

# MATERIAL SAFETY DATA SHEET

## AP ADHESIVE™



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Dryvit Item Number: 23104  
MSDS Number 005C

Version: 5  
Date Issued: 08/17/2010  
Replaces: 04/30/2007

### Section 01 - Product Information

**Identification of the company:**

**Dryvit Systems Canada**  
a division of RPM Canada  
129 Ringwood Drive  
Stouffville, Ontario L4A 8A2  
Telephone: +1 905 642 0444  
Contact: EH&S Manager – ehs@dryvit.com

**CHEMTREC:**

Domestic North America 800-424-9300  
International Call +1 703-527-3887 (collect calls accepted)

**Trade name:** AP Adhesive™  
**Item number:** 23104  
**Primary product use:** Adhesive

### Section 02 - Composition information on ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
14807-96-6	15.0 - 40.0 %	talco
101-68-8	7.0 - 13.0 %	Diphenylmethane-4,4'-diisocyanate (MDI)
64742-46-7	7.0 - 13.0 %	Distillates (petroleum), hydrotreated middle
26447-40-5	1.0 - 5.0 %	Methylenediphenyl diisocyanate
9016-87-9	1.0 - 5.0 %	P-MDI

### Section 03 - Hazards identification

**Emergency overview**

WARNING: CONTAINS DIPHENYLMETHANE DIISOCYANATE (CAS No. 101-68-8). INHALATION OF MDI MISTS OR VAPORS MAY CAUSE RESPIRATORY IRRITATION, BREATHLESSNESS, CHEST DISCOMFORT AND REDUCED PULMONARY FUNCTION. OVEREXPOSURE WELL ABOVE THE PEL MAY RESULT IN BRONCHITIS, BRONCHIAL SPASMS AND PULMONARY EDEMA. LONG-TERM EXPOSURE TO ISOCYANATES HAS BEEN HAS BEEN REPORTED TO CAUSE LUNG DAMAGE, INCLUDING REDUCED LUNG FUNCTION WHICH MAY BE PERMANENT. ACUTE OR CHRONIC OVEREXPOSURE TO ISOCYANATES MAY CAUSE SENSITIZATION IN SOME INDIVIDUALS, RESULTING IN ALLERGIC RESPIRATORY REACTIONS INCLUDING WHEEZING, SHORTNESS OF BREATH AND DIFFICULTY BREATHING. MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

State of matter: solid  
Colour: tan  
Odour: oily

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### Potential health effects

#### **Primary routes of exposure:**

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

#### **Acute toxicity:**

May cause sensitization by inhalation.

#### **Irritation / corrosion:**

Irritating to eyes, respiratory system and skin.

#### **Sensitization:**

Sensitization after skin contact possible. The substance may cause sensitization of the respiratory tract. Studies in animals suggest that dermal exposure may lead to pulmonary sensitization. However, the relevance of this result for humans is unclear.

#### **Signs and symptoms of overexposure:**

In sensitized individuals, sensitization reactions may be elicited by structurally similar substances. Respiratory sensitization may result in allergic (asthma-like) signs in the lower respiratory tract including wheezing, shortness of breath and difficulty breathing, the onset of which may be delayed. Repeated inhalation of high concentrations may cause lung damage, including reduced lung function, which may be permanent. Substances eliciting lower respiratory tract irritation may worsen the asthma-like reactions that may be produced by product exposures.

### **Section 04 - First aid measures**

#### **General advice:**

Remove contaminated clothing.

#### **If inhaled:**

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

#### **If on skin:**

Wash affected areas thoroughly with soap and water. Consult a doctor if skin irritation persists.

#### **If in eyes:**

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Immediate medical attention required.

#### **If swallowed:**

Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

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### Note to physician

**Antidote:** Specific antidotes or neutralizers to isocyanates do not exist.  
**Treatment:** Treatment should be supportive and based on the judgement of the physician in response to the reaction of the patient.

### Section 05 - Fire fighting measures

Flash point: > 200 °F  
> 93.34 °C

Autoignition: No data available.

Lower explosion limit: 1.6 %(V)

Upper explosion limit: 10.2 %(V)

Self-ignition temperature: not self-igniting

**Suitable extinguishing media:**  
water fog, foam, carbon dioxide

**Hazards during fire-fighting:**  
nitrous gases, fumes/smoke, isocyanate, vapour

**Protective equipment for fire-fighting:**  
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

### Section 06 - Accidental release measures

**Personal precautions:**  
Clear area. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

**Environmental precautions:**  
Do not discharge into drains/surface waters/groundwater.

### Section 07 - Handling and storage

#### Handling

**General advice:**  
Avoid contact with the skin, eyes and clothing. Avoid excessive temperatures. Avoid humidity. Use only with adequate ventilation and avoid high concentrations of vapors.

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### Protection against fire and explosion:

Avoid all sources of ignition: heat, sparks, open flame. If exposed to fire, keep containers cool by spraying with water.

### Storage

#### General advice:

Keep container tightly closed and in a well-ventilated place.

#### Storage stability:

Storage temperature: 65 - 104 °F Protect against moisture.

## Section 08 - Exposure controls / personal protection

### Components with workplace control parameters

Diphenylmethane-4,4'-diisocyanate (MDI)	OSHA	CLV 0.02 ppm 0.2 mg/m3
	ACGIH	TWA value 0.005 ppm ;
talc	OSHA	TWA value 20 millions of particles per cubic foot of air ; TWA value 2.4 millions of particles per cubic foot of air Respirable ; The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation. TWA value 0.1 mg/m3 Respirable ; The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation. TWA value 0.3 mg/m3 Total dust ; The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.
	ACGIH	TWA value 2 mg/m3 Respirable fraction ; The value is for particulate matter containing no asbestos and <1% crystalline silica.

### Advice on system design:

Provide local exhaust ventilation to control vapours/mists.

### Personal protective equipment

#### Respiratory protection:

When atmospheric levels may exceed the occupational exposure limit (PEL or TLV) NIOSH-certified air-purifying respirators equipped with an organic vapor sorbent and particulate filter can be used as long as appropriate precautions and change out schedules are in place.

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### Hand protection:

Chemical resistant protective gloves, Protective glove selection must be based on the user's assessment of the workplace hazards.

### Eye protection:

Safety glasses with side-shields. Wear face shield if splashing hazard exists.

### Body protection:

Body protection must be chosen based on level of activity and exposure.

### General safety and hygiene measures:

Wear protective clothing as necessary to prevent contact. Eye wash fountains and safety showers must be easily accessible. Observe the appropriate PEL value. Wash soiled clothing immediately. Contaminated equipment or clothing should be cleaned after each use or disposed of.

## Section 09 - Physical and chemical properties

<b>Form:</b>	paste	
<b>Odour:</b>	oily, mild	
<b>Colour:</b>	tan	
<b>pH value:</b>		neutral to slightly alkaline
<b>Melting point:</b>		not applicable
<b>Vapour pressure:</b>		No data available.
<b>Density:</b>	1.26 g/cm <sup>3</sup>	
<b>Bulk density:</b>	1,800 - 2,400 kg/m <sup>3</sup>	
<b>Vapour density:</b>		Heavier than air.
<b>Partitioning coefficient n-octanol/water (log Pow):</b>		No data available.
<b>Viscosity, dynamic:</b>		No data available.
<b>Solubility in water:</b>		slightly soluble

## Section 10 - Stability and reactivity

### Conditions to avoid:

Avoid moisture. Avoid prolonged exposure to extreme heat. Avoid sources of ignition.

### Substances to avoid:

water, alcohols, strong bases, oxidizing agents, Substances/products that react with isocyanates.

### Hazardous reactions:

The product is chemically stable.

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### Decomposition products:

Hazardous decomposition products: aromatic isocyanates, gases/vapours, carbon oxides, nitrogen oxides

### Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

## Section 11 - Toxicological information

### Acute toxicity

*Information on: Distillates (petroleum), hydrotreated middle*

*Assessment of acute toxicity:*

*Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Of moderate toxicity after short-term inhalation.*

*Information on: Diphenylmethane-4,4'-diisocyanate (MDI) Assessment of acute toxicity:*

*Of moderate toxicity after short-term inhalation. Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.*

#### Oral:

No data available.

#### Inhalation:

No data available.

#### Dermal:

No data available.

### Irritation / corrosion

*Information on: Distillates (petroleum), hydrotreated middle*

*Assessment of irritating effects:*

*May cause slight irritation to the skin. Not irritating to the eyes.*

*Information on: Diphenylmethane-4,4'-diisocyanate (MDI)*

*Assessment of irritating effects:*

*Irritating to eyes and skin.*

*Information on: Methylenediphenyl diisocyanate*

*Assessment of irritating effects:*

*Irritating to eyes and skin.*

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*Information on: P-MDI*  
*Assessment of irritating effects:*  
*Irritating to eyes, respiratory system and skin.*

### **Sensitization**

*Information on: Diphenylmethane-4,4'-diisocyanate (MDI)*  
*Assessment of sensitization:*  
*The substance may cause sensitization of the respiratory tract. Sensitization after skin contact possible. Studies in animals suggest that dermal exposure may lead to pulmonary sensitization. However, the relevance of this result for humans is unclear.*

*Information on: Methylenediphenyl diisocyanate*  
*Assessment of sensitization:*  
*The substance may cause sensitization of the respiratory tract. Sensitization after skin contact possible.*

*Information on: P-MDI*  
*Assessment of sensitization:*  
*The substance may cause sensitization of the respiratory tract. Sensitization after skin contact possible.*

### **Repeated dose toxicity**

*Information on: talc*  
*Assessment of repeated dose toxicity:*  
*The substance may cause damage to the lung after repeated inhalation.*

### **Carcinogenicity**

*Information on: Diphenylmethane-4,4'-diisocyanate (MDI)*  
*Indication of possible carcinogenic effect in animal tests. However, the relevance of this result for humans is unclear.*

*Information on: P-MDI*  
*Based on the ingredients there is a suspicion of a carcinogenic effect.*

## **Section 12 - Ecological information**

### **Other adverse effects:**

Do not release untreated into natural waters. Do not allow to enter soil, waterways or waste water channels. The product has not been tested. The statement has been derived from the properties of the individual components.

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### Section 13 - Disposal considerations

**Waste disposal of substance:**

Incinerate or dispose of in a licensed facility. Observe all local regulations.

**Container disposal:**

Do not reuse empty containers.

### Section 14 - Transport information

**Land transport**

USDOT Not classified as a dangerous good under transport regulations

**Sea transport**

IMDG Not classified as a dangerous good under transport regulations

**Air transport**

IATA/ICAO Not classified as a dangerous good under transport regulations

### Section 15 - Regulatory information

**Federal Regulations**

**Registration status:**

Chemical TSCA, US released / listed

**OSHA hazard category:**

IARC 1, 2A or 2B carcinogen; Chronic target organ effects reported; OSHA PEL established; ACGIH TLV established

**EPCRA 311/312 (Hazard categories):**

Acute; Chronic

**EPCRA 313:**

**CAS Number**

101-68-8  
9016-87-9

**Chemical name**

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



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### State regulations

#### State RTK

MA, NJ, PA  
MA, NJ, PA  
NJ

#### CAS Number

14807-96-6  
101-68-8  
26447-40-5

#### Chemical name

talc  
Diphenylmethane-4,4'-diisocyanate (MDI)  
Methylenediphenyl diisocyanate

#### **CA Prop. 65:**

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

### WHMIS Regulatory Status

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

## Section 16 - Other information

#### **HMIS III rating**

**Health: 2**

**Flammability: 1**

**Physical hazard: 1**

NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

This information is supplied under the OSHA Hazard Communication Standard, 29 CFR 1910.1200, and is offered in good faith based on data available to us that we believe to be true and accurate. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable to the material. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate for that use. No warranty, express or implied, is made regarding the accuracy of this data, the hazards connected with the use of the material, or the results to be obtained from the use thereof. We assume no responsibility for damage or injury from the use of the product described herein. Data provided here are typical and not intended for use as product specifications. (R) and TM indicate trademarks of Dryvit Systems Canada, its business partners or suppliers.