

# MATERIAL SAFETY DATA SHEET

## Hampford Research, Inc.

### SECTION 1. -----CHEMICAL PRODUCT AND COMPANY IDENTIFICATION-----

#### TAOBN

**CHEMICAL FORMULA:** C10 H18 N2 O2

**CAS NUMBER:** 34122-40-2

**CHEMICAL NAME:** 1,4,4-Trimethyl-2,3-diazabicyclo-[3.2.2]-non-2-ene-2,3-dioxide

**REVISED:** 7/9/2008

**MANUFACTURER:** Hampford Research, Inc  
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**EMERGENCY TELEPHONE NUMBERS:** OFFICE (203) 375-1137  
CHEMTREC (800) 424-9300

### SECTION 2. -----COMPOSITION / INFORMATION ON INGREDIENTS-----

COMPONENT	CAS #	% BY WEIGHT	EXPOSURE LIMITS
1,4,4-Trimethyl-2,3-diazabicyclo-[3.2.2]-non-2-ene-2,3-dioxide	34122-40-2	> 99%	

### SECTION 3. -----HAZARDS IDENTIFICATION-----

**EYES:** TAOBN caused transient, mild to minimal conjunctival irritation in tests with rabbits.

**SKIN:** Direct contact may cause mild skin irritation. No sensitization in tests with quinea pigs.

**SWALLOWING:** Ingestion may irritate gastrointestinal tract. Oral ALD is >5000 mg/kg in rats. TAOBN was not mutagenic in bacterial cultures.

**INHALATION:** Dusts may be irritating to respiratory tract.

### SECTION 4. -----FIRST AID MEASURES-----

**EYE CONTACT:**  
In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Contact a physician.

**SKIN CONTACT:**  
In case of contact, immediately wash skin with soap and copious amounts of water for at least 15 minutes. Remove and wash contaminated clothing before reuse.

**INGESTION:**  
If swallowed, get immediate medical attention.

**INHALATION:**  
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

### SECTION 5. -----FIRE FIGHTING MEASURES-----

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**  
Combustion products include nitrogen oxides.

Revision Date: 7/9/2008

Page 1 of 4

Chemical Name: 1,4,4-Trimethyl-2,3-diazabicyclo-[3.2.2]-non-2-ene-2,3-dioxide

# Material Safety Data Sheet

## **FIRE EXTINGUISHING MEDIA:**

Water, carbon dioxide, dry chemical extinguishing media, or appropriate foam.

## **SPECIAL FIREFIGHTING INSTRUCTIONS:**

Evacuate personnel to a safe area. Keep personnel removed and upwind of fire. Firefighters should be equipped with self-contained breathing apparatus and turn out gear.

## **SECTION 6. -----ACCIDENTAL RELEASE MEASURES-----**

### **PERSONAL PROTECTIVE EQUIPMENT (PPE):**

Wear respirator, chemical safety goggles, rubber apron, rubber boots and heavy rubber gloves.

### **SPILL CLEANUP MEASURES:**

Shovel or sweep up immediately with care to avoid dust generation. Place in suitable container and hold for proper disposal. Ventilate area and wash spill site after material pickup is complete.

## **SECTION 7. -----HANDLING AND STORAGE-----**

### **HANDLING AND STORAGE REQUIREMENTS:**

Keep container tightly closed. Store in a cool, dry, well-ventilated area. Avoid dust generation. Avoid breathing dust. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

## **SECTION 8. -----PERSONAL PROTECTION/EXPOSURE CONTROLS-----**

**EYE/FACE PROTECTION:** Wear safety glasses. Wear coverall chemical splash goggles and face shield when possibility exists for eye and face contact from airborne material. Eye bath available.

**SKIN PROTECTION:** If there is potential for significant dermal contact, wear appropriate impervious clothing such as gloves, apron, boots or whole body suit. Safety shower available.

**RESPIRATORY PROTECTION:** NIOSH/MSHA approved air purifying respirator.

**ENGINEERING CONTROLS:** Use only with adequate ventilation.

## **SECTION 9. -----PHYSICAL AND CHEMICAL PROPERTIES-----**

**PHYSICAL STATE:** Powder

**MELTING POINT:** 122-125°C

**BOILING POINT:** N/A

**SPECIFIC GRAVITY:** N/A

**APPEARANCE:** White to yellow or greenish

**ODOR:** Camphor/menthol odor

**OTHER:** Solubility in water: negligible

## **SECTION 10. -----STABILITY AND REACTIVITY-----**

### **INCOMPATIBILITIES:**

None reasonable foreseeable.

### **HAZARDOUS DECOMPOSITION:**

Decomposition will not occur.

# Material Safety Data Sheet

**CHEMICAL STABILITY:**

Stable.

**HAZARDOUS POLYMERIZATION:**

Polymerization will not occur.

**SECTION 11. -----TOXICOLOGICAL INFORMATION-----****TOXICOLOGICAL EFFECTS:**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**SECTION 12. -----ECOLOGICAL INFORMATION-----****ECOLOGICAL EFFECTS:**

Data not yet available.

**SECTION 13. -----DISPOSAL INFORMATION-----****WASTE MANAGEMENT PROCEDURES:**

Treatment, storage, transportation and disposal must be in accordance with Federal, State and Local regulations.

**SECTION 14. -----TRANSPORT INFORMATION-----****TRANSPORTATION INFORMATION:**

Not considered hazardous for transportation not regulated by DOT or IATA

**-----DOT (DOMESTIC SURFACE)-----**

PROPER SHIPPING NAME: NOT Regulated

HAZARD CLASS OR DIVISION:

UN / NA NUMBER:

PACKING GROUP:

DOT PRODUCT RQ lbs (kgs):

HAZARD LABEL (s):

HAZARD PLACARD (s):

**-----IMO / IMDG CODE (OCEAN)-----**

PROPER SHIPPING NAME: NOT Regulated

HAZARD CLASS DIVISION NUMBER:

UN NUMBER:

PACKAGING GROUP:

HAZARD LABEL (s):

HAZARD PLACARD (s):

**-----ICAO / IATA (AIR)-----**

PROPER SHIPPING NAME: NOT Regulated

Revision Date: 7/9/2008

Page 3 of 4

Chemical Name: 1,4,4-Trimethyl-2,3-diazabicyclo-[3.2.2]-non-2-ene-2,3-dioxide

# Material Safety Data Sheet

HAZARD CLASS DIVISION NUMBER:  
UN NUMBER:  
SUBSIDIARY RISK:  
PACKING GROUP:  
HAZARD LABEL (s):  
RADIOACTIVE?:  
PASSENGER AIR - MAX QTY:  
PASSENGER PACKING INSTRUCTION:  
CARGO AIR - MAX QTY:  
CARGO AIR PACKAGING INSTRUCTION:

## SECTION 15. -----REGULATORY INFORMATION-----

### REGULATORY INFORMATION:

Inventory Status  
On TSCA Inventory  
January 2008 TSCA Inventory.  
On NDSL  
Canada Gazette, Part I, January 31, 1998.  
On EINECS  
Annex to Official Journal of the European Communities, 15 June 1990.  
On ECL  
Korean Government Gazette Notice, 2004.  
On ASIA-PAC  
2005.  
Regulatory List Number  
EINECS No.:  
251-833-3  
ECL Serial No.:  
2004-3-2773  
Confidentiality Status  
Public

## SECTION 16. -----ADDITIONAL INFORMATION-----

### ADDITIONAL INFORMATION:

None of the components in this material is listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Hampford Research, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. Hampford Research grants permission to make unlimited paper copies for internal use only.

Revision Date: 7/9/2008

Page 4 of 4

Chemical Name: 1,4,4-Trimethyl-2,3-diazabicyclo-[3.2.2]-non-2-ene-2,3-dioxide