## **MATERIAL SAFETY DATA SHEET**

Page 1 of 6

MSDS-018

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS & 2001/58 EC Standards MSDS Revision: 1.1 MSDS Revision Date: 11/01/2006

				1. PRO	DUCT IDEN	NTIFICA	ATION					
1.1	Product Name: <b>BOND-A</b>	D®										
1.2	Chemical Name: SOLVENT MIXT	URE										
1.3	Synonyms: <b>NA</b>											
1.4	Trade Names: BB010, BB020											
1.5	Product Use:  COSMETIC USI	E ONLY										
1.6	Manufacturer's No											
1.7	Manufacturer's Ac		. HOLLYWOOI	D, CA 91605 US	SA.							
1.8	Emergency Phone		527-3887 /	+1 (800) 424	4-9300							
1.9	Business Phone: +1 (818) 759-2		-	. (000) 12								
	. (0.0) . 0.		.,									
				2. HAZ	ARD IDEN	TIFICA	TION					
2.1	Hazard Identificati Flammable lic of NOHSC and	uid. This pro		fied as a hazaı				ous goods	accordi	ing to the	classificat	ion criteria
2.2	Routes of Entry:			Inhalation:	YES	Ab	sorption:	١	'ES	Ingestion	n:	YES
2.3	Effects of Exposure INGESTION: SKIN & EYES: INHALATION:	If product is Mildly to m watering. M Vapors of Symptoms vapors exc	noderately irri May be irritatir this product of overexposs seeding the lo	may cause nat tating to the e ng to skin in so may be sligh ure can includ evels listed in drowsiness, di	eyes. Symptome sensitive in the sensitive in the tribute of the coughing, we section 2 (Co	ms of overdividual of the not heezing, omposition	verexposions, especies, especies, throat nasal contractions and contractions.	ure may ally after part and other of the oth	include i prolonge her tissu and diff	redness, it d and/or r es of the iculty bred	ching, irri epeated respirato athing. In	itation and contact. ory system. halation of
2.4		skin overe		ome sensitive ess, itching and		nay incl	ude redr	ness, itch	ing, and	irritation	of affec	ted areas.
2.5	Acute Health Effect Mild to model dizziness, hea	rate irritation	-	skin near affe	cted areas. A	dditiona	lly, high c	concentro	itions of	vapors ca	n cause (	drowsiness,
2.6	Chronic Health Effe None known.	ects:										
2.7	Target Organs: <b>Eyes, skin &amp; re</b>	spiratory sys	item.									
			3. COI	MPOSITIOI	N & INGRE	DIENT	INFO	RMATIC	ON			
								EXPO	SURE LIM	ITS IN AIR	(mg/m³)	
							ACGIH	- ppm	(	OSHA - pp	m	OTHER
	CHEMICAL NA	ME(S)	CAS No.	RTECS No.	EINECS No.	%	TLV	STEL	PEL	STEL	IDLH	
ETHYL	ACETATE		141-86-4	AH5425000	205-500-4	≤ 100.0	400	NE	400	NE	2000	400 TWA
AMM	ONIUM HYDRO)	KIDE	1336-21-6	BQ9625000	215-647-6	≤ 1.0	25	NA	25	NA	NA	

NA = Not Available; ND = Not Determined; NE = Not Established; C = Ceiling Limit; See Section 16 for Additional Definitions of Terms Used NOTE: all WHMIS required information is included. It is located in appropriate sections based on the ANSI Z400.1-2004 format.

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Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS & 2001/58 EC Standards

### MATERIAL SAFETY DATA SHEET

MSDS Revision: 1.1

Page 2 of 6

MSDS-018

MSDS Revision Date: 11/01/2006

4. FIRST AID MEASURES 4.1 First Aid: INGESTION: If ingested, do not induce vomiting. If product has been swallowed, drink plenty of water or milk IMMEDIATELY. If the patient is vomiting, continue to offer water or milk. Never give water or milk to an unconscious person. Contact the nearest Poison Control Center or local emergency number. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed. Splashes are not likely; however, if product gets in the eyes, flush with copious amounts of lukewarm water for at least EYES: 15 minutes. Open and close eyelid(s) to ensure thorough irrigation. If irritation occurs, contact a physician. SKIN: If irritation occurs and product is on the skin, rinse thoroughly with lukewarm water, followed by a thorough washing of the effected area with soap and water. Do not wear contaminated clothing until after it has been properly cleaned. If irritation, redness or swelling persists, contact a physician immediately. INHALATION: Remove victim to fresh air at once. If breathing stops, perform artificial respiration. Seek immediate medical attention. 4.2 Medical Conditions Aggravated by Exposure: HEALTH 1 None known. **FLAMMABILITY** 3 **REACTIVITY** 0 PROTECTIVE EQUIPMENT Α **EYES** 5. FIREFIGHTING MEASURES 5.1 Flashpoint & Method: -4°C (24°F) TCC 5.2 Autoignition Temperature: 860°F Flammability Limits: 5.3 Lower Explosive Limit (LEL): 2.2% Upper Explosive Limit (UEL): 11.4% 5.4 Fire & Explosion Hazards: WARNING: Flammable! Keep away from heat, lit cigarettes, sparks & open flame. Keep container closed. When heated above the flashpoint, emits flammable vapors which, when mixed with air, can burn or ve explosive. Mists or sprays may be flammable at temperatures below the flashpoint. 5.5 Extinguishing Methods: CO<sub>2</sub>, Halon, Dry Chemical, Foam Firefighting Procedures: 5.6 HazChem Code: 3YE Hazard Identification Number: 33 This product is a Class IB flammable liquid. When involved in a fire, this product will ignite readily and decompose to produce carbon oxides. Vapors of this product are heavier than air and may travel to a source of ignition and flash back to a leaking or open container. First responders should wear eye protection. Structural firefighters must wear SCBAs and full protective equipment. Use a water spray or fog to reduce or direct vapors. Water may not be effective in actually extinguishing a fire involving this product. 6. ACCIDENTAL RELEASE MEASURES 6.1

Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective Equipment.

For small spills (e.g., <1 gallon) wear appropriate personal protective equipment (e.g., goggles, gloves). Maximize ventilation (open doors and windows) and secure all sources of ignition. Remove spilled material with absorbent material and place into appropriate closed container(s) for disposal. Dispose of properly in accordance with local, state and federal regulations. Wash all affected areas and outside of container with plenty of warm water and soap. Remove any contaminated clothing and wash thoroughly before reuse.

For spills ≥ 1 gallon, deny entry to all unprotected individuals. Dike and contain spill with inert material (e.g., sand or earth). Use ONLY non-sparking tools for recovery and cleanup. Transfer liquid to containers for recovery or disposal and solid diking material to separate containers for proper disposal. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water.

9.11

9.12

Viscosity:

Other Information:

Non-viscous.

NA

### **MATERIAL SAFETY DATA SHEET**

Page 3 of 6

MSDS-018

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS & 2001/58 EC Standards MSDS Revision: 1.1 MSDS Revision Date: 11/01/2006 7. HANDLING & STORAGE INFORMATION 7.1 Work & Hygiene Practices: Avoid prolonged contact with the product. Avoid breathing vapors of this product. Use in a well-ventilated location (e.g., local exhaust ventilation, fans). After use, wash hands and exposed skin with soap & water. Do not eat, drink or smoke while handling product. 7.2 Storage & Handling: Keep this material away from heat, sparks and open flame. Open containers slowly on a stable surface. Keep container closed tightly when not in use. Empty container may contain residual amounts of this product; therefore, empty containers should be handled with care. Store containers in a cool, dry location, away from direct sunlight, other light sources, or sources of intense heat. 7.3 Special Precautions: Open containers slowly on a stable surface. Keep container tightly closed when not in use. Empty containers may contain residual amounts of this product; therefore, empty containers should be handled with care. 8. EXPOSURE CONTROLS & PERSONAL PROTECTION 8.1 Ventilation & Engineering Controls: When working with large quantities of product, provide adequate ventilation (e.g., local exhaust ventilation, fans). Ensure that an eyewash station, sink or washbasin is available in case of exposure to eyes. 82 No special respiratory protection is required under typical circumstances of use or handling. If necessary, use only respiratory protection authorized per U.S. OSHA's requirement in 29 CFR §1910.134, or applicable U.S. state regulations, or the appropriate standards of Canada, its provinces, E.C. member states, or Australia. 8.3 Avoid eye contact. None required under normal conditions of use. However, may cause irritation in some sensitive individuals. When handling large quantities (e.g., ≥ 1 gallon), safety glasses with side shields should be used. 8 4 None required under normal conditions of use. However, may cause skin irritation in some sensitive individuals. When handling large quantities (e.g., ≥ 1 gallon), wear rubber or impervious plastic gloves. 8.5 No apron required when handling small quantities. When handling large quantities (e.g.,  $\geq 1$  gallon), eye wash stations and deluge showers should be available. Upon completion of work activities involving large quantities of this product, wash any exposed areas thoroughly with soap and water. 9. PHYSICAL & CHEMICAL PROPERTIES Density: 0.902 92 Boiling Point: 172°F 9.3 Melting Point: NA 9.4 Evaporation Rate: NΔ 9.5 Vapor Pressure: NA 9.6 Molecular Weight: NA 9.7 Appearance & Color: Clear liquid with characteristic fragrant, fruity odor. Odor Threshold: 9.8 99 Solubility: Miscible with alcohol, ether, glycerine, volatile oils, water, most organic solvents. 9.10 На NΑ

# **MATERIAL SAFETY DATA SHEET**

Page 4 of 6

MSDS-018

Prep	ared to OSHA, ACC, ANSI, NOHSC, WHMIS & 2001/58 EC Standards MSDS Revision: 1.1 MSDS Revision Date: 11/01/2006
	10. STABILITY & REACTIVITY
0.1	Stability:
	Stable under ambient conditions when stored properly (see Section 7, Storage and Handling).
0.2	Hazardous Decomposition Products:
	If exposed to extremely high temperatures, the products of thermal decomposition may include irritating vapors and carbon oxide gases (e.g., NH <sub>3</sub> , CO, CO <sub>2</sub> ).
0.3	Hazardous Polymerization:
	May occur, if exposed to extremely high temperatures.
0.4	Conditions to Avoid:
	None reported.
0.5	Incompatible Substances:  This product is incompatible with strong oxidizers (e.g., peroxides, superoxides), strong acids (e.g., hydrochloric or muriatic acids), of strong bases (e.g., lye, potassium hydroxide).
	11. TOXICOLOGICAL INFORMATION
1.1	Toxicity Data:
	This product has not been tested on animals to obtain toxicological data. There are toxicology data for the components of the product, which are found in the scientific literature. These data have not been presented in this document.
1.2	Acute Toxicity:
	See Section 2.5
1.3	Chronic Toxicity:
	See Section 2.6
.4	Suspected Carcinogen:  No
.5	Reproductive Toxicity:
	This product is not reported to cause reproductive toxicity in humans.
	Mutagenicity:
	This product is not reported to produce mutagenic effects in humans.  Embryotoxicity:
	This product is not reported to produce embryotoxic effects in humans.
	Teratogenicity:
	This product is not reported to cause teratogenic effects in humans.
	Reproductive Toxicity:
	This product is not reported to cause reproductive effects in humans.
1.6	Irritancy of Product:
	See Section 2.3
1.7	Biological Exposure Indices:  NE
1.8	Physician Recommendations:
	Treat symptomatically.
	12. ECOLOGICAL INFORMATION
2.1	Environmental Stability:
	The components of this product will slowly degrade over time into a variety of organic compounds. Specific environmental datavailable for the components of this product are as follows:
	Ethyl Acetate: $K_{OC}$ = 0.73. Water solubility: 64,000 mg/l. Bioconcentration Factor = 4-14. Bioconcentration is not anticipated to b significant. This compound can be removed from contaminated environments from volatilization, and biodegradation. The compound's half-life in water is 6.1 hours.
2.2	Effects on Plants & Animals:  There are no specific data available for this product.
2.3	Effects on Aquatic Life:
	There are no specific data available for this product; however, very large releases of this product may be harmful or fatal toverexposed aquatic life.

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### MATERIAL SAFETY DATA SHEET

Page 4 of 6

MSDS-018

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS & 2001/58 EC Standards MSDS Revision: 1.1 MSDS Revision Date: 11/01/2006 13. DISPOSAL CONSIDERATIONS 13.1 Waste Disposal: Waste disposal must be in accordance with appropriate Federal, state, and local regulations. 13.2 Special Considerations: U.S. EPA WASTE NUMBER: D001 (characteristic - ignitable) 14. TRANSPORTATION INFORMATION The basic description (proper shipping name, hazard class & division, ID Number, packing group) is shown for each mode of transportation. Additional descriptive information may be required by 49 CFR, IATA/ICAO, IMDG and the CTDGR. CONSUMER COMMODITY, ORM-D (≤ 1.0 L) UN1173, ETHYL ACETATE, 3, II (> 1.0 L) 14.2 IATA (AIR): CONSUMER COMMODITY, 9, ID8000 (≤ 0.5 L) UN1173, ETHYL ACETATE, 3, II (> 0.5 L) IMDG (OCN): 14.3 UN1173, ETHYL ACETATE, 3, II, LTD QTY (≤ 1.0 L) ORM-D UN1173, ETHYL ACETATE, 3, II (> 1.0 L) TDGR (Canadian GND): MARK PACKAGE "LIMITED QUANTITY" or "QUANTITÉ LIMITÉE" or "LTD QTY" or "QUANT LTÉE" (≤ 1.0 L) UN1173, ETHYL ACETATE, 3, II (> 1.0 L) 14.5 ADR/RID (EU): UN1173, ETHYL ACETATE, 3, II, ADR, LTD QTY (≤ 1.0 L) MEXICO (SCT): 14.6 UN1173, ACETATO DE ETILO, 3, II, CANTIDAD LIMITADA (≤ 1.0 L) 15. REGULATORY INFORMATION SARA Reporting Requirements: SARA 304 (40 CFR Table 302.4) - Ethyl Acetate 15.2 SARA Threshold Planning Quantity: There are no specific Threshold Planning Quantities for the components of this product. 15.3 TSCA Inventory Status: The components of this product are listed on the TSCA Inventory. 15.4 CERCLA Reportable Quantity (RQ): Ethyl Acetate – 5000 lbs; Ammonium Hydroxide – 1000 lbs 15.5 This product complies with the appropriate sections of the Food and Drug Administration's 21 CFR subchapter G (Cosmetics). 15.6 This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR. The components of this product are listed on the DSL/NDSL. None of the components of this product are listed on the Priorities Substances List. Class B2 Flammable Liquid. 15.7 State Regulatory Information: Ingredients in this mixture on found on the following state criteria lists: California OSHA Hazardous Substances List Ethyl Acetate **Delaware Air Quality Management List** Ethyl Acetate, Ammonium Hydroxide Massachusetts Hazardous Substances List Ethyl Acetate, Ammonium Hydroxide Minnesota Hazardous Substances List **Ethyl Acetate** New Jersey Right to Know Hazardous Substances List **Ammonium Hydroxide New York List of Hazardous Substances** Ethyl Acetate, Ammonium Hydroxide Pennsylvania Hazardous Substances List Ethyl Acetate, Ammonium Hydroxidew Washington Permissible Exposure Limits for Air Contaminants **Ethyl Acetate** Wisconsin Hazardous Substances List **Ethyl Acetate** 

67/548/EEC (European Union) Requirements:

The primary component of this product is listed in Annex I of EU Directive 67/548/EEC:

Ethyl Acetate: Flammable (F). R: 11-36/37/38 – Highly flammable. Irritating to eyes, respiratory system and skin, S: 2-16-23-29-33 – Keep out of the reach of children, Keep away from sources of ignition - No smoking. Do not breathe gas, fumes, vapor or spray. Do not empty into drains. Take precautionary measures against static discharges.



+1 (310) 360-5700 fax

http://www.shipmate.com/

### **MATERIAL SAFETY DATA SHEET**

Page 5 of 6

MSDS-018

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS & 2001/58 EC Standards MSDS Revision: 1.1 MSDS Revision Date: 11/01/2006 16. OTHER INFORMATION 16.1 Other Information: Keep out of reach of children. Do not take internally. Keep away from heat and open flame. 16.2 Terms & Definitions: See last page of this MSDS. This Material Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR §1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of ShipMate's & OPI Products' knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either expressed or implied, are provided. The information contained herein relates only to the specific product(s). If this product(s) is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition. Prepared for: OPI Products, Inc. 13034 Saticoy Street  $O \cdot P \cdot I$ No. Hollywood, CA 91605 USA +1 (818) 759-2400 phone +1 (818) 759-5770 fax http://www.opi.com/ 16.5 Prepared by: ShipMate, Inc. 18436 Hawthorne Boulevard, Suite 201 Torrance, CA 90504 +1 (310) 360-3700 phone

Training & Consulting

## **MATERIAL SAFETY DATA SHEET**

Page 6 of 6

**MSDS-018** 

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS & 2001/58 EC Standards MSDS Revision: 1.1

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#### **DEFINITION OF TERMS**

A large number of abbreviations and acronyms appear on a MSDS. Some of these that are commonly used include the following:

#### **GENERAL INFORMATION:**

CAS No.	Chemical Abstract Service Number

#### **EXPOSURE LIMITS IN AIR:**

ACGIH	ACGIH American Conference on Governmental Industrial Hygienists			
TLV	TLV Threshold Limit Value			
OSHA	U.S. Occupational Safety and Health Administration			
PEL	Permissible Exposure Limit			
IDLH	IDLH Immediately Dangerous to Life and Health			

#### FIRST AID MEASURES:

CPR	Cardiopulmonary resuscitation - method in which a person
	whose heart has stopped receives manual chest
	compressions and breathing to circulate blood and provide
	oxygen to the body

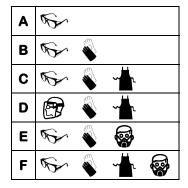
#### HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

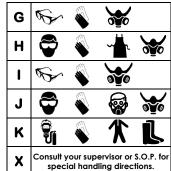
#### **HEALTH, FLAMMABILITY & REACTIVITY RATINGS:**

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard



#### PERSONAL PROTECTION RATINGS:







#### OTHER STANDARD ABBREVIATIONS:

NA Not Available		
NR	No Results	
NE	Not Established	
ND	Not Determined	
ML	Maximum Limit	
SCBA	Self-Contained Breathing Apparatus	

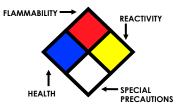
#### NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

#### FLAMMABILITY LIMITS IN AIR:

Autoignition Minimum temperature required to initiate com				
Temperature	nperature in air with no other source of ignition			
LEL	Lower Explosive Limit - lowest percent of vapor in air, by			
	volume, that will explode or ignite in the presence of			
	an ignition source			
UEL	Upper Explosive Limit - highest percent of vapor in air,			
	by volume, that will explode or ignite in the presence of			
	an ignition source			

#### HAZARD RATINGS:

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard
ACD	Acidic
ALK	Alkaline
COR	Corrosive
<del>-W</del> -	Use No Water
OX	Oxidizer



#### TOXICOLOGICAL INFORMATION:

LD <sub>50</sub>	Lethal Dose (solids & liquids) which kills 50% of the exposed animals s
LC <sub>50</sub>	Lethal concentration (gases) which kills 50% of the exposed animal
ppm	Concentration expressed in parts of material per million parts
TD <sub>lo</sub>	Lowest dose to cause a symptom
TCLo	Lowest concentration to cause a symptom
TD <sub>io</sub> , LD <sub>io</sub> , & LD <sub>o</sub> or	Lowest dose (or concentration) to cause lethal or
TC, TC <sub>o</sub> , LC <sub>lo</sub> , & LC <sub>o</sub>	toxic effects
IARC	International Agency for Research on Cancer
NTP	National Toxicology Program
RTECS	Registry of Toxic Effects of Chemical Substances
BCF	Bioconcentration Factor
TLm	Median threshold limit
log Kow or log Koc	Coefficient of Oil/Water Distribution

#### **REGULATORY INFORMATION:**

WHMIS Canadian Workplace Hazardous Material Information Syste			
DOT	U.S. Department of Transportation		
TC	Transport Canada		
EPA	U.S. Environmental Protection Agency		
DSL	Canadian Domestic Substance List		
NDSL	Canadian Non-Domestic Substance List		
PSL	Canadian Priority Substances List		
TSCA U.S. Toxic Substance Control Act			
<b>EU</b> European Union (European Union Directive 67/548/EEC)			

#### **EC INFORMATION:**

			*		<b>\$</b>	×	×
С	E	F	N	0	T+	Xi	Xn
Corrosive	Explosive	Flammable	Harmful	Oxidizing	Toxic	Irritant	Harmful