



MATERIAL SAFETY DATA SHEET

SECTION 1 — CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product identifier: Albatross Haze-Free Ghost & Haze Remover

Product Number: 4042, 4043 & 4044

Product Code: None

Synonyms: None

CAS Number: Blend

Manufacturer's name and address: Refer to supplier

Supplier name and address:

ALBATROSS USA INC./EXPERT WORLDWIDE

36-41 36th 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)

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

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

CONTAINING: HAZARDOUS AND/OR REGULATED COMPONENTS

<u>Chemical Name</u>	<u>Amount</u>	<u>CAS Number</u>	<u>Hazardous</u>	<u>OSHA PEL (ppm)</u>	<u>ACGIH TLV (ppm)</u>
N-Methyl Pyrrolidone	20.5%	872-50-4	Yes	NE	NE
Glycol Ether DB	23%	112-34-5	Yes	NE	NE
Glycol Ether EB	17.5%	111-76-2	Yes	50 ppm (Skin)	20 ppm (Skin)
Glycol Ether EPH	32%	122-99-6	Yes	NE	NE
Caustic Potash, 45%	7%	1310-58-3	Yes	2 mg/m ³	2 mg/m ³
DYELiquidOrange Color	<1%	NE	No	NE	NE

COMPOSITION COMMENT: --

***California Prop 65:** This product does NOT contain an ingredient(s), above the safe harbour limits, which are known to the state of California to cause cancer, birth defects, or other reproductive harm.

HAZARDS DISCLOSURE: This product contains known hazardous materials in reportable levels as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200 except as listed above. As defined under Sara 311 and 312, this product contains known hazardous materials.

SECTION 3 — HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING! CAUSES SEVERE EYE IRRITATION. MAY BE HARMFUL IF SWALLOWED OR INHALED. MAY AFFECT CENTRAL NERVOUS SYSTEM. MAY CAUSE IRRITATION TO SKIN AND RESPIRATORY TRACT. COMBUSTIBLE LIQUID AND VAPOR.

HMIS/NFPA Rating: See Section 16
POTENTIAL HEALTH EFFECTS

ROUTES OF ENTRY: Skin contact. Eye contact. Inhalation. Ingestion.

TARGET ORGANS: No information found.

INHALATION: May cause irritation to the respiratory tract. Symptoms may include coughing, sore throat, labored breathing, and chest pain. May be absorbed into the bloodstream with symptoms similar to ingestion.

INGESTION: Large oral doses may cause irritation to the gastrointestinal tract. Ingestion may cause signs of intoxication, such as nausea, headache, incoordination, dizziness, drowsiness, and slurred speech depending on the amount ingested.

SKIN CONTACT: Brief contact is not irritating. Prolonged skin contact causes mild to moderate local redness and swelling. Can be absorbed through the skin with prolonged and widespread contact.

EYE CONTACT: Causes irritation, redness, and pain.

CHRONIC EXPOSURE: Small, repeated exposures of this material are generally more toxic than single, large exposures. Chronic exposures may produce central nervous system and kidney effects.

AGGRAVATION OF PRE-EXISTING CONDITIONS: No information found.

SECTION 4 — FIRST AID MEASURES

INHALATION FIRST AID: If a respiratory problem develops from vapors, remove victim to fresh air and provide oxygen if breathing is difficult. Get medical attention. If the victim has difficulty breathing or tightness of the chest, is dizzy, vomiting or unresponsive, give 100% oxygen with rescue breathing or CPR as required and transport to the nearest medical facility.

SKIN CONTACT FIRST AID: Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

EYE CONTACT FIRST AID: If contact with eyes, check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

INGESTION FIRST AID: Do not induce vomiting. Do not give anything by mouth to an unconscious person. Call a physician immediately.

STATEMENT OF PRACTICAL TREATMENT: Always have plenty of water available for first aid. Get medical attention if any symptoms develop or persist.

SECTION 5 — FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES: Combustible Liquid!

AUTO IGNITION TEMPERATURE: >204°C (399°F)

FLASH POINT: >78°C (172°F) CC

FLAMMABLE LIMITS IN AIR, % by Volume: lel: NE; uel: NE

EXTINGUISHING MEDIA: Dry chemical, alcohol foam or carbon dioxide. Do not use a solid stream of water, since the stream will scatter and spread the fire. Water spray may be used to keep fire exposed containers cool, dilute spills to non-flammable mixtures, protect personnel attempting to stop leak and disperse vapors.

FIRE & EXPLOSION HAZARDS: Above flash point, vapour-air mixtures are explosive within flammable limits noted above.

SPECIAL INFORMATION: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Do not approach containers suspected to be hot.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e.g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802. Follow applicable OSHA regulations (29 CFR 1910,120).

SECTION 7 — HANDLING AND STORAGE

RECOMMENDED STORAGE CONDITIONS: Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Protect storage area from exposure to external fires. After this container has been emptied, it may contain explosive vapors; observe all warnings and precautions listed for the product. Do not cut, or weld on or near this container. Protect storage area and processing vessels from high energy projectiles by a suitable barricade. Separate from flammables and sensitizers. Do not reuse or dispose of empty containers until they have been rinsed with water. DO NOT enter confined spaces until atmosphere has been checked.

SHELF LIFE: See Label on packaging

HANDLING (PERSONNEL): Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter

confined spaces until atmosphere has been checked. Avoid smoking, bare lights, heat or ignition sources. When handling, DO NOT eat, drink or smoke. Vapor may ignite on pumping or pouring due to static electricity. Ground and secure metal containers when dispensing or pouring product. Use spark-free tools when handling. Avoid contact with incompatible materials. Keep containers securely sealed. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Use good occupational work practices. Observe manufacturer's storing and handling recommendations. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

AIRBORNE EXPOSURE LIMITS: See Section 2 above.

N-Methyl Pyrrolidone:

- OSHA Permissible Exposure Limit (PEL): None Established ppm (TWA)
- ACGIH Threshold Limit Value (TLV): None Established ppm (TWA)

Glycol Ether DB:

- OSHA Permissible Exposure Limit (PEL): None Established ppm (TWA)
- ACGIH Threshold Limit Value (TLV): None Established ppm (TWA)

Glycol Ether EB:

- OSHA Permissible Exposure Limit (PEL): 50 ppm (Skin)
- ACGIH Threshold Limit Value (TLV): 20 ppm (Skin)

Glycol Ether EPH:

- OSHA Permissible Exposure Limit (PEL): None Established ppm (TWA)
- ACGIH Threshold Limit Value (TLV): None Established ppm (TWA)

Caustic Potash 45%:

- OSHA Permissible Exposure Limit (PEL): None Established ppm (TWA)
- ACGIH Threshold Limit Value (TLV): None Established ppm (TWA)

VENTILATION SYSTEM: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

PERSONAL RESPIRATORS (NIOSH APPROVED): If the exposure limit is exceeded and engineering controls are not feasible, wear a supplied air, full-facepiece respirator, airlined hood, or full-facepiece self-contained breathing apparatus. Breathing air quality must meet the requirements of the OSHA respiratory protection standard (29CFR1910.134). Where respirators are required, you must have a written program covering the basic requirements in the OSHA respirator standard. These include training, fit testing, medical approval, cleaning, maintenance, cartridge change schedules, etc. See 29CFR1910.134 for details.

SKIN PROTECTION: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Barrier cream with polyethylene gloves or Butyl rubber gloves or Neoprene rubber gloves. Safety footwear. Butyl and Neoprene Gloves for best protection.

EYE PROTECTION: Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area. Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

FORM: Liquid ODOR: Faint butyl odor SOLUBILITY IN WATER: Miscible MELTING/FREEZING POINT: -68° C (-90° F) AUTOIGNITION TEMPERATURE: >204° C (399° F) Ph: NE % VOLATILE BY VOLUME @ 21° C (70° F): NE	COLOR: Orange BOILING POINT: NE @ 760 mm Hg SPECIFIC GRAVITY: NE @ 20° C (Water = 1) EVAPORATION RATE (BuAc=1): <0.01 FLASH POINT: >78° C (172° F) CC VAPOR PRESSURE: NE @ 20° C (68° F) VAPOR DENSITY: NE (air = 1)
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SECTION 10 — STABILITY AND REACTIVITY

STABILITY: Product is considered stable.

CONDITIONS TO AVOID: Heat, flames, ignition sources and incompatibles.

POLYMERIZATION: Hazardous polymerization will not occur.

INCOMPATIBILITY WITH OTHER MATERIALS: High temperatures in the presence of strong bases. Acids.
Do not distill to dryness. Incompatible to heat, flame, strong oxidizers and alkalis.

DECOMPOSITION: Carbon dioxide and carbon monoxide may form when heated to decomposition.

SECTION 11 — TOXICOLOGICAL INFORMATION

Toxicological Data:

N-Methyl Pyrrolidone:

Oral rat LD50: 5660 mg/kg; Skin rabbit LD50: 2700 mg/kg; Irritation eye rabbit, standard Draize: 20 mg severe.

Glycol Ether DB:

Oral rat LD50: 5660 mg/kg; Skin rabbit LD50: 2700 mg/kg; Irritation eye rabbit, standard Draize: 20 mg severe.

Glycol Ether EB:

Oral rat LD50: 5660 mg/kg; Skin rabbit LD50: 2700 mg/kg; Irritation eye rabbit: standard Draize: 20 mg severe.

Glycol Ether EPH:

Oral rat LD50: 5660 mg/kg; Skin rabbit LD50: 2700 mg/kg; Irritation eye rabbit, standard Draize: 20 mg severe.

Caustic Potash, 45%:

Oral rat LD50: 5660 mg/kg; Skin rabbit LD50: 2700 mg/kg; Irritation eye rabbit, standard Draize: 20 mg severe.

Reproductive Toxicity: No Data.

Carcinogenicity:

Cancer Lists

<u>Ingredient</u>	---NTP Carcinogen---		<u>IARC Category</u>
	<u>Known</u>	<u>Anticipated</u>	
__N-Methyl Pyrrolidone (CAS #872-0-4)	No	No	None
__Glycol Ether DB (CAS #112-34-5)	No	No	None

Glycol Ether EB (CAS #111-76-2)	No	No	None
Glycol Ether EPH (CAS #122-99-6)	No	No	None
Caustic Potash, 45% (CAS #1310-58-3)	No	No	None

SECTION 12 — ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE: When released into the soil, this material is not expected to evaporate significantly. When released into the soil, this material may leach into groundwater. When released into the soil, this material may biodegrade to a moderate extent. When released into water, this material is not expected to evaporate significantly. When released into water, this material may biodegrade to a moderate extent. This material has a log octanol-water partition coefficient of less than 3.0. This material is not expected to significantly bioaccumulate. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to have a half-life of less than 1 day.

ENVIRONMENTAL TOXICITY: The LC50/96-hour values for fish are over 100 mg/l. This material is not expected to be toxic to aquatic life.

Products of degradation: These products are carbon oxides and water.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Whatever cannot be saved for recovery or recycling should be handled as a non-hazardous waste and sent to approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of material in accordance with federal, state and local requirements.

CONTAMINATED MATERIALS: Wash contaminated clothing before reuse.

SECTION 14 — TRANSPORTATION INFORMATION

Domestic (Land, D.O.T.), International (Water, I.M.O.), International (Air, I.C.A.O.)

HAZARD CLASS:	8
PRODUCT LABEL:	HAZE FREE
UN NUMBER:	UN1814
PACKING GROUP:	II
D.O.T. SHIPPING NAME:	Potassium Hydroxide Solution
PRODUCT RQ (LBS):	1000 lbs. (Potassium Hydroxide)
ERG Guide Number:	154

SECTION 15 — REGULATORY INFORMATION

FEDERAL REGULATORY STATUS

Chemical Inventory Status – Part 1

Ingredient	<u>TSCA</u>	<u>EC</u>	<u>Japan</u>	<u>Australia</u>
N-Methyl Pyrrolidone	Yes	Yes	Yes	Yes
Glycol Ether DB	Yes	Yes	Yes	Yes
Glycol Ether EB	Yes	Yes	Yes	Yes
Glycol Ether EPH	Yes	Yes	Yes	Yes
Caustic Potash, 45%	Yes	Yes	Yes	Yes

Chemical Inventory Status – Part 2

Ingredient	<u>Korea</u>	<u>DSL</u>	<u>CANADA</u>	
			<u>NDSL</u>	<u>Phil.</u>
N-Methyl Pyrrolidone	Yes	Yes	No	Yes
Glycol Ether DB	Yes	Yes	No	Yes
Glycol Ether EB	Yes	Yes	No	Yes
Glycol Ether EPH	Yes	Yes	No	Yes
Caustic Potash, 45%	Yes	Yes	Yes	Yes

Federal, State & International Regulations – Part 1

Ingredient	<u>-SARA 302-</u>		<u>-SARA 313-</u>	
	<u>RQ</u>	<u>TPQ</u>	<u>List</u>	<u>Chemical Catalog</u>
N-Methyl Pyrrolidone	No	No	No	No
Glycol Ether DB	No	No	No	Glycol Ether
Glycol Ether EB	No	No	No	Glycol Ether
Glycol Ether EPH	No	No	No	Glycol Ether
Caustic Potash, 45%	1000	1000	No	No

Federal, State & International Regulations – Part 2

Ingredient	<u>CERCLA</u>	<u>-RCRA-</u>	<u>-TSCA-</u>
		<u>261.33</u>	<u>8(d)</u>
N-Methyl Pyrrolidone	No	No	No
Glycol Ether DB	No	No	No
Glycol Ether EB	No	No	No
Glycol Ether EPH	No	No	No
Caustic Potash, 45%	No	No	No

Chemical Weapons Convention: No **TSCA 12(b):** No **CDTA:** Yes

Clean Water Act (CWA) 307 & 311: No products were found.

Clean Air Act (CAA) 112: No products were found.

SARA 311/312 (Title III Hazard Classes): (Pure/Liquid)

Acute: Yes
 Chronic: Yes
 Fire: Yes
 Pressure: No
 Reactivity: Yes

STATE REGULATIONS: None

PROP 65 – WARNING : NONE

THIS PRODUCT DOES NOT CONTAIN A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

RCRA 40 CFR: NONE.

Australian Hazchem Code: None allocated.

Poison Schedule: None allocated.

WHMIS: This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

WHMIS Hazard Class: D1B, E

This material or all of its components are listed on the Inventory of Existing Chemical Substances under the

Toxic Substance Control Act (TSCA). This material or all of its components are listed on the Canadian Domestic Substances List (DSL). This material or all of its components are listed (or considered as having been notified) on the European Inventory of Existing Chemical Substances (EINECS), Other inventory lists: Korea (TCCL), Australia (AICS), China (Draft), PICCS (Phillipines-RA6969), Japan (ENCS METI/MOL).

SECTION 16 — OTHER INFORMATION

Label Requirements: **WARNING! CAUSES SEVERE EYE IRRITATION. MAY BE HARMFUL IF SWALLOWED OR INHALED. MAY AFFECT CENTRAL NERVOUS SYSTEM. MAY CAUSE IRRITATION TO SKIN AND RESPIRATORY TRACT. COMBUSTIBLE LIQUID AND VAPOR.**

Hazardous Material Information System (HMIS):	Health	3
	Flammability	2
	Reactivity	2
	Personal Protection	C

NFPA/HMIS Definitions: 0 – Least, 1 – Slight, 2 – Moderate, 3 – High, 4 – Extreme

Protective Equipment: GOGGLES & SHIELD, LAB COAT & APRON; VENT HOOD; PROPER GLOVES; CLASS BE EXTINGUISHER.

Prepared By: Albatross U.S.A., Inc.

Preparation Date: July 20, 2009

ADDITIONAL INFORMATION:

The data in this Material Safety Data Sheet relates only to the specific material designated herein. It does not relate to use in combination with any other material or in any process. This Material Safety Date Sheet (MSDS) has been reviewed to fully comply with the guidance contained in the ANSI MSDS standard (ANSI Z400.1-2004).

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