b>	Not Applicable
<b>FLAMMABILITY CLASSIFICATION:</b>	Class III-B
<b>LOWER FLAMMABLE LIMIT IN AIR (% by vol):</b>	5.5
<b>UPPER FLAMMABLE LIMIT IN AIR (% by vol):</b>	Not Available
<b>VAPOR PRESSURE (mm of Hg) @ 20 C:</b>	61.5
<b>VAPOR DENSITY (air = 1):</b>	4.4
<b>GRAVITY @ 68/68 F / 20/20 C:</b>	
<b>SPECIFIC GRAVITY (Water – 1):</b>	1.128
<b>POUNDS/GALLON:</b>	9.398
<b>WATER SOLUBILITY:</b>	Negligible
<b>PARTITION COEFFICIENT (n-Octane/Water):</b>	Not Available
<b>AUTO IGNITION TEMPERATURE:</b>	422 C / 793 F
<b>DECOMPOSITION TEMPERATURE:</b>	Not Available
<b>VOC'S (&gt;0.44 Lbs/Sq In):</b>	0.0 Vol% / 0.0 g/L / 0.000 Lbs/Gal
<b>TOTAL VOC'S (TVOC):</b>	100.0 Vol% / 1127.2 g/L / 9.3 Lbs/Gal
<b>NONEXEMPT VOC'S (CVOC)*:</b>	54.2 Vol% / 732.7 g/L / 6.1 Lbs/Gal
<b>HAZARDOUS AIR POLLUTANTS (HAPS):</b>	0.0 Wt% / 0.0 g/L / 0.000 Lbs/Gal
<b>NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C):</b>	55.3

\* Using California South Coast Air Quality Management District (SCAQME) Rule 443.1.

## 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.

## 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

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

**ACCUMULATION:**

Bioaccumulation of this product has not been determined

<b>SECTION 13 — DISPOSAL CONSIDERATIONS</b>
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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.

<b>SECTION 14 — TRANSPORT INFORMATION</b>
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**DOT SHIPPING NAME:** Not Regulated  
**DRUM LABEL:** Not Regulated  
**IATA/ICAO:** Not Regulated  
**IMO/IMDG:** Not Regulated  
**EMERGENCY RESPONSE GUIDEBOOK NUMBER:** None

<b>SECTION 15 — REGULATORY INFORMATION</b>
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**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 indicated <\*> 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.

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

<b>SECTION 16 — OTHER INFORMATION</b>
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**HAZARD RATINGS:**

HEALTH: \* 2, FLAMMABILITY: 1, PHYSICAL HAZARD: 1 PERSONAL PROTECTON: X  
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.