



Material Safety Data Sheet

No. 028902

Product Name:

Por-A-Mold, S-333 Curative

I. Basic Information:

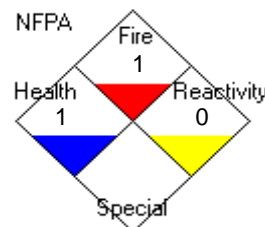
Supplier: PUMA Polymers

Address: 2003 Curtain Pole Rd, P.O. Box 5413

City, ST Zip: Chattanooga, TN 37406

Emergency Phone: 423-697-0499

Transportation Emergency Phone: Chem-trec 1-800-424-9300



Chemical State: Liquid Gas Solid Chemical Type: Pure Mixture

II. Ingredients:

CAS No.	Chemical Name	% Range	EHS	NTP	IARC	SUB Z	SARA 313	OSHA PEL	ACGIH TLV	Other Limits
66402684	Calcined Kaolin	20-40						15mg/m3	15mg/m3	NE
25322694	Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-	60-80								
26545493	Mercury, (neodecanoato-.kappa.O)phenyl-	< 0.6					X	0.01 mg/m3	NE	NE
112945525	Amorphous Fumed Silica	<1.5						NE	NE	NE

III. Hazardous Identification:

Hazard Category: ACUTE CHRONIC

Hazardous Identification Information:

Warning!

Pigmented viscous liquid with a slight odor.

Contains organomercury catalyst.

Repeated skin and eye contact may cause irritation.

IV. First Aid Measures:

Route(s) of Entry: Ingestion, Skin and Eye contact.

Health Hazards (Acute and Chronic):

Acute (Short-term)

Contact may cause skin and eye irritation. Inhalation of vapors may cause respiratory tract irritation.

Chronic (Delayed)

Repeated skin and eye contact may produce sensitivity (rash, itching). Repeated inhalation of vapors may cause immediate or delayed respiratory sensitization leading to asthma-like conditions and difficulty in breathing.

Signs and Symptoms:

Skin and eye irritation.

Medical Conditions Generally Aggravated by Exposure: Repeated contact may cause skin and eye irritation.

Emergency and First Aid Procedures:





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SKIN CONTACT: Remove contaminated clothing and wash affected area with isopropyl alcohol followed by soap and water.

EYE CONTACT: Flush eyes with water for at least 15 minutes and contact a physician.

INGESTION: Do NOT induce vomiting. Take 1-2 glasses of water and contact a physician. Do not give anything by mouth to an unconscious person.

INHALATION: Remove person to fresh air. If person is not breathing give mouth-to-mouth resuscitation and contact a physician.

Other Health Warnings

Wash hands thoroughly after handling this material, before eating, smoking, etc.

V. Fire Fighting Measures:

Flash Point: >330°F **Lower Explosive Limit:** NE **Upper Explosive Limit:** NE

Fire Extinguishing Media:

Foam, water fog, carbon dioxide or dry chemical extinguishers.

Special Fire Fighting Procedures:

Firefighters should wear a self-contained breathing apparatus and protective clothing to guard against incompletely combusted carbon products.

Unusual Fire and Explosion:

None known

VI. Accidental Release Measures:

Steps to be Taken in Case Material is Released or Spilled:

Cover liquid with an absorbent material (sawdust, vermiculite or wet sand). After the material is absorbed scoop up and place in containers for disposal.

VII. Handling and Storage:

Precautions to be Taken:

Store in a cool dry place in tightly sealed containers. Protect from heat and moisture contamination.

Other Precautions:

None known

VIII. Exposure Controls/Personal Protection:

Ventilation Requirements:

Local Exhaust: Use in a ventilated area.

Mechanical (General): Recommended.

Personal Protective Equipment:

RESPIRATORY PROTECTION: None needed at normal temperatures. Use a self-contained breathing apparatus under emergency conditions.

PROTECTIVE GLOVES: Impervious rubber gloves.

EYE PROTECTION: Wear safety glasses or goggles.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: An apron or suitable clothing to prevent skin contact.





Product Name:

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IX. Physical and Chemical Properties:

Boiling Point: >285°F **Melting Point:** NA **Evaporation Rate:** <1
Vapor Pressure (mm Hg.): NE **Vapor Density (AIR = 1):** >1
Solubility In Water: Negligible
Appearance and Odor: Pigmented viscous liquid with odor.
Other Information: VOLATILITY @75°F: Very low
PERCENT VOLATILE BY VOLUME(%): Negligible
SPECIFIC GRAVITY: 1.221

X. Stability and Reactivity:

Stability:
Stable
Incompatibility (Materials to Avoid):
Strong oxidizers
Decomposition/By Products:
Incompletely burned carbon products, carbon monoxide and carbon dioxide.
Hazardous Polymerization:
Will not occur

XI. Toxicological Information:

None Available

XII. Ecological Information:

None Available

XIII. Disposal Considerations:

Waste must be disposed of in accordance with federal, state and local environmental regulations. Incinerate or bury in a licensed facility. Containers may be disposed of or reclaimed in a routine manner.

XIV. Transport Information:

Not regulated by DOT.

XV. Regulatory Information:

TSCA Inventoty Status: This product, or its components, are listed on, or are exempt from the Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

SARA 313 INFORMATION: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372:

CHEMICAL NAME	CAS NUMBER	CONCENTRATION
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Mercury, (neodecanoato-.kappa.O)phenyl-	26545-49-3	<0.6%
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SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:
An immediate health hazard; A delayed health hazard

XVI. Other Information:

For Calcined Kaolin the OSHA PEL or Total Dust is 15mg/m3 and the PEL for Respiratory Dust is 5mg/m3. The ACGIH TLV for Calcined Kaolin is 15mg/m3 for Total Dust and the TLV for Respiratory Dust is 5mg/m3.

In this document the following abbreviations were used:
NA: Not Applicable ; NE: Not Established





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I. Basic Information:

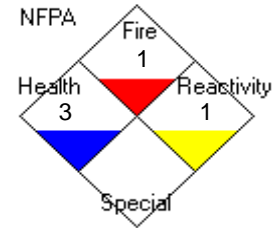
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Address: 2003 Curtain Pole Rd, P.O. Box 5413

City, ST Zip: Chattanooga, TN 37406

Emergency Phone: 423-697-0499

Transportation Emergency Phone: Chem-trec 1-800-424-9300



Chemical State: Liquid Gas Solid Chemical Type: Pure Mixture

II. Ingredients:

CAS No.	Chemical Name	% Range	EHS	NTP	IARC	SUB Z	SARA 313	OSHA PEL	ACGIH TLV	Other Limits
63449398	Paraffin waxes and Hydrocarbon waxes, chloro	15-25								
6474252	Distillates, petroleum, hydrotreated heavy naphthenic	10-15								
101688	4,4' - Diphenylmethane Diisocyanate (MDI)	2-4					X	0.02 ppm	0.005 ppm	NE
9016879	Polymeric MDI	4-6					X	NE	NE	NE
26471625	Toluenediisocyanate (mixed isomers)	2-4		X			X	0.02 ppm	0.005 ppm	NE
60209076	Isocyanic acid, polymethylenepolyphenylene ester, polymer with 1,3-diisocyanatomethylbenzene and .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-	55-65								

III. Hazardous Identification:

Hazard Category: ACUTE CHRONIC REACTIVE

Hazardous Identification Information:

Warning!

Brown liquid with a characteristic odor.

Contains Toluenediisocyanate (TDI).

Contains Diphenylmethane-4,4'-diisocyanate (MDI)

Inhalation of vapors may cause respiratory tract irritation. Contact with skin and eyes may cause irritation.

IV. First Aid Measures:

Route(s) of Entry: Inhalation, Ingestion, Skin and Eye contact.





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Health Hazards (Acute and Chronic):

Acute (Short-Term)

Contact may cause slight irritation of the skin and eyes (tearing). Inhalation of vapors may cause irritation of the mucous membranes in the respiratory tract, running nose and sore throat.

Chronic (Delayed)

Prolonged skin contact can cause reddening, swelling or skin sensitization in susceptible individuals.

Repeated or prolonged inhalation of TDI and MDI vapors above the TLV of 0.02 ppm can cause immediate or delayed respiratory sensitization and asthma-like conditions.

Signs and Symptoms:

Skin, eye and respiratory tract irritation.

Medical Conditions Generally Aggravated by Exposure: Repeated skin contact may cause skin sensitization.

Emergency and First Aid Procedures:

SKIN CONTACT: Remove contaminated clothing and wash affected area with isopropyl alcohol followed by soap and water.

EYE CONTACT: Flush eyes with water for at least 15 minutes and contact a physician.

INGESTION: Do NOT induce vomiting and contact a physician. Do NOT give anything by mouth to an unconscious person.

INHALATION: Remove person to fresh air. If person is not breathing give mouth-to-mouth resuscitation and contact a physician.

Other Health Warnings

In an NTP study, TDI was carcinogenic when given to rats and mice at maximum tolerated doses. TDI was carcinogenic to rats in a two-year inhalation study.

This product contains petroleum oils similar to the ones categorized by IARC as causing skin cancer in mice after prolonged and repeated contact. Any potential hazard can be minimized by using the recommended protective equipment.

V. Fire Fighting Measures:

Flash Point: 440°F **Lower Explosive Limit:** NE **Upper Explosive Limit:** NE

Fire Extinguishing Media:

Foam, water fog, carbon dioxide or dry chemical extinguishers.

Special Fire Fighting Procedures:

Firefighters should wear a self-contained breathing apparatus and protective clothing.

Unusual Fire and Explosion:

Contamination of isocyanates with water releases carbon dioxide which may result in a dangerous amount of pressure build-up in closed containers. Do NOT reseal contaminated containers. Personnel must be evacuated. Use cold water to cool fire exposed containers.

VI. Accidental Release Measures:

Steps to be Taken in Case Material is Released or Spilled:

Cover liquid with an absorbent material (sawdust, vermiculite or wet sand). After the material is absorbed scoop up and place in open containers. Treat material with the prepared decontamination solution and leave the container open in a well ventilated area for 48 hours. Spill area should also be decontaminated with the following decontamination solution: 90% water, 2% detergent and 8% concentrated ammonia or sodium carbonate.

VII. Handling and Storage:

Precautions to be Taken:

Store in tightly closed containers in a cool, dry area away from sources of heat, moisture and incompatibles.

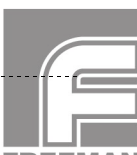
Other Precautions:

This product contains petroleum oils similar to the ones categorized by IARC as causing skin cancer in mice after prolonged and repeated contact. Any potential hazard can be minimized by using recommended protective equipment.

VIII. Exposure Controls/Personal Protection:

Ventilation Requirements:

Local Exhaust: Provide mechanical (general) and/or local exhaust ventilation to control airborne levels below the exposure





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guidelines.

Personal Protective Equipment:

RESPIRATORY PROTECTION: None needed at normal temperatures. Use a self-contained breathing apparatus under emergency conditions.

PROTECTIVE GLOVES: Impervious rubber gloves.

EYE PROTECTION: Wear safety glasses or goggles.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: An apron or suitable clothing to prevent skin contact.

IX. Physical and Chemical Properties:

Boiling Point:	>400°F	Melting Point:	NA	Evaporation Rate:	NA
Vapor Pressure (mm Hg.):	NE	Vapor Density (AIR = 1):	>1		
Solubility In Water:	Reacts slowly to liberate CO2 gas				
Appearance and Odor:	Brown liquid; characteristic odor				
Other Information:	VOLATILITY @75°F: Very low				
	PERCENT VOLATILE BY VOLUME(%): Negligible				
	SPECIFIC GRAVITY: 1.08				

X. Stability and Reactivity:

Stability:

Stable

Incompatibility (Materials to Avoid):

Water, bases, oxidizers, and amines.

Decomposition/By Products:

Carbon dioxide, carbon monoxide, TDI vapors, MDI vapors, traces of HCN and oxides of nitrogen.

Hazardous Polymerization:

May occur at temperatures above 400°F.

XI. Toxicological Information:

None Available

XII. Ecological Information:

None Available

XIII. Disposal Considerations:

Neutralized waste must be disposed of in accordance with federal, state and local environmental control regulations. Incineration is the preferred method.

XIV. Transport Information:

Toluene Diisocyanate's RQ - 100 lbs
This product's RQ (with 4 % TDI) consequently - 2500 lbs
In quantity in one package equals or exceeds RQ (CFR 49 171.8):

Shipping Name: Toxic liquid, organic n.o.s Contains Toluene Diisocyanate (TDI)

Hazard Class: 6.1

Packing Group: III

UN 2810

Otherwise: Not regulated by DOT.

XV. Regulatory Information:

TSCA Inventoty Status: This product, or its components, are listed on, or are exempt from the Toxic Substance Control Act





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(TSCA) Chemical Substance Inventory.

Toluene Diisocyanate CAS# 26471-62-5 contains 2,4 Toluene Diisocyanate CAS# 584-84-9 and 2,6 Toluene Diisocyanate CAS# 91-08-7.

SARA 313 INFORMATION: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372:

CHEMICAL NAME	CAS NUMBER	CONCENTRATION
2,4 Toluene Diisocyanate	584-84-9	< 3%
2,6 Toluene Diisocyanate	91-08-7	< 1%
4,4' - Diphenylmethane Diisocyanate (MDI)	101-68-8	2-4%

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

An immediate health hazard; A delayed health hazard; A reactive hazard

XVI. Other Information:

In this document the following abbreviations were used:

NA: Not Applicable NE: Not Established

