



MATERIAL SAFETY DATA SHEET

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL NAME: VAPOR RETARDER

PRODUCT/TRADE NAME: CertainTeed MemBrain Smart Vapor Retarder

PRODUCT DESCRIPTION: Nylon Film, Plastic Film

PRODUCT USE: Vapor Retarder

- CHEMICAL NAME: Mixture
- CAS NUMBER: None Assigned
- EINECS: None Assigned
- MOLECULAR FORMULA: No Data Available

Company Identification

CERTAINTEED CORPORATION
 P.O. Box 860
 Valley Forge, PA 19482
 United States

WEB ADDRESS: www.certainteed.com

Phone Numbers

Technical Information: (610) 341-7000 - 9 AM – 5 PM (Eastern Time – USA)

*Emergency: (800) 424-9300 - EMERGENCY TELEPHONE: CHEMTREC
 Emergency: (703) 527-3887 - OUTSIDE OF THE U.S. CHEMTREC*

PREPARATION DATE: 2/1/2009
 LAST REVISION DATE: 4/3/2003

SECTION 2 - HAZARDS IDENTIFICATION


Emergency Overview

This product may cause temporary irritation to the upper respiratory system, eyes, and skin although not expected under normal product use.

Avoid inhalation, skin and eye contact as temporary irritation may occur. Wear appropriate personal protective equipment as described in Section 8.

GHS

Temporary eye, skin, and respiratory irritation may occur. Avoid breathing dust, fume, gas, mist, vapors and/or spray. Contaminated work clothing should not be allowed out of the workplace. Wash thoroughly after handling. Wear protective gloves.



GHS: Skin Irritation - Category 3, Eye Irritation - Category 2B

NFPA/HMIS RATINGS:

	<u>Health</u>	<u>Fire</u>	<u>Reactivity</u>	<u>Degree of Hazard</u>
NFPA RATING:	0	0	0	0 - Minimal (Insignificant)
				1 - Slight
				2 - Moderate
				3 - Serious (High)
				4 - Severe (Extreme)
				* - Chronic Health Effect(s)
HMIS RATING:	0	0	0	

PHYSICAL FORM: Solid

COLOR: Clear or Colored

ODOR: None

HAZARDS: Mild/Slight Irritant, Mechanical Irritant

ROUTE OF ENTRY: Inhalation, Skin/Dermal, Eye/Ocular

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing conditions which may be aggravated by mechanical irritants upon inhalation or skin contact.

POTENTIAL HEALTH EFFECTS:

INHALATION:

ACUTE (IMMEDIATE): Not a route of exposure under normal use. Elevated processing temperatures may cause temporary irritation of nose and throat may occur.

CHRONIC (DELAYED): None

SKIN:

ACUTE (IMMEDIATE): Not considered to be a problem but temporary irritation of the skin may occur in some individuals

CHRONIC (DELAYED): None

EYE:

ACUTE (IMMEDIATE): Temporary irritation/mechanical irritation or redness may occur if film comes in contact with the eye.

CHRONIC (DELAYED): None

INGESTION:

ACUTE (IMMEDIATE): Ingestion of this product unlikely. Not considered hazardous. Consult a physician if unusual reaction is noted.

CHRONIC (DELAYED): None known

MUTAGENIC EFFECTS: None

CARCINOGENIC EFFECTS: None

REPRODUCTIVE EFFECTS: None

OTHER HEALTH EFFECTS: None

See Section 12 for Ecological Information

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Composition/Information on Ingredients

Product(s) Containing Component	Chemical Name	CAS	%(weight)	UN;EINIC S	LD50/LC50	EU	OSHA PEL/TWA	ACGIH TLV/TWA	NIOSH REL
For CertainTeed MemBrain Smart Vapor Retarder:	2H-Azepin-2-one, hexahydro-	105-60-2	0% TO 1%	203-313-2	NDA	Xn Xi; R20/22 R36/37/38	None	5 ppm	None
For CertainTeed MemBrain Smart Vapor Retarder:	Poly(iminocarbonyl pentamethylene)	25038-54-4	99% TO 100%	NDA	NDA	NDA	None	None	None
For CertainTeed MemBrain Smart Vapor Retarder:	Colorants/Additives	NDA	0% TO 1%	NDA	NDA	NDA	None	None	None

This product is NOT considered Hazardous under 29 CFR 1910.1200 (Hazard Communication).

In Canada, these products are NOT considered Hazardous under the Workplace Hazardous Materials Information System (WHMIS). According to the Globally Harmonized Standard for Classification and Labeling (GHS) this product is NOT considered Hazardous

See Section 11 for Toxicological Information

SECTION 4 - FIRST AID MEASURES

INHALATION: Remove to fresh air, apply artificial respiration and/or oxygen if necessary and get medical attention.

SKIN: Wash exposed skin with soap and water. If irritation develops or persists, seek medical attention.

EYE: Do not rub or scratch your eyes. If irritation persists get medical attention. In case of contact, immediately flush eyes with large amounts of water, continuing to flush for 15 minutes.

INGESTION: Consult a physician if unusual reaction is noted. Product is not intended nor is it likely to be ingested or eaten.

See Section 2 for Potential Health Effects

SECTION 5 - FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Use any media suitable for the surrounding fires

UNSUITABLE EXTINGUISHING MEDIA: No data available

FIREFIGHTING PROCEDURES: Treat as residential building materials. Fire-fighters should wear a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Molten film at higher temperatures can ignite and will burn.

HAZARDOUS COMBUSTION PRODUCTS: Thermal decomposition products may include but are not limited to caprolactam, hydrogen cyanide, carbon monoxide, carbon dioxide and combustion by-products (oxidized and non-oxidized hydrocarbons).

FLASH POINT: Non-volatile solid

FLASH POINT TEST TYPE: N/A

EXPLOSION LIMITS

UPPER: N/A LOWER: N/A

SECTION 6 - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Avoid contact with skin and eyes during clean-up.

EMERGENCY PROCEDURES: Persons not wearing appropriate protective equipment should be excluded from area of spill until clean-up has been completed.

CONTAINMENT/CLEAN-UP MEASURES: Containment of this material should not be necessary. Remove sources of ignition. Collect material and place in a solid waste container.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Use good personal hygiene and good housekeeping.

STORAGE: Store in a cool, dry area, away from direct heat or sunlight.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

PPE:



RESPIRATORY PROTECTION: Under normal usage, not normally required. Wear NIOSH-approved respirators in areas where the PEL/TLV is exceeded.

EYE/FACE PROTECTION: As a general practice in manufacturing and construction areas, safety glasses that conform to ANSI Z87.1 should be worn.

SKIN/BODY PROTECTION: Not normally required. Use heat-resistant gloves if handling melted material.

GENERAL INDUSTRIAL HYGIENE CONSIDERATIONS: Use good industrial hygiene practices in handling this material.

ENGINEERING MEASURES/CONTROLS: General room ventilation plus local exhaust at points of fume generation to maintain exposure below the PEL/TLV exposure limits.

LISTED EXPOSURE LIMITS:

US State California

• 2H-Azepin-2-one, hexahydro- (105-60-2): **PELs:** (1 mg/m³ PEL (dust); 5 ppm PEL (vapor); 20 mg/m³ PEL (vapor)) | **STELs:** (3 mg/m³ STEL (dust); 10 ppm STEL (vapor); 40 mg/m³ STEL (vapor))

United States - ACGIH

2H-Azepin-2-one, hexahydro- (105-60-2): **TWAs:** (5 mg/m3 TWA (inhalable fraction and vapor)) | **Carcinogens:** (A5 - Not Suspected as a Human Carcinogen) | **TLV Basis - Critical Effects:** (irritation)

United States – OSHA

• 2H-Azepin-2-one, hexahydro- (105-60-2): **TWAs:** (1 mg/m3 TWA (dust); 5 ppm TWA (vapor); 20 mg/m3 TWA (vapor)) | **STELs (Short Term Exposure Limits):** (3 mg/m3 STEL (dust); 10 ppm STEL (vapor); 40 mg/m3 STEL (vapor))

United States - NIOSH

• 2H-Azepin-2-one, hexahydro- (105-60-2): **STELs:** (3 mg/m3 STEL (dust); 0.66 ppm STEL (vapor); 3 mg/m3 STEL (vapor)) | **TWAs:** (1 mg/m3 TWA (dust); 0.22 ppm TWA (vapor); 1 mg/m3 TWA (vapor)) |

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM: Solid

APPEARANCE/DESCRIPTION: Clear or colored plastic film.

COLOR: Clear/colored		ODOR: None	
TASTE: No data available		ODOR THRESHOLD: NDA	
BOILING POINT:	NDA	VAPOR PRESSURE:	NDA
MELTING POINT/FREEZING POINT:	= 428 to 433 F(220 to 222.8 C)	VAPOR DENSITY:	NDA
SPECIFIC GRAVITY:	= 1.12 TO 1.14	EVAPORATION RATE:	NDA
DENSITY:	= 9.3464 to 9.5133 lbs/gal	VOC (WT.):	NDA
BULK DENSITY:	NDA	VOC (VOL.):	NDA
WATER SOLUBILITY:	Negligible	VOLATILES (WT.):	NDA
SOLVENT SOLUBILITY:	NDA	VOLATILES (VOL.):	NDA
VISCOSITY:	@	FLASH POINT:	NDA
HALF-LIFE:	NDA	FLASH POINT TEST TYPE:	NDA
OCTANOL/WATER PARTITION COEFFICIENT:	NDA	UEL:	NDA
COEFFICIENT OF WATER/OIL DISTRIBUTION:	NDA	LEL:	NDA
BIOACCUMULATION FACTOR:	NDA	AUTOIGNITION:	NDA
PH:	NDA		

SECTION 10 - STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

CONDITIONS TO AVOID: Avoid exposure to open flame or temperatures exceeding recommended processing temperatures. The maximum temperature to which the film can be exposed will vary with exposure (dwell) time.

INCOMPATIBLE MATERIALS: Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition products may include but are not limited to caprolactam, hydrogen cyanide, carbon monoxide, carbon dioxide and combustion by-products (oxidized and non-oxidized hydrocarbons).

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: None known. Temporary irritation may be observed in the upper respiratory system, eyes, and skin. This product has not been tested as a separate entity. Therefore, the hazards must be evaluated on the basis of the individual ingredients, and those hazards must be assumed to be additive in the absence of complete information. The hazards described in this document have been evaluated on a threshold of 1.0% for all hazardous ingredients and 0.1% for all carcinogens.

CARCINOGENIC EFFECTS: None

SECTION 12 - ECOLOGICAL INFORMATION

PRODUCT INFORMATION: Material is considered inert and is not expected to be biodegradable or toxic.

ECOLOGICAL FATE: No information available for the product.

PERSISTANCE/DEGRADABILITY: No information available for the product.

SECTION 13 - DISPOSAL CONSIDERATIONS

PRODUCT: Dispose of waste material in an approved landfill in accordance with federal, state, and local regulations. If you are unsure of the regulations, contact your Public Health Department, or the local office of the Environmental Protection Agency (EPA). See Section 7 for Handling Procedures; see Section 8 for Personal Protective Equipment recommendations.

SECTION 14 - TRANSPORTATION INFORMATION

U.S. DOT 49 CFR 172.101:

SHIPPING NAME: Not Classified as a Hazardous Material for Transport

TDG - CANADA - TRANSPORT OF DANGEROUS GOODS:

SHIPPING NAME: Not Classified as a Dangerous Good for Transport

SECTION 15 - REGULATORY INFORMATION

SARA HAZARD CLASSIFICATIONS:

Acute Health: No Chronic Health: No Fire: No Pressure: No Reactive: No

US FEDERAL:

GENERAL PRODUCT INFORMATION:

Components of this product have been checked against the non-confidential TSCA inventory by CAS Registry Number. Components not identified on this non-confidential inventory are either exempt from listing (i.e. polymers, hydrates) or are listed on the confidential inventory as declared by the supplier.

CERCLA:

This material does not contain chemicals required to be identified under CERCLA (40 CFR 302.4).

STATE REGULATIONS:

COMPONENT ANALYSIS - STATE:

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS #	CA	MA	MN	NJ	PA	RI
2H-Azepin-2-one, hexahydro-	105-60-2	Yes	Yes	Yes	Yes	Yes	Yes
Poly(iminocarbonylpentamethylene)	25038-54-4	No	No	No	No	No	No
Colorants/Additives	NDA	No	No	No	No	No	No

CALIFORNIA SAFE DRINKING WATER AND TOXICS ENFORCEMENT ACT (PROPOSITION 65):

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): None

CANADIAN WHMIS INFORMATION:

GENERAL PRODUCT INFORMATION:

Not classified

COMPONENT ANALYSIS - WHMIS IDL:

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List: None

ADDITIONAL REGULATORY INFORMATION:

GENERAL PRODUCT INFORMATION:

No information available for the product.

COMPONENT ANALYSIS – INVENTORY:

Component	CAS #	TSCA	DSL	EINECS
2H-Azepin-2-one, hexahydro-	105-60-2	Yes	Yes	Yes
Poly(iminocarbonylpentamethylene)	25038-54-4	Yes	Yes	No
Colorants/Additives	NDA	No	No	No

SECTION 16 - OTHER INFORMATION

PREPARATION DATE: 2/1/2009

LAST REVISION DATE: 4/3/2003

DISCLAIMER: Reasonable care has been taken in the preparation of this information, but the supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this

product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Material Safety Data Sheet before handling product.

For reference to the acronyms/definitions used in this MSDS please visit www.certainteed.com.

MSDS HISTORY:

MSDS REVISION SUMMARY:

Date	MSDS No.	Changes
4/2003	CT 10072-1	<ul style="list-style-type: none"> • New MSDS
6/12/2009	CT10072-2	<ul style="list-style-type: none"> • MSDS format change (new ANSI Z400.2004 & GHS v .2007 format) • Section 2 – GHS (v. 2007) Classifications

This is the end of MSDS # CT 10072-2