

KIT - SAFETY DATA SHEET

Product identifier used on the

label:

Kit Name DEVCON® Dev-Thane 5™ grey [1:1]

Stock No.: 14503

Other means of identification:

Recommended use of the chemical and restrictions on use:

Chemical manufacturer address and telephone number: Manufacturer Name: ITW Performance Polymers

30 Endicott Street Danvers, MA 01923 Address:

Component list	
Component B	PU 990B
Component A	DEV-THANE I RESIN
Kit SDS Revision Date	9/10/2015

Component B - SDS

SECTION 1: IDENTIFICATION

 $\underline{\text{Product identifier used on the label:}}$

Product Name: PU 990B

Other means of identification:

Recommended use of the chemical and restrictions on use:

 $\underline{\hbox{Chemical manufacturer address and telephone number:}}\\$

Manufacturer Name:

30 Endicott Street Address: Danvers, MA 01923 (978) 777-1100 General Phone Number:

Emergency phone number:

(800) 424-9300 Emergency Phone Number:

CHEMTREC: For emergencies in the US, call CHEMTREC: 800-424-9300

SECTION 2: HAZARD(S) IDENTIFICATION

Classification of the chemical in accordance with CFR 1910.1200(d)(f):

GHS Pictograms:

Signal Word: WARNING.

Eye Irritation. Category 2. GHS Class:

Skin Irritation. Category 2. Specific Target Organ Toxicity - STOT, Single Exposure SE. Category 3.

Stock No. 14503

Hazard Statements:

H319 - Causes serious eye irritation. H315 - Causes skin irritation. H335 - May cause respiratory irritation.

DEVCON® Dev-Thane $5^{\text{TM}}\,\text{grey}$ [1:1] Revision:: 9/10/2015

Page 1 of 10

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. Precautionary Statements:

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 - IF ON SKIN: Wash with plenty of water.
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P321 - P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.

Hazards not otherwise classified that have been identified during the classification process:

Emergency Overview: WARNING! Irritant.

Route of Exposure: Eyes. Skin. Inhalation. Ingestion.

Potential Health Effects:

Can cause moderate irritation, burning sensation, tearing, redness, and swelling. Overexposure may Eye:

cause lacrimation, conjunctivitis, corneal damage and permanent injury.

Skin: Can cause skin irritation; itching, redness, rashes, hives, burning, and swelling.

Inhalation: Respiratory tract irritant. High concentration may cause dizziness, headache, and anesthetic effects.

Ingestion: Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal

Chronic Health Effects: Prolonged skin contact may lead to burning associated with severe reddening, swelling, and possible

tissue destruction.

Signs/Symptoms: Overexposure can cause headaches, dizziness, nausea, and vomiting.

Target Organs: Eves, Skin, Respiratory system, Digestive system.

Aggravation of Pre-Existing Conditions:

Individuals with pre-existing skin disorders, asthma, allergies or known sensitization may be more susceptible to the effects of this product.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures:

Chemical Name CAS# **Ingredient Percent** EC Num.

Proprietary ingredient(s) Trade Secret 90 - 100 by weight

SECTION 4: FIRST AID MEASURES

Description of necessary measures:

Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of Eye Contact:

the eyes by separating the eyelids with fingers. Get immediate medical attention

Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists. Skin Contact:

If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained Inhalation:

personnel. Seek immediate medical attention

Ingestion: If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give

anything by mouth to an unconscious person.

SECTION 5: FIRE FIGHTING MEASURES

Suitable and unsuitable extinguishing media:

Suitable Extinguishing Media: Use dry chemical, carbon dioxide, foam or water fog

Special protective equipment and precautions for fire-fighters:

Protective Equipment: As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent)

and full protective gear.

Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, Fire Fighting Instructions:

contain fire run-off water. During fire, irritating and toxic gases may be generated by thermal

decomposition or combustion

DEVCON® Dev-Thane 5^{TM} grey [1:1] Stock No. 14503 Revision:: 9/10/2015

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Personal Precautions: Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.

Environmental precautions:

Environmental Precautions: Avoid runoff into storm sewers, ditches, and waterways.

Methods and materials for containment and cleaning up:

Spill Cleanup Measures:

Absorb spill with inert material (e,g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section. After removal, flush spill area with soap and water to remove trace residue.

Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal protective

equipment as listed in Section 8.

Reference to other sections:

Other Precautions: Pump or shovel to storage/salvage vessels.

SECTION 7: HANDLING and STORAGE

Precautions for safe handling:

Handling: Use with adequate ventilation. Avoid breathing vapor, aerosol or mist.

Hygiene Practices: Wash thoroughly after handling.

Special Handling Procedures: Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against dust during sanding/grinding of cured

product

Conditions for safe storage, including any incompatibilities:

Storage: Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep

container tightly closed when not in use.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE GUIDELINES:

Appropriate engineering controls:

Engineering Controls: Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other

engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance

of the personal protective equipment.

Individual protection measures:

Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye Eye/Face Protection:

and face protection regulation, or the European standard EN 166.

Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data. Skin Protection Description:

Respiratory Protection:

A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Other Protective: Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower

safety station

Notes: Only established PEL and TLV values for the ingredients are listed.

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES:

Physical State Appearance: Liquid. Color: Gray Odor: mild

Boiling Point: Not determined. Melting Point: Not determined.

Specific Gravity: 1.4

Solubility: negligible. Vapor Density: > 1 (air = 1)Vapor Pressure: Not determined.

> DEVCON® Dev-Thane 5^{TM} grey [1:1] Stock No. 14503

Percent Volatile: Not determined. Evaporation Rate: Not determined. Not determined.

Molecular Formula: Mixture

>325°F (162.7°C) Flash Point:

Flash Point Method: Pensky-Martens Closed Cup

Mixture

Lower Flammable/Explosive Limit: Not determined. Upper Flammable/Explosive Limit: Not determined. Auto Ignition Temperature: Not determined. VOC Content: Not determined.

9.2. Other information:

Molecular Weight:

Percent Solids by Weight Not determined.

SECTION 10: STABILITY and REACTIVITY

Chemical Stability:

Chemical Stability: Stable under normal temperatures and pressures.

Possibility of hazardous reactions:

Hazardous Polymerization: Not reported.

Conditions To Avoid:

Conditions to Avoid: Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions.

Incompatible Materials:

Incompatible Materials: Oxidizing agents. Strong acids and alkalis.

Hazardous Decomposition Products:

Special Decomposition Products: Carbon dioxide, carbon monoxide, Aldehydes, acids and other organic substances may be formed

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Proprietary ingredient(s):

No relevant toxicological data were available. Skin: No relevant toxicological data were available. Inhalation: No relevant toxicological data were available. Ingestion: No relevant toxicological data were available.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

Ecotoxicity: No ecotoxicity data was found for the product. Environmental Fate: No environmental information found for this product.

SECTION 13: DISPOSAL CONSIDERATIONS

Description of waste:

Waste Disposal:

Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local suitelines.

guidelines.

RCRA Number: Not determined.

SECTION 14: TRANSPORT INFORMATION

DOT Shipping Name: Refer to Bill of Lading Refer to Bill of Lading DOT UN Number:

> DEVCON® Dev-Thane 5^{TM} grey [1:1] Stock No. 14503

IATA Shipping Name: Refer to Bill of Lading

IATA UN Number: Refer to Bill of Lading

IMDG UN Number: Refer to Bill of Lading

IMDG Shipping Name: Refer to Bill of Lading

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product:

Canadian Regulations. WHMIS Hazard Class(es): None.

All components of this product are on the Canadian Domestic Substances List.

SECTION 16: ADDITIONAL INFORMATION

HMIS Ratings:

HMIS Health Hazard: 1
HMIS Fire Hazard: 1
HMIS Reactivity: 0
HMIS Personal Protection: X

Health Hazard 1
Fire Hazard 1
Reactivity 0
Personal Protection X

SDS Revision Date: July 28, 2015
SDS Revision Notes: GHS Update

SDS Format: In accordance to OSHA GHS 1910.1200

SDS Author: Actio Corporation

Disclaimer:

The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. ITW
Performance Polymers MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED

Performance Polymers MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the ITW Performance Polymers product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a ITW Performance Polymers product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the ITW Performance Polymers product to determine whether it is fit for a particular purpose and suitable for user's method of use or application. ITW Performance Polymers provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, ITW Performance Polymers makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available

directly from ITW Performance Polymers.

 $Copyright @ \ 1996-2018 \ Enviance. \ All \ Rights \ Reserved.$

Component A - SDS

SECTION 1: IDENTIFICATION

Product identifier used on the label:

Product Name: DEV-THANE I RESIN

 $\underline{\hbox{Other means of identification:}}$

 $\underline{\textbf{Recommended use of the chemical and restrictions on use:}}$

 $\underline{\hbox{Chemical manufacturer address and telephone number:}}\\$

Manufacturer Name: ITW

Address: 30 Endicott Street Danvers, MA 01923
General Phone Number: (978) 777-1100

Emergency phone number:

Emergency Phone Number: (800) 424-9300

CHEMTREC: For emergencies in the US, call CHEMTREC: 800-424-9300

SECTION 2: HAZARD(S) IDENTIFICATION

DEVCON® Dev-Thane 5^{TM} grey [1:1] Stock No. 14503

GHS Pictograms:



Signal Word: DANGER

GHS Class: Acute Inhalation Toxicity. Category 2.

Respiratory sensitisation. category 1.
Specific Target Organ Toxicity -STOT Repeated exposure RE. Category 2 (Inhalation, respiratory

system)

Eye Irritation. Category 2. Skin Irritation. Category 2. Skin Sensitization. category 1.

Specific Target Organ Toxicity - STOT, Single Exposure SE. Category 3.

Hazard Statements:

 $\rm H334$ - May cause allergy or asthma symptoms or breathing difficulties if inhaled. $\rm H373$ - May cause damage to organs through prolonged or repeated exposure.

H319 - Causes serious eye irritation. H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction. H335 - May cause respiratory irritation.

Precautionary Statements:

P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 - Wash hands thoroughly after handling. P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P284 - In case of inadequate ventilation wear respiratory protection.

P302+P352 - IF ON SKIN: Wash with plenty of water.
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several mint if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/physician.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P314 - Get medical advice/attention if you feel unwell.
P320 - Specific treatment is urgent (see ... on this label).
P321 - Specific treatment (see ... on this label).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P333+P313 - If sexperiencing respiratory symptoms: Call a POISON CENTER

P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P362+P364 - Take off contaminated clothing and wash it before reuse. P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.
P501 - Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.

Hazards not otherwise classified that have been identified during the classification process:

Route of Exposure: Eyes. Skin. Inhalation. Ingestion.

Potential Health Effects:

Can cause moderate irritation, burning sensation, tearing, redness, and swelling. Overexposure may cause lacrimation, conjunctivitis, corneal damage and permanent injury. Eve:

Skin: Can cause skin irritation; itching, redness, rashes, hives, burning, and swelling. Allergic reactions are

possible

May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this

Inhalation: MDI vapors at concentrations above the TLV can irritate the mucous embranes in the respiratory tract

(nose, throat, lungs) causing a runny nose, soar throat, coughing, chest discomfort, shortness of breath and reduced lung function. Persons with pre-existing, nonspecific bronchial hyperreactivity can respond to concentrations below TLV with similar symptoms as well as asthma attack. Overexposure to isocyanates has also been reported to cause lung damage (including decrease in lung function) which

Ingestion: Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal

pain.

Chronic Health Effects: Prolonged skin contact may lead to burning associated with severe reddening, swelling, and possible

tissue destruction.

Signs/Symptoms: Overexposure can cause headaches, dizziness, nausea, and vomiting.

Target Organs: Eyes. Skin. Respiratory system. Digestive system.

Aggravation of Pre-Existing Conditions

Individuals with pre-existing skin disorders, asthma, allergies or known sensitization may be more susceptible to the effects of this product.

Isocyanate exposure levels must be monitored. Medical supervision of all employees who handle or come in contact with isocyanates is recommended (i.e. FEV, FVC). This should include pre-employment

and periodic medical examinations. Persons with asthmatic-type conditions, chronic bronchitis, other chronic respiratory diseases, recurrent skin eczema or sensitization should be excluded from working with this product. Once sensitized no

further exposure can be permitted.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures:

Chemical Name CAS# **Ingredient Percent** EC Num.

4,4'-Diphenylmethane diisocyanate 101-68-8 90 - 100 by weight

> DEVCON® Dev-Thane 5TM grey [1:1] Revision:: 9/10/2015

Stock No. 14503

Diphenylmethane Diisocyanate 26447-40-5 1 - 10 by weight

SECTION 4: FIRST AID MEASURES

Description of necessary measures:

Eye Contact: Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of

the eyes by separating the eyelids with fingers. Get immediate medical attention

Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists. Skin Contact:

If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained Inhalation:

personnel. Seek immediate medical attention

Ingestion: If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give

anything by mouth to an unconscious person.

Indication of immediate medical attention and special treatment needed:

Note to Physicians: Asthmatic type symptoms may develop, which may be immediate or delayed for several hours.

SECTION 5: FIRE FIGHTING MEASURES

Suitable and unsuitable extinguishing media:

Suitable Extinguishing Media: For large fires, alcohol resistant foams (ATC type) are preferred if available. General purpose synthetic foams (including AFFF) or protein foams may function but much less effectively.

Unsuitable extinguishing media: Water is not recommended but may be applied in very large quantities as a fine spray when other

extinguishing media are not available.

Unusual Fire Hazards: Do not reseal containers if contaminated with water, resin will react with water to release carbon dioxide.

As a result of the water contamination, pressure will build up in the sealed container causing it to

rupture.

Special protective equipment and precautions for fire-fighters:

As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) Protective Equipment:

and full protective gear.

Fire Fighting Instructions: Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to

minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Personal Precautions: Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.

Environmental precautions:

Environmental Precautions: Avoid runoff into storm sewers, ditches, and waterways.

Methods and materials for containment and cleaning up:

Absorb spill with inert material (e,g., dry sand or earth), then place in a chemical waste container. Spill Cleanup Measures:

Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section. Neutralize residue with appropriate neutralizer. Do not attempt to neutralize large quantities of material unless measures to control reactivity and heat generation have been taken. After removal,

flush spill area with soap and water to remove trace residue. Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal protective

equipment as listed in Section 8.

A blanket of protein foam may be placed over spill for temporary control of isocyanate vapor.

Reference to other sections:

Other Precautions: Pump large quantities into closed but not sealed metal containers. Isocyanates will react with water and

generate carbon dioxide, this could result in the rupture of any closed containers.

Neutralize using 10 parts neutralizer to 1 part isocyanate solution. Mix and allow to stand for 48 hrs in containers, letting evolved carbon dioxide to vent. Neutralizer consist of 90% water, 3-8% concentrated

ammonia (or sodium carbonate), 2% detergent.

SECTION 7: HANDLING and STORAGE

Precautions for safe handling:

Handling: Use with adequate ventilation. Avoid breathing vapor, aerosol or mist.

Hygiene Practices: Wash thoroughly after handling.

> DEVCON® Dev-Thane 5TM grey [1:1] Revision:: 9/10/2015

Stock No. 14503

Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) Special Handling Procedures: during welding/flame cutting operations and to protect against dust during sanding/grinding of cured

product.

Conditions for safe storage, including any incompatibilities:

Storage:

Store indoors in a dry place away from heat between 64 to 86 °F Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use. Do not reseal container If moisture or water contamination is suspected. Water contaminated material in a sealed container may rupture due to pressure buildup.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE GUIDELINES:

4,4'-Diphenylmethane diisocyanate:

Guideline ACGIH: TLV-TWA: 0.005 ppm Guideline OSHA: PEL-Ceiling/Peak: 0.02 ppm

Appropriate engineering controls:

Engineering Controls:

Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance

of the personal protective equipment.

Individual protection measures:

Eye/Face Protection: Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye

and face protection regulation, or the European standard EN 166.

Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data. Skin Protection Description:

Hand Protection Description: Use permeation resistant gloves such as Butyl rubber, nitrile rubber or polyvinyl alcohol. However,

please note that PVA degrades with water

Respiratory Protection: A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed

exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Other Protective: Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower

safety station.

Only established PEL and TLV values for the ingredients are listed. Notes:

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES:

Physical State Appearance: Liauid..

Color: Pale to dark vellow... Odor: Slightly musty. **Boiling Point:** Not determined. Melting Point: 60-68°F (15.5-20°C)

Specific Gravity: 1.41 @ 77°F Solubility: Insoluble.

Vapor Density: 8.5 MDI (air = 1)

Vapor Pressure: < 10 mmHg @77°F (MDI)

Percent Volatile: Nealiaible

Evaporation Rate: Not determined. pH: Not determined.

Molecular Formula: Mixture Molecular Weight: Mixture

Flash Point: >450°F (>232°C)

Flash Point Method: Pensky-Marten Closed Cup (PMCC)

Lower Flammable/Explosive Limit: Not determined. Upper Flammable/Explosive Limit: Not determined. Auto Ignition Temperature: Not determined. VOC Content: Not determined.

9.2. Other information: Percent Solids by Weight

> DEVCON® Dev-Thane 5TM grey [1:1] Stock No. 14503

SECTION 10: STABILITY and REACTIVITY

Chemical Stability:

Chemical Stability: Stable under normal temperatures and pressures. Product is very unstable when contaminated with

Possibility of hazardous reactions:

Hazardous Polymerization: Can occur. Polymerization an be catalyzed by strong bases and water

Conditions To Avoid:

Conditions to Avoid: Avoid temperatures above 86°F. Avoid temperatures below 64°F. Avoid moisture. Product can

decompose at elevated temperature

Incompatible Materials:

Incompatible Materials: Avoid contact with metals such as aluminum, brass, copper, galvanized metals, zinc Reaction with water

can generate carbon dioxide. Avoid contact with acids, alcohol, amines, ammonia, bases, metal compounds, moist air, strong oxidizers, water. Avoid unintended contact with polyols.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

4,4'-Diphenylmethane diisocyanate:

Eye: Administration into the eye - Rabbit Standard Draize test: 100 mg [Moderate] (RTECS)

Inhalation - Rat LC50 - Lethal concentration, 50 percent kill: 178 mg/m3 [Details of toxic effects not Inhalation:

reported other than lethal dose value] (RTECS)

Oral - Rat LD50 - Lethal dose, 50 percent kill: 9200 mg/kg [Behavioral - Somnolence (general depressed activity) Behavioral - Ataxia Nutritional and Gross Metabolic - Body temperature decrease] Ingestion:

(RTECS)

Chronic Effects: Lung tumors have been observed in laboratory animals exposed to aerosol droplets of MDI/Polymeric MDI (6 mg/m3) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung

injury. Current exposure guidelines are expected to protect against these effects reported for MDI

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

Ecotoxicity: No ecotoxicity data was found for the product.

Environmental Fate: No environmental information found for this product.

SECTION 13: DISPOSAL CONSIDERATIONS

Description of waste:

Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, Waste Disposal:

if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local

quidelines.

RCRA Number: Not determined

SECTION 14: TRANSPORT INFORMATION

DOT Shipping Name: Refer to Bill of Lading

DOT UN Number: Refer to Bill of Lading

IATA Shipping Name: Refer to Bill of Lading IATA UN Number: Refer to Bill of Lading

IMDG UN Number: Refer to Bill of Lading IMDG Shipping Name: Refer to Bill of Lading

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product:

4,4'-Diphenylmethane diisocyanate:

TSCA Inventory Status: Listed

> DEVCON® Dev-Thane 5^{TM} grey [1:1] Stock No. 14503 Revision:: 9/10/2015

Page 9 of 10

Section 313: EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.

Canada DSI: Listed

Diphenylmethane Diisocyanate:

TSCA Inventory Status: Listed Canada DSL: Listed

Canadian Regulations. WHMIS Hazard Class(es): D2A

All components of this product are on the Canadian Domestic Substances List.

WHMIS Pictograms:



SECTION 16: ADDITIONAL INFORMATION

HMIS Ratings:

HMIS Health Hazard: HMIS Fire Hazard: 1 HMIS Reactivity: HMIS Personal Protection:



* Chronic Health Effects

SDS Revision Date: July 25, 2015 SDS Revision Notes: GHS Update

SDS Format: In accordance to OSHA GHS 1910.1200

SDS Author: Actio Corporation

Disclaimer:

The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. ITW Performance Polymers MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the ITW Performance Polymers product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a ITW Performance Polymers product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the ITW Performance Polymers product to determine whether it is fit for a particular purpose and suitable for user's method of use or application. ITW Performance Polymers provides information in electronic form as a service to its customers. Due to the remote possibility that provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, ITW Performance Polymers makes no representations as to its completeness or accuracy. In addition

information obtained from a database may not be as current as the information in the MSDS available

directly from ITW Performance Polymers.

Copyright© 1996-2018 Enviance. All Rights Reserved.

DEVCON® Dev-Thane 5^{TM} grey [1:1] Revision:: 9/10/2015

Stock No. 14503