

**AIRCO FLUSH**  
**Material Safety Data Sheet**  
**EU**

**Section 1 – Product and Company Information**

Product Name: AIRCO BIOFLUSH  
Product Codes: AC2141  
Manufactured By: PRIMALEC  
Unit 1 West Kingsdown Ind Estate, West Kingsdown, Kent TN15 6EL  
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**Section 2 – Composition and Information on Ingredients**

COMPONENTS	CAS NO.	PEL/TLV-SOURCE
Dipropylene Glycol Methyl Ether	34590-94-8	100 ppm TWA, 150 ppm STEL (OSHA, ACGIH)
Propylene Glycol Butyl Ether	5131-66-8	Not Established
Non-ionic detergent <1%		

All components of this product are listed on the U.S. TSCA inventory or are exempt from TSCA inventory requirements.

**Section 3 – Hazard Identification**

Carcinogenicity: Not listed for any component at 0.1% or greater  
Primary Route(s) of Entry: Skin contact, absorption, eye contact, inhalation

Skin contact: Repeated exposure may cause skin irritation

Eye contact: May cause moderate eye irritation or corneal injury. Vapors may irritate eyes.

Inhalation: Brief inhalation exposure not likely to cause adverse effects. Higher levels may cause narcosis

**Section 4 – First Aid Procedures**

- |              |   |
|--------------|---|
| Skin Contact | • Thoroughly wash the exposed area with soap and water. Remove contaminated clothing. Launder contaminated clothing before re-use.  |
| Eye Contact  | • Flush with large amounts of water, lifting upper and lower lids occasionally. Get medical attention.  |
| Ingestion    | • Immediately drink a large amount of water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Get medical attention immediately.  |
| Inhalation   | • If affected, remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet, and get medical attention. |

**Section 5 – Fire Fighting Measures**

Flash Point (Method Used): 71°C (160°F) (ASTM D-93)

Extinguishing Media: Use alcohol foam, carbon dioxide or dry chemical extinguishing media

Special Fire Fighting Procedures: Wear self-contained breathing apparatus in the positive pressure demand mode when fighting fires

Unusual Fire & Explosion Hazards: Avoid all sources of ignition – heat, sparks, open flame. Vapors are heavier than air.

## **Section 6– Accidental Release Measures**

### **Steps to be taken in case material is released or spilled:**

Small Spill or Large Spill: Spill should be contained and placed in suitable containers for disposal

**Waste Disposal Method:** Do not dispose to sewers, on the ground, or into any body of water. All disposal methods must be in compliance with local laws and regulations. Waste characterizations and compliance are the responsibility of the waste generator.

For unused and uncontaminated product, the preferred options include sending to a licensed, permitted recycler, reclaimer, incinerator or other thermal destruction device.

## **Section 7 – Handling and Storage**

Respiratory Protection: If work place exposure limit(s) of product or any component is exceeded (see section 2), a Niosh/MSHA approved air supplied respirator is advised in absence of proper environmental control engineering, or administrative controls should be implemented to reduce exposure.

Ventilation: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(S).

## **Section 8 – Exposure Controls/Personal Protection**

Eye Protection: Chemical splash goggles in compliance with OSHA regulations are advised. However, OSHA regulations also permit other type safety glasses (consult your safety equipment supplier).

Protective Gloves: Wear resistant gloves such as Neoprene.

Other Protective Equipment: To prevent repeated or prolonged skin contact, wear impervious clothing or boots.

## **Section 9 – Physical and Chemical Properties**

Boiling Point: 171°C (340°F)

Specific Gravity (H<sub>2</sub>O = 1): 0.91-0.92

% Volatile Organic Compounds: 99+

Freeze Point: <-73°C (<-100°F)

Vapor Density (Air=1): N/D

% Volatile (By Weight): 99+

Solubility of Water in Product: >100g/100g Product

Appearance / Odor: Clear colorless liquid, Slight Ether Odor

pH: Not Applicable, Non Aqueous

## **Section 10 – Stability and Reactivity**

Stability: Stable

Hazardous Polymerization: Cannot Occur

Incompatibility: Avoid contact with strong oxidizing agents

Hazardous Decomposition or Byproducts: Under Fire Conditions: Fumes, smoke, carbon dioxide, carbon monoxide, and other decomposition products

## **Section 11 – Toxicological Information**

See section 3 for health hazard information

## **Section 12 – Ecological Information**

Propylene glycol butyl ether is readily biodegradable and is practically non-toxic to aquatic organisms.

Dipropylene glycol methyl ether is not considered a hazardous waste.

### **Section 13 – Ecological Information**

See section 6. Dispose of product according to local regulations

### **Section 14 – Transport Information**

DOT (49 CFR 172): Not Regulated  
Poison Constituent: None

Bill of Lading: Cleaning compound IT 48580 S3  
Marine Pollutant: No

### **Section 15 – Transport Information**

Label requirement: St. Andrew's cross with caption "irritating"

Warning Statements:

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

S2 – keep out of reach of children

S36/37/39 – wear suitable protective clothing, gloves and eye/face protection

S24/25 – avoid contact with skin and eyes

S46 – if swallowed, seek medical advice immediately and show this container or label.

### **Section 16 – Other Information**

While Primalec believes the data set forth herein are accurate as of the date hereof, Primalec makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data are offered solely for your consideration, investigation, and verification.

Date: 9 September, 2002

Airco BioFlush is the new single treatment internal coil cleaner and system flush from Primalec.

It is non-hazardous, non-flammable, non-toxic, bio-degradable, and says "Yes!" to a safer environment.

After a compressor burnout, or before a full system retrofit, AC BioFlush will neutralise and remove organic and mineral acids, eliminating moisture, gum, soot, sludge, grease, tar, particulate, debris, and carbon deposits. A/C BioFlush contains no hazardous ingredients, and is compatible with all refrigerants and refrigerant oils. And, as long as you leave no more than 8% of the compressor oil by volume, performance is not affected. A/C BioFlush can even be used to clean and chemically stabilise recovery and recycling equipment.

Advantages:

- Non-Hazardous transport classification
- Non-Flammable - Flash point 70 deg C
- Bio-Degradable, non-polluting
- Low odour
- Compatible with all refrigerants and refrigerant oils
- Oil soluble surfactants thoroughly contact and clean internal surfaces
- Neutralises & removes organic and mineral solvents
- Absorbs its own weight in water
- Cleans & chemically stabilises recovery and recycling equipment
- Small residues will not harm the system
- Re-usable when properly filtered
- Contains special agents to combat acid formed in a compressor burnout

In order to achieve all these advantages, the following should be borne in mind.

- Flushing equipment should be of good grade metal or ceramic
- Diaphragms and seals should be Teflon or Teflon coated Polyethylene, Polypropylene, or other inert material
- Hoses must be of Teflon coated PVC or similar
- A slower evaporation rate may be experienced compared to less benign products.