

## MATERIAL SAFETY DATA SHEET

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REVISION DATE: 11-01-2005

### SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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#### COMPANY INFORMATION

Advanced Protective Technologies LLC  
 2502 Beech Street Unit 100  
 Valparaiso, IN 46383  
 Phone: 219 476-7170

#### PRODUCT INFORMATION

TRADE NAME: KBS NuMetal  
 PRODUCT NUMBER: NuMetal Part A  
 PRODUCT DESCRIPTION: Epoxy resin

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

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Chemical Name	CAS #	PERCENT	OSHA PEL
Epoxy resin	25068-38-6	5 - 10	Not established

### SECTION 3: HAZARDS IDENTIFICATION

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#### EMERGENCY OVERVIEW

Eye irritant.  
 Can cause skin irritation. May cause allergic skin reaction.  
 Harmful if swallowed.

HMIS RATING: HEALTH -- 1 FLAMMABILITY -- 1 REACTIVITY -- 0

See SECTION 7: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

#### POTENTIAL HEALTH EFFECTS BY ROUTE OF ENTRY

EYE: Can cause irritation. Eye contact may result in corneal injury. Symptoms may include discomfort or pain, excessive blinking and tear production, with marked redness and swelling of the conjunctiva.

SKIN: Can cause skin irritation. May cause sensitization.

INHALATION: Can cause minor respiratory irritation. Inhalation of dusts produced during cutting, grinding or sanding of this product may cause irritation of the respiratory tract.

INGESTION: Ingestion is not an anticipated route of exposure. Harmful if swallowed. Irritating to mouth, throat, and stomach.

#### REGULATED CARCINOGEN STATUS:

Unless noted below, this product does not contain regulated levels of NTP, IARC, ACGIH, or OSHA listed carcinogens.

EXISTING HEALTH CONDITIONS AFFECTED BY EXPOSURE: Skin and eye conditions

### SECTION 4: FIRST AID MEASURES

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IF IN EYES: Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get medical attention if irritation persists.

IF ON SKIN: Wash with soap and water. Get medical attention if irritation develops or persists.

IF VAPORS INHALED: Remove to fresh air. Call a physician if symptoms persist.

IF SWALLOWED: Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Do not give anything by mouth to an unconscious person.

### SECTION 5: FIRE FIGHTING MEASURES

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FLASH POINT: 243C; 469F  
 AUTOIGNITION TEMPERATURE: Not established  
 LOWER EXPLOSIVE LIMIT (% in air): Not established

## MATERIAL SAFETY DATA SHEET

UPPER EXPLOSIVE LIMIT (% in air): Not established  
 EXTINGUISHING MEDIA: Use water spray, foam, dry chemical or carbon dioxide.  
 UNUSUAL FIRE AND EXPLOSION HAZARDS: Material will burn in a fire.  
 SPECIAL FIRE FIGHTING INSTRUCTIONS: Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.  
 HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, Carbon monoxide, Silicon dioxide

### SECTION 6: HANDLING AND STORAGE

Storage: Store in a cool, dry place.

Consult the Technical Data Sheet for specific storage instructions.

### SECTION 7: EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION: Wear safety glasses with side shields when handling this product.  
 SKIN PROTECTION: Avoid skin contact by wearing rubber gloves.  
 GLOVES: Polyethylene for prolonged use.  
 RESPIRATORY PROTECTION: None required for normal use. Use dust mask if grinding or sanding.  
 VENTILATION: None required for normal use or use local exhaust ventilation.

#### EXPOSURE LIMITS:

Chemical Name	ACGIH EXPOSURE LIMITS	AIHA WEEL
Epoxy resin	Not established	Not established

### SECTION 8: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Semi-solid  
 COLOR: Black  
 ODOR: Mild Neutral  
 ODOR THRESHOLD: Not established  
 WEIGHT PER GALLON (lbs.): 15.5  
 SPECIFIC GRAVITY: 1.86  
 pH: Not established  
 BOILING POINT (deg. C): Not established  
 FREEZING/MELTING POINT (deg. C): Not established  
 VAPOR PRESSURE (mm Hg): Not established  
 VAPOR DENSITY: Not established  
 EVAPORATION RATE: Not established  
 OCTANOL/WATER COEFFICIENT: Not established

### SECTION 9: STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.  
 CHEMICAL INCOMPATIBILITY: Not established  
 HAZARDOUS POLYMERIZATION: Will not occur.  
 HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, Silicon dioxide

### SECTION 10: TOXICOLOGICAL INFORMATION

CHEMICAL NAME	LD50/LC50
Epoxy resin	Oral LD50 Rat = 11.4 g/kg Dermal LD50 Rabbit > 20 ml/kg

TOXICOLOGY SUMMARY: No additional health information available.

## MATERIAL SAFETY DATA SHEET

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### SECTION 11: ECOLOGICAL INFORMATION

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OVERVIEW: No ecological information available

### SECTION 12: DISPOSAL CONSIDERATIONS

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To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261.

### SECTION 13: TRANSPORTATION INFORMATION

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Consult Bill of Lading for transportation information.

DOT: NOT REGULATED

### SECTION 14: REGULATORY INFORMATION

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#### INVENTORY STATUS

U.S. EPA TSCA: This product is in compliance with the Toxic Substances Control Act's Inventory requirements.

#### FEDERAL REPORTING

##### EPA SARA Title III Section 313

Unless listed below, this product does not contain toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 72. EPA has advised that when a percentage range is listed the midpoint may be used to fulfill reporting obligations.

Chemical Name	CAS#	%

WHMIS STATUS: Unless listed below, this product is not controlled under the Canadian Workplace Hazardous Materials Information System.

D2B

Prepared by: Advanced Protective Technologies LLC

Phone: 219 476-7170

The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to Advanced Protective Technologies LLC from its suppliers, and because Advanced Protective Technologies LLC has no control over the conditions of handling and use, Advanced Protective Technologies LLC makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and Advanced Protective Technologies LLC assumes no responsibility for use or reliance thereon. It is the responsibility of the user of Advanced Protective Technologies LLC products to comply with all applicable federal, state and local laws and regulations.

## MATERIAL SAFETY DATA SHEET

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REVISION DATE: 11-01-2005

### SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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#### COMPANY INFORMATION

Advanced Protective Technologies LLC  
 2502 Beech Street Unit 100  
 Valparaiso, IN 46383  
 Phone: 219 476-7170

#### PRODUCT INFORMATION

TRADE NAME: KBS NuMetal  
 PRODUCT NUMBER: NuMetal Part B  
 PRODUCT DESCRIPTION: Epoxy putty hardener

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

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Chemical Name	CAS #	PERCENT	OSHA PEL
Tetraethylene pentamine	68513-05-3	10 - 30	Not established

### SECTION 3: HAZARDS IDENTIFICATION

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#### EMERGENCY OVERVIEW

Eye irritant.  
 Can cause skin irritation. May cause allergic skin reaction.  
 Harmful if swallowed.

HMIS RATING: HEALTH -- 1 FLAMMABILITY -- 1 REACTIVITY -- 0  
 See SECTION 7: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

#### POTENTIAL HEALTH EFFECTS BY ROUTE OF ENTRY

EYE: Can cause irritation. Eye contact may result in cornea injury. Symptoms may include discomfort or pain excessive blinking and ear production, with marked redness and swelling of the conjunctiva.

SKIN: Can cause skin irritation. May cause sensitization.

INHALATION: Can cause minor respiratory irritation. Inhalation of dusts produced during cutting, grinding or sanding of this product may cause irritation of the respiratory tract.

INGESTION: Ingestion is not an anticipated route of exposure. Harmful if swallowed. Irritating to mouth, throat, and stomach.

#### REGULATED CARCINOGEN STATUS:

Unless noted below, this product does not contain regulated levels of NTP, IARC, ACGIH, or OSHA listed carcinogens.

EXISTING HEALTH CONDITIONS AFFECTED BY EXPOSURE: Skin and eye conditions

### SECTION 4: FIRST AID MEASURES

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IF IN EYES: Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get medical attention if irritation persists.

IF ON SKIN: Wash with soap and water. Get medical attention if irritation develops or persists.

IF VAPORS INHALED: Remove to fresh air. Call a physician if symptoms persist.

IF SWALLOWED: Do not induce vomiting. Drink one glass of water followed by milk if available. Seek medical attention immediately. Do not give anything by mouth to an unconscious person.

## MATERIAL SAFETY DATA SHEET

### SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT:	204C; 399F
AUTOIGNITION TEMPERATURE:	Not established
LOWER EXPLOSIVE LIMIT (% in air):	Not established
UPPER EXPLOSIVE LIMIT (% in air):	Not established
EXTINGUISHING MEDIA:	Use water spray, foam, dry chemical or carbon dioxide.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Material will burn in a fire.
SPECIAL FIRE FIGHTING INSTRUCTIONS:	Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.
HAZARDOUS COMBUSTION PRODUCTS:	Carbon dioxide, Carbon monoxide, Nitrogen containing gases, Silicon dioxide

### SECTION 6: HANDLING AND STORAGE

Storage: Store in a cool, dry place.

Consult the Technical Data Sheet for specific storage instructions.

### SECTION 7: EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION:	Wear safety glasses with side shields when handling this product.
SKIN PROTECTION:	Avoid skin contact by wearing rubber gloves.
GLOVES:	Polyethylene for prolonged use.
RESPIRATORY PROTECTION:	None required for normal use. Use dust mask if grinding or sanding.
VENTILATION:	None required for normal use or use local exhaust ventilation.

#### EXPOSURE LIMITS:

Chemical Name	ACGIH EXPOSURE LIMITS	AIHA WEEL
Tetraethylene pentamine	Not established	Not established

### SECTION 8: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Semi-solid
COLOR:	Tan
ODOR:	Mild
ODOR THRESHOLD:	Not established
WEIGHT PER GALLON (lbs.):	15.5
SPECIFIC GRAVITY:	1.95
pH:	Not established
BOILING POINT (deg. C):	Not established
FREEZING/MELTING POINT (deg. C):	Not established
VAPOR PRESSURE (mm Hg):	Not established
VAPOR DENSITY:	Not established
EVAPORATION RATE:	Not established
OCTANOL/WATER COEFFICIENT:	Not established

### SECTION 9: STABILITY AND REACTIVITY

STABILITY:	Stable under normal conditions.
CHEMICAL INCOMPATIBILITY:	Not established
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide, carbon dioxide, Nitrogen containing gases, Silicon dioxide

### SECTION 10: TOXICOLOGICAL INFORMATION

## MATERIAL SAFETY DATA SHEET

<b>CHEMICAL NAME</b>	<b>LD50/LC50</b>
Tetraethylene pentamine	Not established

TOXICOLOGY SUMMARY: No additional health information available.

### SECTION 11: ECOLOGICAL INFORMATION

OVERVIEW: No ecological information available

### SECTION 13: DISPOSAL CONSIDERATIONS

To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. .

### SECTION 14: TRANSPORTATION INFORMATION

Consult Bill of Lading for transportation information.

DOT: NOT REGULATED

### SECTION 15: REGULATORY INFORMATION

#### INVENTORY STATUS

U.S. EPA TSCA: This product is in compliance with the Toxic Substances Control Act's Inventory requirements.

#### FEDERAL REPORTING

EPA SARA Title III Section 313

Unless listed below, this product does not contain toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 72. EPA has advised that when a percentage range is listed the midpoint may be used to fulfill reporting obligations.

Chemical Name	CAS#	%

WHMIS STATUS: Unless listed below, this product is not controlled under the Canadian Workplace Hazardous Materials Information System.

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