

Material Safety Data Sheet

Take Off RF

Section 1. Chemical Product and Company Identification

Product Name	Take Off RF		
Product Number	BL0812		
Product Use	Very Aggressive No-Rinse Stripper		
Manufacturer/Supplier	Amrep, Inc. 990 Industrial Park Drive Marietta, GA 30062		
Phone Number	(770) 422-2071 (Mon-Fri/ 8am- 5pm ET)		
D.O.T. Emergency Phone:	CHEM TEL (800) 255-3924 INTERNATIONAL: + 01-813-248-0584		
Date of Preparation	April 27 2009	Revision Number	1.0

Section 2. Hazards Identification

Emergency overview This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

DANGER!

Keep out of reach of children.

Keep container closed during storage.

Potential Acute Health Effects Corrosive to skin and eyes on contact. Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath.

Routes of Entry Absorbed through skin. Eye contact. Inhalation. Ingestion.

Eyes Corrosive to eyes on contact. Eye contact can result in corneal damage or blindness.

Skin Corrosive to skin and eyes on contact. Tissue Destruction Possible. Skin contact may produce burns.

Inhalation The product is a severe irritant for lungs and respiratory tract. Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract.

Ingestion Harmful if swallowed. Burns to mouth, throat and stomach. May be fatal if swallowed.

Medical conditions aggravated by exposure: May aggravate existing respiratory conditions such as asthma. Severe over exposure may cause nervous system damage and kidney damage. Repeated or prolonged exposure to the substance may produce liver damage, blood disorders.

Potential Chronic Health Effects May aggravate existing respiratory conditions such as asthma. Severe over exposure may cause nervous system damage and kidney damage. Repeated or prolonged exposure to the substance may produce liver damage, blood disorders.

Carcinogenic Effects Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

Target organs

Environmental effects

Section 3. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC ₅₀ /LD ₅₀
2-Butoxyethanol	111-76-2	<21	TWA: 20 (ppm) from ACGIH (TLV) [United States] TWA: 50 (ppm) from OSHA (PEL) [United States]	ORAL (LD50): Acute: 1746 mg/kg [Rat].
Potassium Hydroxide	1310-58-3	<10	Not available.	Not available.
Sodium Xylene Sulfonate	1300-72-7	<7	Not available.	ORAL (LD50): Acute: 650 mg/kg [Rat]. 5939 mg/kg [Mouse].
Monoethanolamine	141-43-5	<5	TWA: 3 (ppm) TWA: 6 (ppm) from OSHA (PEL) [United States] STEL: 6 (ppm)	Not available.

Section 4. First Aid Measures

Eye Contact	Avoid contact with eyes. Call a poison control center or doctor immediately for treatment advice. Hold eye open and rinse slowly and thoroughly with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
Skin Contact	Rinse skin immediately with plenty of water for 15 to 20 minutes.
Inhalation	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration., preferably mouth to mouth if possible.
Ingestion	Call a poison control center immediately for treatment advice. Have person sip a glass of water if able to swallow. Do NOT induce vomiting unless instructed to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
General Advice	In case of Accident or if you feel unwell, seek medical advice immediately (show label or MSDS where possible).
Notes to Physician	

Section 5. Fire Fighting Measures

Flammability	Non-flammable.
Fire Fighting Media and Instructions	Non-flammable substance.
Products of Combustion	Not available.
Special Remarks on Fire Hazards	No additional remark.
Special Remarks on Explosion Hazards	
Sensitivity to Mechanical Impact	N/A
Sensitivity to Static Discharge	N/A
Protection of Fire Fighters	See special remarks on Fire Hazards

Section 6. Accidental Release Measures

Personal Precautions	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Methods for Containment	Corrosive liquid. Do not touch damaged container or spilled material. Isolate the area, do not attempt to clean-up spill, notify your manager for additional instructions.
Environmental precautions	See Methods for Containment
Methods for Clean Up	See Methods for Containment

Section 7. Handling and Storage

Precautions	After handling, always wash hands thoroughly with soap and water. Do not breathe gas/fumes/ vapor/spray. Do not ingest. Good general ventilation should be sufficient to control airborne levels.
Incompatibility	acids , oxidizing materials, metals
Storage	Corrosive materials should be stored in a separate safety storage cabinet or room. Handle and open container with care Keep out of the reach of children. Not for use or storage in or around the home.

Keep out of reach of children.
Keep container closed during storage.

Section 8. Exposure Controls/Personal Protection

Engineering Controls

Personal Protection

Good general ventilation should be sufficient to control airborne levels.

Eyes

Splash goggles.

Body

Wear overalls or long sleeved shirt and long trousers, nitrile rubber or neoprene gloves, rubber boots.

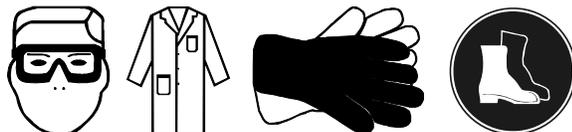
Respiratory

Wear appropriate respirator when ventilation is inadequate. Be sure to use a MSHA/NIOSH approved respirator or equivalent.

Hands

Gloves (impervious).

Protective Clothing (Pictograms)



Exposure Limits

2-Butoxyethanol

TWA: 25 (ppm)

TWA: 50 (ppm) from OSHA (PEL)

Monoethanolamine

TWA: 3 (ppm)

TWA: 6 (ppm) from OSHA (PEL)

STEL: 6 (ppm)

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid. (Liquid.)	Odor	Characteristic.
Molecular Weight	Not applicable.	Color	Colorless.
pH	13.5 to 14 [Basic.]		
Boiling/Condensation Point	214°F initial		
Melting/Freezing Point	Not available.		

Critical Temperature	Not available.
Instability Temperature	Not available.
Specific Gravity	1.04 (Water = 1)
Vapor Pressure	20mm Hg @ 68°F
Vapor Density	>1 (Air = 1)
Volatility	90
VOC	Not available.
Evaporation Rate	<1 compared to Water
Dispersion Properties	See solubility in water.
Solubility	Easily soluble in cold water.
The Product is:	May be combustible at high temperature.
Auto-ignition Temperature	Not available.
Flash Points	Not available.
Flammable Limits	Not available.
Fire Hazards in Presence of Various Substances	Non-flammable.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Incompatibility with Various Substances	acids , oxidizing materials, metals
Hazardous Decomposition Products	Will not occur.

Section 11. Toxicological Information

Routes of Entry	
Toxicity to Animals	Absorbed through skin. Eye contact. Inhalation. Ingestion.
Acute Effects on Humans	WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 1746 mg/kg [Rat]. (2-Butoxyethanol). Acute toxicity of the gas (LC50): 926 ppm 4 hour(s) [Mouse]. (2-Butoxyethanol).
Eyes	Corrosive to eyes on contact. Eye contact can result in corneal damage or blindness.
Skin	Corrosive to skin and eyes on contact. Tissue Destruction Possible. Skin contact may produce burns.
Inhalation	The product is a severe irritant for lungs and respiratory tract. Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract.
Ingestion	Harmful if swallowed. Burns to mouth, throat and stomach. May be fatal if swallowed.
Chronic Effects on Humans	May aggravate existing respiratory conditions such as asthma. Severe over exposure may cause nervous system damage and kidney damage. Repeated or prolonged exposure to the substance may produce liver damage, blood disorders.
Special Remarks on Toxicity to Animals	No additional remark.
Special Remarks on Chronic Effects on Humans	No additional remark.

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	Not available.
Special Remarks on the Products of Biodegradation	No additional remark.

Section 13. Disposal Considerations

Waste Information	Any method in accordance with applicable laws.
Waste Stream	Not available.

Section 14. Transport Information

**DOT (U.S.A)
(Pictograms)**



TDG Classification

8



PIN UN, Proper Shipping Name, PG Shipping name: Corrosive liquids n.o.s. UNNA: UN1760 PG: II

Maritime Transportation Not available.

Special Provisions for Transport Not available.

Section 15. Other Regulatory Information and Pictograms

Regulatory Lists	No products were found.	
Other Regulations	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).	
Other Classifications	HCS (U.S.A.)	HCS CLASS: Corrosive liquid.
	USA Regulatory Lists	This product does NOT contain components that are known to the state of California to Cause Cancer or Reproductive Harm at or above California Prop 65 No Observable Effect Level (NOEL) (Safe Harbor Level).

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: 2-Butoxyethanol: immediate health hazard, delayed health hazard; Potassium Hydroxide: immediate health hazard
SARA 313 toxic chemical notification and release reporting: 2-Butoxyethanol

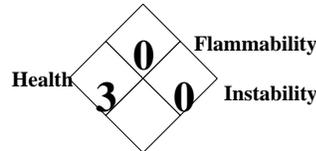
DSD (EEC) R35- Causes severe burns.

International Regulations Lists No products were found.

Hazardous Material Information System (U.S.A.)

Health	*	3
Flammability		0
Physical Hazard		0

National Fire Protection Association (U.S.A.)



Specific Hazard



WHMIS (Classification) E D-1B

The Hazard Ranking systems presented on this MSDS provide only a quick reference for hazard information. The ENTIRE MSDS must be consulted to determine any specific hazards, First Aid measures, and PPE associated with this product.

Section 16. Other Information

Expiry date 3 (Three Years) from the date of preparation indicated in Section 1

Validated by CRushton on 4/27/2009.

Verified by CRushton.

Printed 4/27/2009.

Information Contact **Amrep, Inc.**
990 Industrial Park Drive
Marietta, GA 30062

Notice to Reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Validated on 4/27/2009.

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