



MATERIAL SAFETY DATA SHEET

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HEPU868A - HENRY AQUA-BLOC PUMA EARLY PRIME - PART A

1. Product And Company Identification

Supplier

HENRY COMPANY
999 N. Sepulvida Blvd., Suite 800
El Segundo, CA 90245-2716

Company Contact: Technical Services
Telephone Number: 800-486-1278
Web Site: www.henry.com www.bakor.com

Manufacturer

HENRY COMPANY
999 N. Sepulvida Blvd., Suite 800
El Segundo, CA 90245-2716

Company Contact: Technical Services
Telephone Number: 800-486-1278
Web Site: www.henry.com www.bakor.com

Supplier Emergency Contacts & Phone Number

CHEMTREC: 800-424-9300
CHEMTREC: 703-527-3887
CANUTEC: 613-996-6666

Manufacturer Emergency Contacts & Phone Number

CHEMTREC: 800-424-9300
CHEMTREC: 703-527-3887
CANUTEC: 613-996-6666

Issue Date: 07/24/2014

Product Name: HEPU868A - HENRY AQUA-BLOC PUMA EARLY PRIME - PART A

Product/Material Uses

Epoxy primer

2. Composition/Information On Ingredients

Ingredient Name	CAS Number	Percent Of Total Weight
epoxy resin	25068-38-6	75 - 85
furfuryl alcohol	98-00-0	5 - 10
hydrocarbon resin	25155-81-1	1 - 5
nonylphenol	25154-52-3	1 - 5
o-cresyl glycidyl ether	2210-79-9	5 - 10

EMERGENCY OVERVIEW

WARNING! Causes skin irritation. May cause allergic skin reaction. Causes serious eye irritation. Vapors, spray and mist causes lung, nose and throat irritation. o-Cresyl glycidyl ether: Possible risk of irreversible effects, based on animal data.

3. Hazards Identification

Primary Routes(s) Of Entry

Inhalation, eye contact and skin absorption

Eye Hazards

Causes eye irritation.

Skin Hazards

Causes skin irritation. May cause skin sensitization. If sensitized, repeated exposures will result in irritation, reddening, and rashes even for very low exposures.

Ingestion Hazards

Ingestion is not expected to be a significant route into the body.

Inhalation Hazards

Exposure to vapors, spray and mist causes respiratory tract irritation. May cause allergic respiratory reaction. Prolonged or repeated exposure to high concentrations may be harmful and cause adverse effects, including



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3. Hazards Identification - Continued

Inhalation Hazards - Continued

labored breathing.

Chronic/Carcinogenicity Effects

None of the ingredients of this product comprising over 0.1% are classified as carcinogenic according to OSHA, National Toxicology Program (NTP), International Agency for Research on Cancer (IARC) or the American Conference of Governmental Industrial Hygienists (ACGIH).

Skin: Skin sensitization, characterized by redness, inflammation, itching and/or burning may result from prolonged or repeated contact with this material.

Germ cell mutagenicity: o-CRESYL GLYCIDYL ETHER is suspected of causing genetic defects - Category 2: Literature Ames tests showed that o-cresyl glycidyl ether was a direct-acting mutagen in strains TA 1535 and TA 100, but was not mutagenic in TA 98. In an unscheduled DNA synthesis assay, o-cresyl glycidyl ether produced significant increases in unscheduled DNA synthesis at 10 and 100 ppm. At 1000 ppm, o-cresyl glycidyl ether produced a marked reduction in unscheduled DNA synthesis due to its cytotoxic effects. In a host-mediated micronucleus test in mice, o-cresyl glycidyl ether was found not to be genotoxic.

Conditions Aggravated By Exposure

Skin allergies, eczema or skin conditions.

4. First Aid Measures

Eye

In case of contact, hold eyelids apart and immediately flush eyes with plenty of water. If applicable, remove contact lenses after initial 2 minutes of flushing. Continue flushing for at least 15 minutes. Get medical attention immediately if irritation develops and persists.

Skin

Remove contaminated clothing and shoes. Wash affected areas with soap and water. Consult a physician if irritation persists.

Ingestion

Make sure victim is conscious and alert. If so, give 2-3 glasses of water to dilute. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious victim. Call a physician or poison control center immediately.

Inhalation

Remove the person from the contaminated area to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately. Asthmatic-type symptoms may develop and may be immediate or delayed several hours. Treatment is essentially symptomatic. Seek medical attention.

5. Fire Fighting Measures

Flash Point: 375 °F 190.5 °C

Flash Point Method: PMCC

Lower Explosive Limit: Not applicable

Upper Explosive Limit: Not applicable

Fire And Explosion Hazards

Thermal decomposition (burning) may release irritating and/or toxic gases and vapors including carbon monoxide, carbon dioxide, nitrogen oxides and dense smoke.

Extinguishing Media

Use foam, carbon dioxide, dry chemical, or water spray when fighting fires. Do not direct a water stream directly into the hot burning liquid. Use water spray to keep fire exposed containers cool.



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5. Fire Fighting Measures - Continued

Fire Fighting Instructions

Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface.

6. Accidental Release Measures

Evacuate non-emergency personnel. Isolate the area and prevent access. Remove ignition sources. Notify management. Put on protective equipment. Control source of the leak. Ventilate. Contain the spill to prevent spread into drains, sewers, water supplies, or soil.

Contain and/or absorb spill with inert material (e.g. sand, vermiculite). Clean up, collect and dispose of in accordance with applicable regulations.

7. Handling And Storage

Handling And Storage Precautions

Keep containers tightly closed. Store in a cool, dry, well-ventilated area. Use only with adequate ventilation.

Handling Precautions

Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid breathing vapors or spray/mist. Use only with adequate personal protection (gloves, goggles, protective clothing.)

Storage Precautions

Keep away from excessive heat.

8. Exposure Controls/Personal Protection

Engineering Controls

Use with adequate general and local exhaust ventilation. When used outdoors, stay well away from building air intakes or close and seal the intakes to prevent product from entering building.

Eye/Face Protection

Safety glasses with side shields are recommended. Additional protection such as goggles or faceshield may be used to protect the face from splash or spray, depending on conditions of use.

Skin Protection

Use with chemical-protective gloves to prevent skin contact. Wash hands with soap and water after handling this product. Gloves should be decontaminated or discarded after use.

Respiratory Protection

Airborne exposures to hazardous vapors or mists must be considered when using this product.

The level of respiratory protection needed should be based on the evaluation of chemical exposures by a health or safety professional. If required, use a NIOSH-approved full face piece air purifying respirator with organic vapor cartridge and R95 particulate filter or supplied air respirator.

Occupational Exposure Limits for individual ingredients (if available) are listed below.

Ingredient(s) - Exposure Limits

furfuryl alcohol

ACGIH TLV-STEL 15 ppm (Skin)

ACGIH TLV-TWA 10 ppm (Skin)

OSHA PEL-TWA 50 ppm



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- PART A

9. Physical And Chemical Properties

Appearance

Clear, straw-colored liquid.

Odor

Light, musty odor

Chemical Type: Mixture

Physical State: Liquid

Melting Point: Not established °F

Boiling Point: Not established °F

Specific Gravity: 1.15

Molecular Weight: NA

Percent Volatiles: <5

Packing Density: NA

Vapor Pressure: NA

Vapor Density: >1

pH Factor: not available At a Concentration Of NA

Solubility: Insoluble

Viscosity: 800-1200 cps

10. Stability And Reactivity

Stability: Stable

Hazardous Polymerization: Not expected to occur

Conditions To Avoid (Stability)

Avoid excessive heat

Incompatible Materials

Avoid contact with oxidizers, alkalis and acids.

Hazardous Decomposition Products

Carbon dioxide, carbon monoxide, aldehydes

Conditions To Avoid (Polymerization)

None identified.

11. Toxicological Information

Chronic/Carcinogenicity

None of the ingredients present in this product, at concentrations equal to or greater than 0.1%, have been determined to be carcinogenic by IARC, NTP, OSHA, or ACGIH.

Mutagenicity (Genetic Effects)

Germ cell mutagenicity: o-CRESYL GLYCIDYL ETHER is suspected of causing genetic defects - Category 2: Literature Ames tests showed that o-cresyl glycidyl ether was a direct-acting mutagen in strains TA 1535 and TA 100, but was not mutagenic in TA 98. In an unscheduled DNA synthesis assay, o-cresyl glycidyl ether produced significant increases in unscheduled DNA synthesis at 10 and 100 ppm. At 1000 ppm, o-cresyl glycidyl ether produced a marked reduction in unscheduled DNA synthesis due to its cytotoxic effects. In a host-mediated micronucleus test in mice, o-cresyl glycidyl ether was found not to be genotoxic.

Miscellaneous Toxicological Information

Toxicological testing has not been conducted for this product overall. Available toxicological data for individual ingredients are summarized below.



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11. Toxicological Information - Continued

Ingredient(s) - Toxicological Data

epoxy resin
LD-50 (Oral-Rat) - 11400 mg/kg
furfuryl alcohol
LD50 (Oral-Rat) - 177 mg/kg
LD50 (Dermal-Rabbit) - 400 mg/kg
LC50 (Inhalation-Rat) - 233 ppm (4H)
o-cresyl glycidyl ether
LD50 (Oral-Rat) - 4 g/kg
LC50 (Inhalation-Rat) - 6090 mg/kg

12. Ecological Information

Ecotoxicological Information

Data not available for mixture.

Acute Toxicity - Fish And Invertebrates

Data for epoxy resin are shown below:

LC50 (Rainbow Trout), 96 hr - 2 mg/L
EC50 (Daphnia magna), 48 hr - 1.8 mg/L

Environmental Fate Information

Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable. Not expected to bioaccumulate.

13. Disposal Considerations

Dispose in accordance with applicable federal, state and local government regulations.

14. Transport Information

Ground - Not regulated

IATA (air) - UN3082; Environmentally Hazardous Substance, Liquid, NOS (Epoxy Resin); 9; III

IMDG (ocean) - UN3082; Environmentally Hazardous Substance, Liquid, NOS (Epoxy Resin); 9; III

Marine Pollutant - Yes

15. Regulatory Information

SARA Hazard Classes

Acute Health Hazard

Ingredient(s) - State Regulations

furfuryl alcohol
New Jersey - Workplace Hazard
Pennsylvania - Workplace Hazard
Massachusetts - Hazardous Substance
New York City - Hazardous Substance
nonylphenol
Pennsylvania - Workplace Hazard
Massachusetts - Hazardous Substance

Canadian Regulatory Information

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR. WHMIS Classification: Class D2B - Materials Causing Other Toxic Effects,

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- PART A**

15. Regulatory Information - Continued

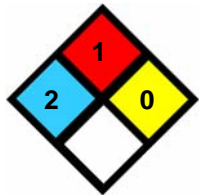
Canadian Regulatory Information - Continued

Toxic Material

WHMIS - Canada (Pictograms)



NFPA



HMIS

HEALTH	2
FLAMMABILITY	1
REACTIVITY	0
PERSONAL PROTECTION	

16. Other Information

Revision/Preparer Information

This MSDS Supersedes A Previous MSDS Dated: 04/20/2014

Disclaimer

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purposes(s).



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HEPU868B - HENRY AQUA-BLOC PUMA EARLY PRIME - PART B

1. Product And Company Identification

Supplier

HENRY COMPANY
999 N. Sepulvida Blvd., Suite 800
El Segundo, CA 90245-2716

Company Contact: Technical Services
Telephone Number: 800-486-1278
Web Site: www.henry.com www.bakor.com

Manufacturer

HENRY COMPANY
999 N. Sepulvida Blvd., Suite 800
El Segundo, CA 90245-2716

Company Contact: Technical Services
Telephone Number: 800-486-1278
Web Site: www.henry.com www.bakor.com

Supplier Emergency Contacts & Phone Number

CHEMTREC: 800-424-9300
CHEMTREC: 703-527-3887
CANUTEC: 613-996-6666

Manufacturer Emergency Contacts & Phone Number

CHEMTREC: 800-424-9300
CHEMTREC: 703-527-3887
CANUTEC: 613-996-6666

Issue Date: 07/24/2014

Product Name: HEPU868B - HENRY AQUA-BLOC PUMA EARLY PRIME - PART B

Product/Material Uses

Epoxy primer

2. Composition/Information On Ingredients

Ingredient Name	CAS Number	Percent Of Total Weight
1,2-cyclohexanediamine	694-83-7	1 - 5
4,4'-methylenebis(cyclohexylamine)	1761-71-3	1 - 5
4-nonylphenol, branched	84852-15-3	10 - 20
aminoethylpiperazine	140-31-8	5 - 10
benzyl alcohol	100-51-6	30 - 40
formaldehyde, polymer with benzeneamine, hydrogenated	135108-88-2	10 - 20
polyamines	NA-Mixture	10 - 20
tetraethylenepentamine	112-57-2	1 - 5
tetraethylenepentamine, reaction with fatty acids	68953-36-6	10 - 20
dimethylaminomethyl phenol	90-72-2	1 - 5

EMERGENCY OVERVIEW

DANGER! Causes eye and skin burns. Causes severe respiratory tract irritation. May cause skin and respiratory tract sensitization.

3. Hazards Identification

Primary Route(s) Of Entry

Skin contact, inhalation

Eye Hazards

Corrosive. Contact with eyes is painful and irritating and will cause chemical burns, associated with redness and swelling of the conjunctiva.

Skin Hazards

Causes skin burns. May cause skin sensitization.



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3. Hazards Identification - Continued

Ingestion Hazards

Corrosive and irritating to the digestive tract; may cause gastric distress, stomach pains and vomiting.

Inhalation Hazards

Corrosive to upper respiratory tract and mucous membranes. Exposure to vapors will cause nose, throat and lung irritation characterized by a sore throat and coughing.

Chronic/Carcinogenicity Effects

None of the ingredients of this product comprising over 0.1% are classified as carcinogenic according to OSHA, National Toxicology Program (NTP), International Agency for Research on Cancer (IARC) or the American Conference of Governmental Industrial Hygienists (ACGIH). Chronic exposure to one of the ingredients in this product may be toxic to the pancreas, liver, thyroid and eyes.

Conditions Aggravated By Exposure

Eye disease, skin disorders and allergies, asthma

4. First Aid Measures

Eye

In case of contact, hold eyelids apart and immediately flush eyes with plenty of water for 2 minutes. If applicable, remove contact lenses at this time. Continue flushing for at least 15 minutes. Get medical attention immediately.

Skin

Remove contaminated clothing and shoes. Wash affected areas with soap and water. DO NOT attempt to neutralize with chemical agents. Get medical attention immediately if irritation (redness, rash, blistering) develops and persists.

Ingestion

Call a physician or a poison control center immediately. If swallowed, do not induce vomiting unless directed to do so by medical personnel. If the victim stops breathing: Clear the airway and administer artificial respiration. If the victim is unconscious: Lay person on the left side, and loosen clothing. If victim is fully conscious, give one or two cups of water or milk to drink. Never give anything by mouth to an unconscious victim.

Inhalation

Remove the person from the contaminated area to fresh air. Wash mouth and nasal passages with water repeatedly. Contact a physician if symptoms develop.

5. Fire Fighting Measures

Flash Point: 255 °F 125 °C

Flash Point Method: PMCC

Flammability Class: Not applicable

Lower Explosive Limit: Not applicable

Upper Explosive Limit: Not applicable

Fire And Explosion Hazards

Product is corrosive. Products of combustion include oxides of carbon, nitrogen, ammonia, and nitric acid.

Extinguishing Media

Carbon dioxide, water fog, dry chemical, chemical foam. Use water spray to cool fire-exposed containers.

Fire Fighting Instructions

Self-contained respiratory equipment. Do not use solid stream of water since stream will scatter and spread fire. Fine water spray can be used to keep fire-exposed containers cool. Product is corrosive.



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6. Accidental Release Measures

CORROSIVE! Do not flush to sanitary sewer. Confine spills, soak up with approved absorbent, shovel product into approved container for disposal. Flush spill area with water. Recover flush for proper disposal. Avoid runoff to waterways and sewers.

7. Handling And Storage

Handling And Storage Precautions

Product is corrosive. Keep containers tightly closed. Store in a cool, dry, well-ventilated area. Protect from physical damage. Use only with adequate ventilation. Wash thoroughly after handling. Empty containers may contain hazardous residue, do not reuse.

8. Exposure Controls/Personal Protection

Engineering Controls

Use with adequate general and local exhaust ventilation. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment.

Eye/Face Protection

Chemical resistant goggles or face shield.

Skin Protection

Use with chemical-protective gloves to prevent excessive skin contact. The following glove materials are recommended for chemical-protective gloves: butyl rubber, nitrile rubber.

Respiratory Protection

The level of respiratory protection needed should be based on the evaluation of chemical exposures by a health or safety professional. If required, use a NIOSH-approved full face piece air purifying respirator with cartridges appropriate for organic vapors and amines or supplied air respirator.

Occupational Exposure Limits for individual ingredients (if available) are listed below.

Other/General Protection

Coveralls, apron, or other equipment should be worn to prevent skin contact. Safety eyewash station nearby.

9. Physical And Chemical Properties

Appearance

Clear to pale yellow liquid

Odor

Ammonia smell

Chemical Type: Mixture

Physical State: Liquid

Boiling Point: >392 °F >200 °C

Specific Gravity: 1.02 @ 25°C

Vapor Pressure: 0.02 mm Hg @ 25°C

Vapor Density: >1

pH Factor: 10-12

Solubility: Negligible

Evaporation Rate: <1

10. Stability And Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur



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HEPU868B - HENRY AQUA-BLOC PUMA EARLY PRIME - PART B

10. Stability And Reactivity - Continued

Conditions To Avoid (Stability)

Extreme temperatures

Incompatible Materials

Strong oxidizers, strong acids, reactive metals, peroxides, materials with reactive hydroxyl groups.

Hazardous Decomposition Products

Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, nitrogen, ammonia and nitric acid, fumes or vapors and smoke may be produced.

Conditions To Avoid (Polymerization)

None identified.

11. Toxicological Information

Chronic/Carcinogenicity

None of the ingredients present in this product, at concentrations equal to or greater than 0.1%, have been determined to be carcinogenic by IARC, NTP, OSHA, or ACGIH.

Miscellaneous Toxicological Information

Toxicological testing has not been conducted for this product overall. Available toxicological data for individual ingredients are summarized below.

Ingredient(s) - Toxicological Data

1,2-cyclohexanediamine
LD50 (Oral-Rat) - 4556 mg/kg
4,4'-methylenebis(cyclohexylamine)
LD50 (Oral-Rat) - 1000 mg/kg
4-nonylphenol, branched
LD50 (Oral-Rat) - 580 mg/kg
LD50 (Dermal-Rabbit) - 2031 mg/kg
aminoethylpiperazine
LD50 (Oral-Rat) - 2140 mg/kg
LD50 (Dermal-Rabbit) - 880 mg/kg
tetraethylenepentamine
LD50 (Oral-Rat) - 2100 mg/kg
LD50 (Dermal-Rabbit) - 660 mg/kg
dimethylaminomethyl phenol
LD50 (ORAL-RAT): 1670 mg/kg
LD50 (DERMAL-RABBIT): 1242 mg/kg

12. Ecological Information

Do not allow into any sewer, on the ground, or into any body of water.

13. Disposal Considerations

Dispose in accordance with applicable federal, state and local government regulations.

14. Transport Information

Ground: UN3066; Paint; 8, III

IMDG: UN3066; Paint; 8, III

IATA: UN3066; Paint; 8, III



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HEPU868B - HENRY AQUA-BLOC PUMA EARLY PRIME - PART B

DOT (Pictograms)



15. Regulatory Information

SARA Hazard Classes

- Acute Health Hazard
- Chronic Health Hazard

Ingredient(s) - State Regulations

- aminoethylpiperazine
 - New Jersey - Workplace Hazard
 - New Jersey - Special Hazard
 - Pennsylvania - Workplace Hazard
 - Massachusetts - Hazardous Substance
 - New York City - Hazardous Substance
- benzyl alcohol
 - New Jersey - Workplace Hazard
 - Pennsylvania - Workplace Hazard
 - Massachusetts - Hazardous Substance
- tetraethylenepentamine
 - New Jersey - Workplace Hazard
 - New Jersey - Special Hazard
 - Pennsylvania - Workplace Hazard
 - Massachusetts - Hazardous Substance
 - New York City - Hazardous Substance

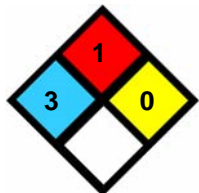
Canadian Regulatory Information

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR. WHMIS Classification: D2B - Toxic, E - Corrosive Material

WHMIS - Canada (Pictograms)



NFPA



HMIS

HEALTH	3
FLAMMABILITY	1
REACTIVITY	0
PERSONAL PROTECTION	

16. Other Information

Revision/Preparer Information

This MSDS Supersedes A Previous MSDS Dated: 04/20/2014

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Disclaimer - Continued

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HENRY COMPANY