



# SAFETY DATA SHEET

## SECTION 1 — PRODUCT IDENTIFICATION

**Product identifier:** SPIF II Cured Ink Remover (revised)

**Product Number:** 1089R, 1090R, 1092R & 1094R

**Product use:** Spot cleaning of apparel and 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

(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 — HAZARDOUS IDENTIFICATION

Application of the classification rules in GHS:

### PHYSICAL HAZARDS:

Flammable liquid:

Not Classified

Self-Reactive Substances and Mixtures:

Classification not possible.

Corrosive to metals:

Classification not possible.

### HEALTH HAZARDS:

Acute toxicity (oral)

Not Classified

Acute toxicity (inhalation)

Not Classified

Skin corrosion and irritation

Category 2

Serious eye damage and eye irritation

Category 2A

Germ cell mutagenicity

Classification not possible.

Carcinogenicity

Classification not possible.

Reproductive toxicity

Classification not possible.

Specific target organ systemic toxicity after single exposure:

Category 1

Category 2

Category 3

Specific target organ systemic toxicity after repeated exposure:

Category 2

Aspiration toxicity:

Classification not possible.

### HAZARDOUS TO THE AQUEOUS ENVIRONMENT:

Acute

Not Classified

Chronic

Not Classified

**Signal Word:**

**DANGER!**

**HAZARD STATEMENTS:**

- H315 Causes skin irritation
- H319 Causes serious eye irritation.
- H370 Causes damage to (liver) (central nervous system)
- H371 May cause damage to organs (heart) (respiratory organ)
- H336 May cause drowsiness or dizziness
- H373 May cause damage to respiratory organ through prolonged or repeated exposure.

**PICTOGRAMS:****PRECAUTIONARY STATEMENTS:**

- P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves and eye / face protection.
- P233 Keep container tightly closed.
- P243 Take precautionary measures against static discharge.
- P273 Avoid release to the environment
- P280 Wear protective gloves and eye / face protection.

**RESPONSE:**

- P302+P352: IF ON SKIN: Wash with plenty of soap and water.
- P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P308+P311 If exposed or concerned: Call a POISON CENTER.
- P312: Call a POISON CENTER/doctor if you feel unwell.
- P332+P313: If skin irritation occurs: Get medical advice/attention.
- P337+P313: If eye irritation persists: Get medical advice/attention.
- P362+P364: Take off contaminated clothing and wash it before reuse.
- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P370 + P378: In case of fire: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish.

**STORAGE/DISPOSAL**

- P391 Collect spillage.
- P403 + P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.
- P501 Dispose of contents and container in accordance with local regulation.

**OTHER INFORMATION:**

- Emergency overview
- Inhalation of high concentrations of vapor may cause heart irregularities, unconsciousness or death.

**POTENTIAL HEALTH HAZARDS:**

- Inhalation of vapor may cause coughing, dizziness, fullness, drowsiness, and headache.
- Inhalation of higher concentrations of vapor is harmful and may cause heart irregularities, central

nervous system depression, narcosis, unconsciousness, respiratory failure or death.  
Intentional misuse can be fatal. Vapor reduces oxygen available for breathing and is heavier than air.

### SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

<u>MATERIAL</u>	<u>CAS #</u>	<u>EINECS #</u>	<u>WT %</u>
1,2-trans-Dichloroethylene	156-60-5	-	90-100
1,1,2,2-Tetrafluoroethyl-2, 2,2-Trifluoroethyl ether	406-78-0	-	1-10

### SECTION 4 — FIRST AID MEASURES

#### INHALATION:

Remove the victim from the contamination immediately to fresh air and keep the victim warm and quiet. Obtain medical attention immediately.

If breathing is weak, irregular or has stopped, loosen his collar and belt and administer artificial respiration.

#### SKIN CONTACT:

Remove all contaminated clothing, shoes and socks from the affected areas as quickly as possible, cutting them off if necessary. Wash the affected area with plenty of water using a mild soap or a detergent for skin. If irritation persists, obtain medical attention immediately.

#### EYE CONTACT:

Immediately flush eyes with running water at least 15 minutes. Hold eyelids open during flushing. If irritation persists, repeat flushing. Obtain medical attention immediately.

#### INGESTION:

DO NOT induce vomiting. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomits. Keep an unconscious person in the lateral position in the transportation. Obtain medical attention immediately.

#### NOTE TO PHYSICIAN:

For ingestion, consider gastric lavage. Consider oxygen.

### 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-proof equipment, lighting.

#### EXTINGUISHING MEDIA:

Use CO2 or dry powder foam

#### 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.

#### HAZARDOUS COMBUSTION PRODUCT OR GASES:

Containers may rupture under fire conditions. If involved in a fire or if overheated, there is a risk of generation of toxic degradation products such as hydrogen fluoride, carbonyl fluoride, carbon monoxide, and carbon dioxide.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS:**

Self-contained breathing apparatus (SCBA) is required if drums rupture and contents are spilled under fire conditions.

**ADDITIONAL INFORMATION:**

Move container from fire areas if it can be done without risk. Cool containers with water spray. Fire residues and contaminated firefighting water must be disposed in accordance with the local regulations.

**SECTION 6 — ACCIDENTAL RELEASE MEASURES**

In case of leakage, there is a risk of asphyxiation, evacuate area immediately. Do not try to wipe (mop) up recklessly. Evacuate non-essential personnel to prevent secondary disaster. Cleaning work in the room, there is a risk of asphyxiation and high concentration gas inhalation. Perform the work with mask under the adequate ventilation such as open the window and local ventilation running. Wear air respirator whenever you cannot have adequate ventilation.

**PERSONAL PRECAUTIONS:** Ensure adequate ventilation. Use personal respiratory protection, impermeable gloves, chemical splash goggles and protective clothing.

**ENVIRONMENTAL PRECAUTIONS:** Collect contaminate water/firefighting water separately. Do not wash into shower or waterway.

**METHODS FOR CLEANING UP/TAKING UP:** Take up with absorbent material (e.g. sand, general-purposes binder). Collect an absorbent material and transfer to steel drums or recovery/disposal drums.

**ADDITIONAL INFORMATION:** Do not allow product to contact open flame or electrical heating elements. Information for safe handling in section 7. Information for disposal in section 13.

**SECTION 7 — HANDLING AND STORAGE****HANDLING:**

Use with sufficient ventilation to keep employee exposure below recommended limits. Provide adequate ventilation for storage, handling, and use, especially for enclosed or low spaces. Avoid contact of liquid with eyes and prolonged skin exposure. Do not allow product to contact open flame or electrical heating elements because dangerous decomposition products such as hydrogen fluoride may form.

**STORAGE:**

Avoid placing sealed containers under direct sunlight, but store them in a well-ventilated areas, at room temperature. Don't store near heat, sparks or open flames.

**SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION**

Ingredients with occupation exposure limits to be monitored:

Ingredient name: trans-1,2-Dichloroethylene.

OSHA TWA: N/E

ACGIH TWA: 200 PPM

NIOSH recommended TWA 10 hour(s): N/E

Ingredient name: 1,1,2,2-Tetrafluoroethyl-2,2,2-trifluoroethyl ether

AEL\*: 50 PPM (8H-TWA)

\*AEL is the Acceptable Exposure Limit set by Asahi Glass Co., Ltd.

EEL\*: 150 PPM (TIME LIMIT 15 MIN.), 500PPM (Ceiling concentration.)

\*EEL is the Emergency Exposure Limit set by Asahi Glass Co., Ltd.

Exposure Limit recommended by US EPA

75ppm (8hr-TWA)

150ppm (Ceiling)

Emergency Exposure Limits (EELs) are to be used for short-term emergency exposure control. They are concentrations of short periods, which should not result in permanent adverse health effects or interfere with escape. They should not be confused with ACGIH TLV-TWA or TLV STEL values that are designed for repeated exposure guidelines. For the use of 1,1,2,2-Tetrafluoroethyl-2, 2,2-trifluoroethyl ether, daily exposure limits such as AEL as well as EEL are to be followed. The EEL for 1,1,2,2-Tetrafluoroethyl-2, 2,2-trifluoroethyl ether is needed to avoid anaesthetic effects, which could prevent self-rescue. If an EEL is exceeded for specified duration, evacuation, sheltering in place or other mitigation steps should be taken.

Exposure controls:

Occupational Exposure Controls:

Engineering Controls:

Use process enclosures, local exhaust ventilation or other engineering controls to maintain airborne levels below Exposure Guidelines. An eyewash and safety shower should be readily accessible.

Personal Protection:

Respiratory Protection:

Use a NIOSH/MSHA full face respirator with organic vapor cartridge(s) when the airborne concentration is less than 1000 ppm. In an emergency or when airborne concentration is greater than 1000 ppm, use positive pressure self-contained breathing apparatus (SCBA).

Eye Protection:

Use chemical safety goggles when there is potential for eye contact.

Skin protection: Impervious gloves.

Other protection: If needed, protective clothing and rubber boots should be used.

## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance and Odor:</b>	Clear, colorless liquid with pleasant odor
<b>Boiling Point:</b>	44 C
<b>Flashpoint TCC °C:</b>	No true flash detected up to 110°C
<b>Flammable Limits:</b>	N/D
<b>Auto-Ignition Temperature</b>	N/D
<b>Specific Gravity (H<sub>2</sub>O =1):</b>	> 1
<b>Vapor Pressure (25 deg C):</b>	N/D
<b>Melting Point:</b>	N/D
<b>Vapor Density (Air = 1):</b>	> 1
<b>Evaporation Rate (Ethyl ether =1):</b>	0.92
<b>Solubility in Water:</b>	N/D

## SECTION 10 — STABILITY AND REACTIVITY

**Conditions to avoid:**

Avoid open flames and high temperature and active metals. But alkaline or acid may cause slightly decomposition.

**Stability:** Stable

Reacts with strong oxidants, causing fire & explosion hazard.

**Materials to avoid (Incompatibilities):**

Exposure to alkalis, sulfuric acid, or copper and its alloys produces explosive or spontaneously flammable, chloroacetylene. Avoid amines, aluminium and its alloys, and other reducing agents such as sodium, magnesium and zinc. A fire or explosion hazard also exists when exposed to strong oxidizing agents, ozone, or nitrogen tetroxide. Reacts with rubber, plastics and coatings (causes swelling).

**Hazardous decomposition products:**

Hydrogen chloride gas, carbon monoxide, hydrogen fluoride gas.

## SECTION 11 — TOXICOLOGICAL INFORMATION

**Acute toxicity:****Trans-1,2-Dichloroethylene**

Oral LD50 (rat): 1,392 mg/kg

Dermal LD50 (rabbit): 5,000 mg/kg

**1,1,2,2-Tetrafluoroethyl-2,2,2-trifluoroethyl ether**

Oral LD50 (rat): >2,000 mg/kg

Dermal LD50 (rat): > 2,000 mg/kg

Particles/mist LC50, inhalation LD50 (rate) > 24.8 mg/L (3,010 ppm)

## SECTION 12 — ECOLOGICAL INFORMATION

**FISH TOXICITY:**

**Trans- 1,2-Dichloroethylene:** LC50(96hr)(bluegill): 135mg/L

If released to the soil, the material should leach into the groundwater. It will be lost from the water primarily by volatilization (half-life is 3 hours in a model river). Biodegradation, absorption to sediment, and bioconcentration (BCF:22) in aquatic organisms should not be significant. If released to the atmosphere, it will be lost by reaction with hydroxyl radicals (half-life is 3.6 days) or lost to rain, since it is water soluble.

**1,1,2,2- Tetrafluoroethyl-2,2,2-trifluoroethyl ether:** LC50(96hr)(Carp):>76mg/L

The test which examined by saturated aqueous solution of 1,1,2,2-Tetrafluoroethyl-2, 2,2-trifluoroethyl either did not reach the Lethal Concentration, 50%.

## SECTION 13 — DISPOSAL CONSIDERATIONS

Contaminated sawdust, vermiculite or porous surface must be disposed of in a permitted hazardous waste management facility. Recovered liquids may be incinerated or must be treated in a permitted hazardous waste management facility. Care must be taken when using of disposing of chemical materials and/or their containers to prevent environmental contamination.

Company with federal, state, local regulations. Do not dump this product into sewers, on the ground or into any body of water.

<b>SECTION 14 — TRANSPORTATION INFORMATION</b>
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**UN NO.;** N/A  
**DOT SHIPPING NAME:** N/A  
**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.

SARA TITLE III INGREDIENTS	CAS #	EINECS #	WT% (REG.SECTION)	RQ(LBS)
None				

**CALIFORNIA PROPOSITION 65:**

None

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

HEALTH: \* 2    FLAMMABILITY: 1    PHYSICAL HAZARD: 0    PERSONAL PROTECTION: X

**HAZARD RATING KEY:**

4 = Extreme, 3 = High, 2 = Moderate, 1 = Slight, 0 = Insignificant, \* = Chronic Health Hazard.

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.

**NOTICE**

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to 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 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 10/30/2020.

**Prepared by:** Albatross USA Inc.

**Telephone number:** 718-392-6272

**Preparation Date:** October 30, 2017