chanhvinh.com

AptTec inc.
Adhesive & Process Technologies

Safety Data Sheet

Revision Number: 004.0

Issue date: 02/16/2015

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: **APT-0325P**
Product type: Adhesive
Restriction of Use: This product is for industrial use only.

Company address:
Aptec, Inc.
1202 E. Pontaluna Rd., Suite B
Spring Lake, MI 49456

Region: United States
Contact information:
Telephone: (231) 737-4418
TRANSPORT EMERGENCY Phone: CHEMTREC
1-800-424-9300 (toll free)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW	
DANGER:	MOLTEN ADHESIVE MAY CAUSE SEVERE BURNS. STATIC CHARGES GENERATED BY EMPTYING PACKAGE IN OR NEAR FLAMMABLE VAPORS MAY CAUSE IGNITION. VAPORS ABOVE MOLTEN ADHESIVE MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. CAUSES SKIN IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE IRRITATION. HARMFUL IF INHALED. MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED. CAUSES DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
ACUTE TOXICITY INHALATION	4
SKIN IRRITATION	2
EYE IRRITATION	2A
RESPIRATORY SENSITIZATION	1
SKIN SENSITIZATION	1
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	1

PICTOGRAM(S)



Precautionary Statements

Prevention:

Do not breathe vapors, mist, or spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear eye and face protection. Wear protective gloves. In case of inadequate ventilation wear respiratory protection.

Response:

chanhvinh.com

IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. If experiencing respiratory symptoms: Call a poison center or physician. Take off contaminated clothing.

Storage: Not prescribed

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Polyurethane prepolymer	Proprietary	60 - 100
Limestone	1317-65-3	10 - 30
Methylenebis(phenylisocyanate)	101-68-8	1 - 5
Quartz (SiO2)	14808-60-7	0.1 - 1

* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion. Get medical attention. If not breathing, give artificial respiration.

Skin contact: Cool melted product on skin with plenty of water. Do not remove solidified product. Cover affected areas with clean sheeting or gauze and seek immediate medical attention. No attempt should be made to remove material from skin or to remove contaminated clothing as damaged skin can be easily torn. Molten adhesive may cause severe burns.

Eye contact: If eye contact occurs with molten material immediately cool with water. Do not remove adhesive. Seek medical attention.

Ingestion: If material is ingested, immediately contact a physician or poison control center.

Symptoms: See Section 11.

Notes to physician: Persons with asthmatic-type conditions, chronic bronchitis, other chronic respiratory diseases or recurrent skin eczema or sensitization should be excluded from working with isocyanates.

5. FIRE FIGHTING MEASURES

Extinguishing media: Use extinguishing measures appropriate to local circumstances and the surrounding environment. Dry chemical. Carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. Keep unnecessary personnel away.

Unusual fire or explosion hazards: Sealed containers at elevated temperatures or contaminated with water may rupture explosively.

chanhvinh.com

Hazardous combustion products: Irritating and toxic gases or fumes may be released during a fire. Isocyanate vapors. Oxides of carbon. Hydrogen cyanide.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow material to contaminate ground water system.

Clean-up methods: If product is spilled in the solid state, pick up and place in an appropriate waste disposal container. If product is spilled in the molten state, allow product to solidify before scraping up and disposing of in an appropriate waste disposal container. Persons not wearing appropriate protective equipment should be excluded from area of spill until clean-up has been completed.

7. HANDLING AND STORAGE

Handling: Wear suitable protective clothing, safety glasses and gloves. Always be careful around molten material. Avoid skin contact with molten resins. Precaution - this product should only be heated to recommended temperatures. Hazards of pyrolysis products emitted are unknown and may be hazardous to health. If recommended temperature is exceeded, there is an increased possibility that MDI may be released. Equipment should be closely monitored. Follow suggested application temperature. Use caution if using container unloading equipment that inverts product, in order to avoid dislodging product prematurely. Do not place wet or damp solid into melt tank.

Storage: Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or promptly disposed of. Keep containers closed when not in use. Do not let moisture contaminate this material. Product reacts with water to release carbon dioxide, which could build up pressure in closed containers and lead to bursting. Do not reseal if moisture contamination is suspected.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Polyurethane prepolymer	None	None	None	None
Limestone	10 mg/m3 TWA Total dust.	5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust.	None	None
Methylenebis(phenylisocyanate)	0.005 ppm TWA	0.02 ppm (0.2 mg/m3) Ceiling	None	None
Quartz (SiO2)	0.025 mg/m3 TWA Respirable fraction.	2.4 MPPCF TWA Respirable. 0.1 mg/m3 TWA Respirable. 0.3 mg/m3 TWA Total dust.	None	None

chanhvinh.com

Engineering controls:	Work should be done in an adequately ventilated area (i.e., ventilation sufficient to maintain concentrations below one half of the PEL and other relevant standards). Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination. Local exhaust should be used to maintain levels below the TLV whenever MDI is processed, heated or spray applied. Monitoring of airborne isocyanates in the breathing zone of individuals should become part of the overall employee exposure characterization program. Once a person is diagnosed as sensitized to an isocyanate, no further exposure can be permitted.
Respiratory protection:	Use NIOSH approved respirator if there is potential to exceed exposure limit(s). A positive pressure, supplied-air respirator or a self-contained breathing apparatus is recommended when: airborne concentrations of isocyanate are known to exceed 0.005 ppm; operations are performed in a confined space or area with limited ventilation; material is heated or sprayed. Do not inhale vapors and fumes. Concentrations greater than the TLV can occur when MDI is sprayed, heated or used in a poorly ventilated area. Observe OSHA regulations for respirator use (29 CFR 1910.134).
Eye/face protection:	Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists. Do not wear contact lenses.
Skin protection:	Insulated gloves and long sleeved clothing are strongly recommended when working with molten adhesive. Wear face shield.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid
Color:	Off white
Odor:	Odorless
Odor threshold:	Not available.
pH:	Not applicable
Vapor pressure:	Not available.
Boiling point/range:	Not available.
Melting point/ range:	Not available.
Specific gravity:	1.25
Vapor density:	Not available.
Flash point:	> 325 °C (> 617°F)
Flammable/Explosive limits - lower:	Not available.
Flammable/Explosive limits - upper:	Not available.
Autoignition temperature:	Not available.
Evaporation rate:	Not available.
Solubility in water:	Insoluble
Partition coefficient (n-octanol/water):	Not available.
VOC content:	Not available.
Viscosity:	Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable
Hazardous reactions:	None expected.
Hazardous decomposition products:	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Hydrogen cyanide. Isocyanates.
Incompatible materials:	Humid air and/or water will produce carbon dioxide which will pressurize the container.
Reactivity:	Not available.
Conditions to avoid:	Avoid moisture. Container can be pressurised by carbon dioxide due to reaction with humid air and/or water.

chanhvinh.com

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Eyes, Lungs

Potential Health Effects/Symptoms

Inhalation: Dusts from solid adhesive may cause irritation. Heating this product may release harmful vapors. May cause allergic skin and respiratory tract reaction. Methylene bisphenyl isocyanate (MDI) vapors or mist at concentrations above the TLV can irritate the mucous membranes in the respiratory tract (nose, throat, lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing obstruction). As a result of previous repeated overexposures or a single large dose, certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanate at levels well below the TLV. Chronic overexposure to isocyanates has been reported to cause lung damage.

Skin contact: Molten adhesive may cause severe burns. Repeated or prolonged skin contact may result in allergic sensitization.

Eye contact: Molten adhesive in eyes will cause severe and permanant damage. Vapors may also produce eye irritation. Can cause mechanical irritation if dusts are generated.

Ingestion: Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. Molten adhesive may cause severe burns.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Polyurethane prepolymer	None	No Records
Limestone	None	Nuisance dust
Methylenebis(phenylisocyanate)	Inhalation LC50 (RAT, 4 h) = 0.38 mg/l Inhalation LC50 (RAT, 4 h) = 0.369 mg/l	Irritant, Respiratory, Allergen
Quartz (SiO2)	None	Immune system, Lung, Some evidence of carcinogenicity

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Polyurethane prepolymer	No	No	No
Limestone	No	No	No
Methylenebis(phenylisocyanate)	No	No	No
Quartz (SiO2)	Known To Be Human Carcinogen.	Group 1	No

12. ECOLOGICAL INFORMATION

Ecological information: Do not empty into drains / surface water / groundwater.

chanhvinh.com

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Legal disposition of wastes is the responsibility of the owner/generator of the waste. Applicable federal, state and/or local regulations must be followed during treatment, storage, or disposal of waste containing this product. Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: To the best of our knowledge, this product is not listed nor does it meet the criteria of a hazardous waste if discarded in its purchased form. However, under RCRA, it is the responsibility of the user to determine at the time of disposal whether a product meets any of the RCRA hazardous waste criteria. This is because product uses, transformations, mixtures, processes, etc., may render the resulting material hazardous, under the criteria of ignitability, corrosivity, reactivity and toxicity characteristics under the new Toxicity Characteristics Leaching Procedure (TCLP) 40 Code of Federal Regulations 261.20-24.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name:	Not regulated
Hazard class or division:	None
Identification number:	None
Packing group:	None

International Air Transportation (ICAO/IATA)

Proper shipping name:	Not regulated
Hazard class or division:	None
Identification number:	None
Packing group:	None

Water Transportation (IMO/IMDG)

Proper shipping name:	Not regulated
Hazard class or division:	None
Identification number:	None
Packing group:	None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status:	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12 (b) Export Notification:	None above reporting de minimis
CERCLA/SARA Section 302 EHS:	None above reporting de minimis
CERCLA/SARA Section 311/312:	Immediate Health, Delayed Health
CERCLA/SARA Section 313:	This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Methylenebis(phenylisocyanate) (CAS# 101-68-8).
California Proposition 65:	This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

CEPA DSL/NDSL Status:	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

chanhvinh.com

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: This Safety Data Sheet contains changes from the previous version in Section(s):
2

Prepared by: C. Poulsen, Regulatory Affairs

Issue date: 11/19/2014

Disclaimer: The data in this SDS has been compiled from publicly available sources. This data relates only to the designated product and not to the use of said product in combination with other materials. Because conditions and circumstances of the use of the product are beyond our control and any summary of data as such is represented by this SDS is inherently incomplete, Aptec, Inc. makes no warranty about the accuracy of the data herein and assumes no liability for the use of such data. Responsibility for proper precautions and safe use of the product lies with the user. We recommend that tests be made in a laboratory or plant to determine if this product meets all of your requirements. It is the responsibility of the buyer/user to determine the suitability of this product for his/her application/requirements. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.