



U.S. Department  
of Transportation

1200 New Jersey Avenue, SE  
Washington, D.C. 20590

**Pipeline and Hazardous  
Materials Safety Administration**

MAY 31 2007

Ms. Tanya M. Warsheski  
Rohm and Haas Company  
100 Independence Mall West  
Philadelphia, PA 19106-2399

Ref. No. 07-0075

Dear Ms. Warsheski:

This is in response to your April 5, 2007 letter requesting clarification of the classification requirements in the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask whether additional subsidiary hazards may be indicated when not otherwise listed in the § 172.101 Hazardous Materials Table (HMT).

In accordance with § 173.22, it is the shipper's responsibility to properly class and describe a hazardous material. This Office does not perform that function. However, based on the information in the MSDS you provided with your letter, it is the opinion of this Office that your product is properly classed as a subsidiary Division 6.1 toxic liquid at the packing group III level based on acute oral toxicity. Also, it is the opinion of this Office that "UN2733, Amines flammable liquid, corrosive, n.o.s. (t-octylamine), 3 (8, 6.1), PG III is the appropriate proper shipping name.

Your questions are paraphrased and answered as follows:

Q1. Are we required to label a package containing our product with a Division 6.1 subsidiary hazard even though Column (6) of the HMT does not include Division 6.1 as a subsidiary hazard for the proper shipping name?

A1. Yes. Unless otherwise excepted from the labeling requirements, if a material meets the definition of a hazard class as a subsidiary hazard, the package containing the hazardous material must be labeled per § 172.402(a).

Q2. If labeling for a subsidiary hazard not listed in Column (6) is required, is it also required to enter the subsidiary hazard on the shipping paper?

A2. Yes. Unless otherwise excepted from the shipping paper requirements, if a material meets the definition of a hazard class as a subsidiary hazard, the subsidiary hazard must be entered in parentheses immediately following the primary hazard per § 172.202(a)(2).



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172.202(a)  
172.402(a)  
173.22

Q3. For international transport by vessel or air, where in 49 CFR 171 does it allow an additional subsidiary hazard not listed in Column (6) of the HMT to be entered on a shipping paper or labeled on a package as required by the HMR.

Sections 171.11 and 171.12(b) of the HMR permit transportation in the United States of a material that is classed, labeled, and described on a shipping paper in accordance with the ICAO Technical Instructions and the IMDG Code, respectively, provided that all or part of the transportation is by air or vessel, as appropriate, and otherwise conforms to the requirements of the applicable section.

I hope this information is helpful. Please contact us if you require additional assistance.

Sincerely,



John A. Gale  
Chief, Standards Development  
Office of Hazardous Materials Standards

Der Kinderen  
§172.101  
§172.202  
§172.402 (a)(2)  
Labeling  
07-0075



April 5, 2007

Mr. Edward Mazullo  
Director of Hazardous Materials Standards  
Research and Special Programs Administration  
U.S. Department of Transportation  
400 7<sup>th</sup> SW  
Washington, DC 20590

**RE: Request for Interpretation on Additional Subsidiary Hazard Class for UN 2733**

Dear Mr. Mazullo,

I am writing to request a clarification from your office. Our Carrier requests approval by the Competent Authority as to the classification and the permissibility to reference an additional subsidiary hazard in the shipping description for UN 2733.

We classify a product called Primene TOA Amine as "UN 2733, Amines flammable liquid, corrosive, n.o.s. (t-octylamine), 3 (8)(6.1), PG III". Enclosed is a MSDS which shows the composition of Primene TOA Amine is 99% octylamine and 1% inert non-hazardous ingredients. We have analytical that supports the following hazardous characteristics subject to transportation classification criteria: Flammable PG III, Corrosive PG III and Acute Oral Toxic PG III.

- (1) According to 49 CFR 172.402(a)(2), are we permitted to label the package with a subsidiary hazard of (6.1) even though UN 2733 only references a subsidiary hazard of Corrosive?
- (2) If labeling of the (6.1) subsidiary hazard is required, would shipping documents require the subsidiary hazard to be referenced per 49 CFR 172.202(3)?
- (3) Where in 49 CFR Part 171 does it allow an additional subsidiary hazard not listed in the Shipping Table, but is required by DOT, to be applied to shipping documentation and packages that are also being transported via ocean or air during the course of transit?

Thank you for taking the time to review this issue. I look forward to your timely response.

Sincerely,

Tanya M. Warsheski, CHMM  
Regulatory Specialist  
Rohm and Haas Company

732-262-5988  
TWarsheski@rohmdhaas.com



# Material Safety Data Sheet

## 1. PRODUCT AND COMPANY IDENTIFICATION

### PRIMENE(TM) TOA AMINE

Revision date: 05/21/2004

**Supplier** Rohm and Haas Company  
100 Independence Mall West  
Philadelphia, PA 19106-2399 United States of America

For non-emergency information contact: 215-592-3000

#### Emergency telephone number

Spill Emergency 215-592-3000  
Health Emergency 215-592-3000  
Chemtrec 800-424-9300

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Octylamine	107-45-9	99.0 - 100.0%
Related reaction products	Not Required	<1.0%

## 3. HAZARDS IDENTIFICATION

### Emergency Overview

#### Appearance

**Form** liquid clear  
**Colour** colourless  
**Odour** Ammonia odor

#### Hazard Summary

**DANGER!**  
CORROSIVE  
CAUSES SEVERE EYE/SKIN BURNS.  
FLAMMABLE LIQUID AND VAPOR.  
INHALATION OF VAPOR OR MIST CAN CAUSE HEADACHE,  
NAUSEA AND IRRITATION OF THE NOSE, THROAT AND LUNGS.

#### Potential Health Effects

**Primary Routes of Entry:** Inhalation  
Eye contact  
Skin contact

**Eyes:** Material can cause the following:  
corrosion to eyes

May cause permanent eye injury.

**Skin:**Material can cause the following:  
corrosion to the skin

**Ingestion:**Harmful if swallowed.

**Inhalation:**Inhalation of vapor or mist can cause the following:  
irritation of nose, throat, and lungs  
nausea  
vomiting  
pulmonary edema (fluid in lung tissue and air spaces)

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#### 4. FIRST AID MEASURES

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**Inhalation:**Move to fresh air. Oxygen or artificial respiration if needed. Consult a physician.

**Skin contact:**IMMEDIATELY get under a safety shower. Wash off with soap and water. Immediate medical attention is required. Wash contaminated clothing before re-use. Do not take clothing home to be laundered. Discard contaminated shoes, belts, and other articles made of leather.

**Eye contact:**Rinse immediately with plenty of water for at least 15 minutes. Immediate medical attention is required

**Ingestion:**Drink 1 or 2 glasses of water. Call a physician immediately. Never give anything by mouth to an unconscious person.

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#### 5. FIRE-FIGHTING MEASURES

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<b>Flash point</b>	27 °C (80.60 °F ) PENSKY MARTENS CLOSED CUP
<b>Lower explosion limit</b>	0.60 %(V)v/v @ 150C/302F
<b>Upper explosion limit</b>	3.90 %(V)v/v @ 150C/302F
<b>Suitable extinguishing media:</b>	carbon dioxide (CO2) water spray dry chemical foam

**Specific hazards during fire fighting:**Vapors can travel to a source of ignition and flash back. Closed containers may explode when heated or contents contaminated with water. Combustion generates toxic fumes of the following: nitrogen oxides (NOx) Carbon oxides

**Special protective equipment for fire-fighters:**Wear self-contained breathing apparatus and protective suit.

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#### 6. ACCIDENTAL RELEASE MEASURES

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##### **Personal precautions**

Appropriate protective equipment must be worn when handling a spill of this material. See SECTION 8, Exposure Controls/Personal Protection, for recommendations.

If exposed to material during clean-up operations, see SECTION 4, First Aid Measures, for actions to follow.

##### **Environmental precautions**

**CAUTION:** Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

**Methods for cleaning up**

Evacuate personnel to safe areas.

Remove all sources of ignition.

Floor may be slippery; use care to avoid falling.

Contain spills immediately with inert materials (e.g., sand, earth).

Allow material to solidify then transfer into containers for recovery or disposal.

**7. HANDLING AND STORAGE****Handling**

Vapors can be evolved when material is heated during processing operations. See SECTION 8, Exposure Controls/Personal Protection, for types of ventilation required. Shower or bathe at the end of working. Ground all metal containers during storage and handling.

**Advice on protection against fire and explosion:** CONTAINERS MAY BE HAZARDOUS WHEN EMPTY.

Since emptied containers retain product residue follow all MSDS and label warnings even after container is emptied. Residual vapors in empty containers may explode on ignition. DO NOT cut, drill, grind or weld on or near container.

**Storage**

**Storage conditions:** Material can burn; limit indoor storage to approved areas equipped with automatic sprinklers. Store away from excessive heat (e.g. steampipes, radiators), from sources of ignition and from reactive materials. Keep container tightly closed. Ground all metal containers during storage and handling.

**Storage temperature:** < 21 °C (< 70 °F)

**Storage temperature:** > 4 °C (> 39 °F)

**Further information:**

CONTAINERS MAY BE HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue follow all MSDS and label warnings even after container is emptied.

Residual vapors in empty containers may explode on ignition. DO NOT cut, drill, grind or weld on or near container.

Improper disposal or re-use of this container may be dangerous and illegal. Refer to applicable local, state and federal regulations.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Exposure limit(s)**

Exposure limits are listed below, if they exist.

Component	Regulation	Type of listing	Value
Octylamine	Rohm and Haas	TWA	3 ppm
	Rohm and Haas	STEL	9 ppm

**Eye protection:** Chemical resistant goggles must be worn.

**Hand protection:** Chemical-resistant gloves should be worn whenever this material is handled. The glove(s) listed below may provide protection against permeation. (Gloves of other chemically resistant materials may not provide adequate protection): Butyl rubber. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water.

**Skin and body protection:** Use chemically resistant apron or other impervious clothing to avoid prolonged or repeated skin contact.

**Respiratory protection:** A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements or equivalent must be followed whenever workplace conditions warrant a respirator's use. None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Up to 10 times the exposure limit: Wear a properly fitted NIOSH approved (or equivalent) half-mask, air-purifying

respirator. Up to 50 times the exposure limit: Wear a properly fitted NIOSH approved (or equivalent) full-facepiece, air-purifying respirator, OR full-facepiece, airline respirator in the pressure demand mode. Above 50 times the exposure limit or Unknown: Wear a properly fitted NIOSH approved (or equivalent) self-contained breathing apparatus in the pressure demand mode, OR full-facepiece, airline respirator in the pressure demand mode with emergency escape provision. Air-purifying respirators should be equipped with NIOSH approved (or equivalent) ammonia/methylamine cartridges and N95 filters. If oil mist is present, use R95 or P95 filters.

**Protective measures:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**Engineering measures:** Use explosion-proof local exhaust ventilation with a minimum capture velocity of 100 ft/min (0.5 m/sec) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

<b>Form</b>	liquid clear
<b>Colour</b>	colourless
<b>Odour</b>	Ammonia odor
<b>Boiling point/range</b>	140 °C (284.00 °F)
<b>Melting point/range</b>	-67.00 °C (-88.60 °F)
<b>Flash point</b>	27 °C (80.60 °F) PENSKEY MARTENS CLOSED CUP
<b>Lower explosion limit</b>	0.60 %(V)v/v @ 150C/302F
<b>Upper explosion limit</b>	3.90 %(V)v/v @ 150C/302F
<b>Vapour pressure</b>	10.0 mmHg at 25 °C (77.00 °F)
<b>Relative vapour density</b>	4.4
<b>Water solubility</b>	practically insoluble
<b>Relative density</b>	0.77
<b>Viscosity, kinematic</b>	1.4 mm <sup>2</sup> /s
<b>Evaporation rate</b>	0.75
<b>Percent volatility</b>	100 %

NOTE: The physical data presented above are typical values and should not be construed as a specification.

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## 10. STABILITY AND REACTIVITY

<b>Hazardous reactions</b>	Stable under recommended storage conditions.
<b>Materials to avoid</b>	acids oxidizing agents
<b>Hazardous decomposition products</b>	There are no known hazardous decomposition products for this material.,
<b>polymerization</b>	Product will not undergo hazardous polymerization.

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## 11. TOXICOLOGICAL INFORMATION

<b>Acute oral toxicity</b>	LD50rat 217 mg/kg
<b>Acute dermal toxicity</b>	LD50rabbit >3,000 mg/kg
<b>Skin irritation</b>	rabbitcorrosive
<b>Eye irritation</b>	rabbitcorrosive

**Mutagenicity**

Ames mutagenicity:

Non-mutagenic

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**12. ECOLOGICAL INFORMATION**

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No data available

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**13. DISPOSAL CONSIDERATIONS**

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**Environmental precautions:**CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.**Disposal****Waste Classification:** D001

When a decision is made to discard this material as supplied, it is classified as a RCRA hazardous waste with the characteristic of ignitability.

Incinerate liquid and contaminated solids in accordance with local, state, and federal regulations.

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**14. TRANSPORT INFORMATION**

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**DOT**

<b>Proper shipping name</b>	Amines, flammable, corrosive, n.o.s.(t-Octylamine)
<b>UN-No</b>	UN 2733
<b>Class</b>	3 (8) (6.1)
<b>Packing group</b>	III

**IMO/IMDG**

<b>Proper shipping name</b>	Amines, flammable, corrosive, n.o.s.(t-Octylamine)
<b>UN-No</b>	UN 2733
<b>Class</b>	3 (8) (6.1)
<b>Packing group</b>	III

**China DG Number:**CN82032*Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations*

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**15. REGULATORY INFORMATION**

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**Workplace Classification**

This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

This product is a 'controlled product' under the Canadian Workplace Hazardous Materials Information System (WHMIS).

**SARA TITLE III:Section 311/312 Categorizations (40CFR370):**Acute Health Hazard

Fire Hazard

**SARA TITLE III:Section 313 Information (40CFR372)**

This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations.

**CERCLAInformation(40CFR302.4)**

This material is regulated under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)and the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304. This material is or contains chemical(s) listed in 40 CFR Table 302.4 or nondesignated RCRA ICR substance(s). (Nondesignated



ICR substances apply to materials that will not be reused.) The Reportable Quantity(s) (RQ) are listed below. Releases in excess of its reportable quantity must be reported to the National Response Center (1-800-424-8802) and to the appropriate state and local emergency response organizations. D001, 100 lbs.

**US. Toxic Substances Control Act (TSCA)** All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

## 16. OTHER INFORMATION

### Hazard Rating

	Health	Fire	Reactivity
HMIS	3	3	0

### Legend

ACGIH	American Conference of Governmental Industrial Hygienists
BAC	Butyl acetate
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
STEL	Short Term Exposure Limit (STEL):
TLV	Threshold Limit Value
TWA	Time Weighted Average (TWA):
	Bar denotes a revision from prior MSDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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