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SAFETY DATA SHEET

Page 1 of 6 **SDS-044**

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards

SDS Revision: 3.1

SDS Revision Date: 2/8/2016

1. PRODUCT & COMPANY IDENTIFICATION				
1.1	Product Name:	OPI MICROBOND MICRO SEALER GEL		
1.2	Chemical Name:	Methacrylate Mixture		
1.3	Synonyms:	NA		
1.4	Trade Names:	MBM22		
1.5	Product Use:	Professional Use Only		
1.6	Distributor's Name:	OPI Products, Inc.		
1.7	Distributor's Address:	13034 Saticoy Street, No. Hollywood, CA 91605 USA		
1.8	Emergency Phone:	CHEMTREC: +1 (703) 527-3887 / +1 (800) 424-9300 (CCN 16377)		
1.9	Business Phone / Fax:	+1 (818) 759-2400 / +1 (818) 759-5776		

2. HAZARDS IDENTIFICATION

Hazard Identification: This product is classified as a hazardous substance but not as dangerous goods according to the classification criteria of NOHSC: 1008 (2004) and ADG Code (Australia).

> WARNING! CAUSES SKIN IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION. **CAUSES SERIOUS EYE IRRITATION.**

Classification: Skin Irrit. 2; Skin Sens. 1A; Eye Irrit. 2A

Hazard Statements (H): H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation.

Precautionary Statements (P): P261 - Avoid breathing fume/ mist/vapors/spray. P264 - Wash exposed skin areas thoroughly with soap and water after handling. P272 - Contaminated work clothing should not be allowed out of the workplace. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P302+P352 - IF ON SKIN: Wash with soap and water. P305+P351+P338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. P333+P313 - If skin irritation or a rash occurs - Get medical advice/attention. P321 - For specific first aid treatment (See Section 4 of this Safety Data Sheet). P363 - Wash contaminated clothing before reuse. P370+P378 - In case of fire, CO₂, Halon (if permitted), dry chemical, or foam for extinction. P403+P235 - Store in a well-ventilated place. Keep cool. P501 - Dispose of contents/container to a licensed treatment, storage or disposal facility (TSDF).



3. COMPOSITION & INGREDIENT INFORMATION

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							EXPO	SURE L	MITS IN	I AIR (m	g/m³)		
					AC	GIH		NOHSC			OSHA		
					ppm		ppm		ppm]	
CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	TLV	STEL	ES- TWA	ES- STEL	ES- PEAK	PEL	STEL	IDLH	OTHER
URETHANE METHACRYLATE OLIGOMERS	NA	NA	NA	60-100	NA	NA	NF	NF	NF	NA	NA	NA	
OLIGOWERS													•
TRIETHYLENE GLYCOL	109-16-0	OZ4100000	203-652-6	7-13	NA	NA	NF	NF	NF	NA	NA	NA	
DIMETHACRYLATE													
HYDROXYETHYL METHACRYLATE	868-77-9	OZ4725000	212-782-2	7-13	NA	NA	NF	NF	NF	NA	NA	NA	
(HEMA)	Acute ToxDer	rmal 5; Skin Irrit. 2	2; Eye Irrit. 2A; S	kin Sens.	1; H313	, H315,	H317,	H319					
HYDROXYMETHYLPHENYL	7473-98-5	NA	231-272-0	0.1-1	NA	NA	NF	NF	NF	NA	NA	NA	
PROPANONE	Acute Tox. 4; H	1302											
CILICA	7631-86-9	NA	231-545-4	0.1-1	NA	NA	NF	NF	NF	NA	NA	NA	DUST
SILICA		•	•	•									

			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 Rocky Mountain Poison Control Center at 1-303-623-5716 or 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.
		<u>Skin:</u>	If irritation occurs & product is on the skin, rinse thoroughly with lukewarm water, followed by a thorough washing of the affected area with plenty of soap and water. Remove contaminated clothing and wash thoroughly before reuse. If irritation, redness or swelling persists, consult a physician immediately.
		Eyes:	If product gets in the eyes, flush with copious amounts of lukewarm water for at least 15 minutes. Open and close eyelid(s) to ensure thorough irrigation. If irritation persists seek immediate medical attention.
		Inhalation:	Remove victim to fresh air at once. If breathing stops, perform artificial respiration. Seek immediate medical attention.

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SAFETY DATA SHEET

Page 2 of 6 SDS-044

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards SDS Revision: 3.1 SDS Revision Date: 2/8/2016 4. FIRST AID MEASURES - cont'd 42 Effects of Exposure: If product is swallowed, may cause nausea, headache, vomiting and/or diarrhea and central nervous Ingestion: system depression. Irritating to the eyes. Symptoms of overexposure may include redness, itching, irritation and watering. Eyes: May be irritating to skin in some sensitive individuals, especially after prolonged and/or repeated contact. Skin: Inhalation of vapors is unlikely under normal conditions of use and handling; however, inhalation of vapors Inhalation: in excess of the levels listed in Section 3 (Composition and Ingredient Information) can cause central nervous system depression (e.g., drowsiness, dizziness, headaches, nausea). 4.3 Symptoms of Overexposure: Symptoms of skin overexposure in some sensitive individuals may include redness, itching, and irritation of affected areas. Overexposure in eyes may cause redness, itching and watering. Acute Health Effects: 4.4 Mild to moderate irritation to eyes and skin near affected areas. 4.5 Chronic Health Effects: None known. 46 Target Organs: Eyes, Skin. 47 Medical Conditions Pre-existing dermatitis, other skin conditions, and disorders of the **HEALTH** 2 Aggravated by Exposure: target organs (eyes, skin, and respiratory system). **FLAMMABILITY** 1 PHYSICAL HAZARDS 1 PROTECTIVE EQUIPMENT В **EYES** SKIN 5. FIREFIGHTING MEASURES 5.1 Fire & Explosion Hazards: Keep away from heat, lit cigarettes, sparks & open flame and other sources of heat. Keep Extinguishing Methods: 5.2 CO₂, Halon (if permitted), Dry Chemical or Foam, as authorized. 5.3 Firefighting Procedures: 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. HazChem Code: NA Hazard Identification Number: NA 6. ACCIDENTAL RELEASE MEASURES 6.1 Spills Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective Equipment. For small spills (e.g., < 1 gallon (3.8 L)) wear appropriate personal protective equipment (e.g., goggles, gloves). Maximize ventilation (open doors and windows. 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 large spills (e.g., ≥ 1 gallon (3.8 L)), deny entry to all unprotected individuals. Dike and contain spill with inert material (e.g., sand or earth). 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 7. HANDLING & STORAGE INFORMATION 7.1 Work & Hygiene Practices: Avoid prolonged contact with the product. After use, wash hands and exposed skin with soap and 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. Store away from incompatible materials (See Section 10, Stability and Reactivity). Material should be stored in secondary containers as appropriate. 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.

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11.4

11.5

Chronic Toxicity

Suspected Carcinogen:

See Section 4.5

No

SAFETY DATA SHEET

Page 3 of 6 SDS-044

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards SDS Revision: 3.1 SDS Revision Date: 2/8/2016 8. EXPOSURE CONTROLS & PERSONAL PROTECTION Exposure Limits ACGIH NOHSC OTHER ppm (mg/m³) FS. FS. TI V STEL STEL CHEMICAL NAME(S) TWA STEL PEAK PEL **SILICA** NA NA NF NF NF NA NA DUST NA 8.2 Ventilation & Engineering When working with large quantities of product, provide adequate ventilation (e.g., local exhaust ventilation, fans). Controls: Ensure that an eyewash station, sink or washbasin is available in case of exposure to eyes Respiratory Protection: 8.3 No special respiratory protection is required under typical circumstances of use or handling. In instances where vapors or sprays of this product are generated, and respiratory protection is needed, use only protection authorized by 29 CFR §1910.134, applicable U.S. State regulations, or the Canadian CAS Standard Z94.4-93 and applicable standards of Canadian Provinces, EC member States, or Australia. Eye Protection: 8.4 Avoid eye contact. None required under normal conditions of use. However, may cause irritation in some sensitive individuals. Depending on the use of this product, splash or safety glasses may be worn. If necessary, refer to U.S. OSHA 29 CFR §1910.133, Canadian standards, or the European Standard EN166. When handling large quantities (e.g., ≥ 1 gallon), safety glasses with side shields should be used. 8.5 Hand Protection: AVOID SKIN CONTACT DUE TO SENSITIZING POTENTIAL. If anticipated that prolonged & repeated skin contact will occur during use of this product, wear latex or rubber gloves for routine industrial use. If necessary, refer to U.S. OSHA 29 CFR §1910.138, the appropriate standards of Canada, of the EU member states. 8.5 Body Protection: AVOID SKIN CONTACT DUE TO SENSITIZING POTENTIAL. However, no special body protection is required under typical circumstances of use and handling. If necessary, refer to appropriate standards of Canada, the EU member states, or U.S. OSHA. 9. PHYSICAL & CHEMICAL PROPERTIES 9 1 Appearance: Clear viscous gel 9.2 Odor Characteristic acrylate odor Odor Threshold 93 94 NA 9.5 Melting Point/Freezing Point: NA 9.6 Initial Boiling Point/Boiling > 212 °F Range: 9.7 Flashpoint: > 82 °C (180 °F) c.c. 9.8 Upper/Lower Flammability NA Limits: 9.9 Vapor Pressure: NA 9.10 Vapor Density: NA 9.11 Relative Density: NA Solubility 9.12 **Immiscible** Partition Coefficient (log Pow): 9.13 NA 9 14 **Autoignition Temperature** NA 9 15 Decomposition Temperature: NA 9.16 Viscosity 5,000 cPs 9 17 Other Information: NA 10. STABILITY & REACTIVITY Stability: 10.1 Relatively stable under ambient conditions when stored properly. Hazardous Decomposition If exposed to extremely high temperatures, products of thermal decomposition may include irritating vapors and toxic 10.2 gases (e.g., oxides of carbon & nitrogen) 10.3 Hazardous Polymerization: Will not occur. Conditions to Avoid: 10.4 Exposure to or contact with extreme temperatures, incompatible chemicals, strong light sources, sparks, flame Incompatible Substances: 10.5 Strong oxides, peroxides or strong acids. 11. TOXICOLOGICAL INFORMATION Inhalation: YES Absorption: YES Routes of Entry: Ingestion: 11.1 YES Toxicity Data: 11.2 This product has NOT been tested on animals to obtain toxicology data. There are toxicology data for the components of the product, which are found in scientific literature. This data has not been presented in this document. 11.3 Acute Toxicity: See Section 4.4

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SAFETY DATA SHEET

Page 4 of 6 SDS-044

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards SDS Revision: 3.1 SDS Revision Date: 2/8/2016 11. TOXICOLOGICAL INFORMATION - cont'd 11.6 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. 11.7 Irritancy of Product See Section 4.3 11.8 Biological Exposure Indices: NE 11.9 Physician Recommendations: Treat symptomatically. 12. ECOLOGICAL INFORMATION 12.1 Environmental Stability: This product will slowly volatile from soil. Components of this product will slowly decompose into organic compounds. 12.2 Effects on Plants & Animals: There are no specific data available for this product. 12.3 Effects on Aquatic Life: There are no specific data available for this product. However, releases of large volumes may be harmful or fatal to overexposed aquatic life. Aquatic toxicity data for components of this product are available, but are not presented in this Safety Data Sheet 13. DISPOSAL CONSIDERATIONS Waste Disposal: Waste disposal must be in accordance with appropriate federal, state, and local regulations. 13.1 13.2 Special Considerations: 14. TRANSPORTATION INFORMATION The basic description (ID Number, proper shipping name, hazard class & division, packing group) is shown for each mode of transportation. Additional descriptive information may be required by 49 CFR, IATA/ICAO, IMDG and the CTDGR 14.1 49 CFR (GND): NOT REGULATED IATA (AIR): 14.2 **NOT REGULATED** IMDG (OCN): 14.3 **NOT REGULATED** TDGR (Canadian GND): 144 **NOT REGULATED** 14.5 ADR/RID (EU): **NOT REGULATED** 14.6 SCT (MEXICO): **NOT REGULATED** 14.7 ADGR (AUS): **NOT REGULATED** 15. REGULATORY INFORMATION 15.1 SARA Reporting This product does not contain any substances subject to SARA Title III, Section 313 reporting requirements. Requirements 15.2 SARA Threshold Planning 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 or are otherwise exempt. 15.4 CERCLA Reportable Quantity NA (RQ): 15.5 Other Federal Requirements: This product complies with the appropriate sections of the Food and Drug Administration's 21 CFR subchapter G 15.6 Other Canadian Regulations: This product has been classified according to the hazard criteria of the CPR and the SDS 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. WHMIS D2B (Other Toxic Effects) 15.7 State Regulatory Information: Hydroxyethyl Methacrylate (HEMA) is listed on the following state criteria list: New Jersey Right-to-Know List (NJ), and Pennsylvania Right-to-Know List (PA) None of the ingredients in this product, present in a concentration of 1.0% or greater, are listed on any of the following state criteria lists: California Proposition 65 (CA65), Delaware Air Quality Management List (DE), Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Michigan Critical Substances List (MI), Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), New York Hazardous Substances List (NY), Pennsylvania Right-to-Know List (PA), Washington Permissible Exposures List (WA), Wisconsin Hazardous Substances List (WI). 15.8 Other Requirements: The primary components of this product are listed in Annex I of EU Directive 67/548/EEC: Hydroxyethyl Methacrylate (HEMA): Irritant (Xi). Risk Phrases (R): 36/38-43 - Irritation to eyes and skin. May cause sensitization by skin contact. Safety Phrases (S) 2-26-28 - Keep out of reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, was immediately with plenty of soap and water.

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SAFETY DATA SHEET

Page 5 of 6 SDS-044

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards SDS Revision: 3.1 SDS Revision Date: 2/8/2016 16. OTHER INFORMATION WARNING! CAUSES SKIN IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE 16 1 Other Information: IRRITATION. Avoid breathing fume/ mist/vapors/spray. Wash exposed skin areas thoroughly with soap and water after handling. Wear protective gloves/eye protection/face protection. IF ON SKIN: Wash with soap and water. IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. If skin irritation or a rash occurs - Get medical advice/attention. Store in a well-ventilated place. Keep cool. Precisely follow directions and SDS (available through your supplier) for use. Avoid skin contact. If redness or other signs of adverse reaction occur, discontinue use immediately. KEEP OUT OF REACH OF CHILDREN. FOR PROFESSIONAL USE ONLY. 16.2 Terms & Definitions: See last page of this Safety Data Sheet. Disclaimer: This 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's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness is 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. 16.4 Prepared for: OPI Products, Inc. 13034 Saticoy Street No. Hollywood, CA 91605 USA Tel: +1 (818) 759-2400 Fax: +1 (818) 759-5776 http://www.opi.com Prepared by: ShipMate, Inc. P.O. Box 787 Sisters, Oregon 97759-0787 USA

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SAFETY DATA SHEET

Page 6 of 6 **SDS-044**

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards

SDS Revision Date: 2/8/2016

DEFINITION OF TERMS

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

GENERAL INFORMATION:

CAS No.	Chemical Abstract Service Number
EVDOCUDE	LIMITS IN AID.

EXPOSURE LIMITS IN AIR:

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

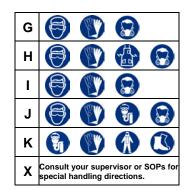
HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

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

HEALTH FLAMMABILITY PHYSICAL HAZARDS PERSONAL PROTECTION

PERSONAL PROTECTION RATINGS:

Α			
В			
С		THE STATE OF THE S	
D		THE STATE OF THE S	
Е			
F		THE STATE OF THE S	









Full Face Respirator

Synthetic Apron









Dust & Vapor Half-

Full Face Respirator

Airline Hood/Mask or SCBA

OTHER STANDARD ABBREVIATIONS:

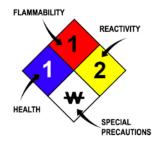
NA	Not Available
NR	No Results
NE	Not Established
ND	Not Determined
ML	Maximum Limit
SCBA	Self-Contained Breathing Apparatus

NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

FLAMMABILITY LIMITS IN AIR:						
Autoignition Temperature						
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
W	Use No Water
ОХ	Oxidizer
TREFOIL	Radioactive



TOXICOLOGICAL INFORMATION:

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

REGULATORY INFORMATION:

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

WORKPLACE HAZARDOUS MATERIALS IDENTIFICATION (WHMIS) SYSTEM:

0	③	(2)	(3)	\odot	(4)		
Class A	Class B	Class C	Class D1	Class D2	Class D3	Class E	Class F
Compress ed	Flammabl e	Oxidizing	Toxic	Irritation	Infectious	Corrosive	Reactive

EC (67/548/EEC) INFORMATION:

13		M	*		Q	X	X
С	Е	F	N	0	Т	Xi	Xn
Corrosive	Explosive	Flammabl e	Harmful	Oxidizing	Toxic	Irritant	Harmful

CLP/GHS (1272/2008/EC) PICTOGRAMS:

			\Diamond			\Diamond		*
GHS01	GHS02	GHS03	GHS04	GHS05	GHS06	GHS07	GHS08	GHS09
Explosive	Flammable	Oxidizer	Pressurized	Corrosive	Toxic	Harmful Irritating	Health Hazard	Environment