

Safety Data Sheet

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 Document Group:
 11-2406-4
 Version Number:
 11.03

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 06/26/17
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Product identifier

3MTM Scotch-WeldTM Urethane Adhesive DP605NS, Off-White

ID Number(s):

62-3592-1431-9, 62-3592-1436-8, 62-3592-3830-0

Recommended use

Structural adhesive

Supplier's details

MANUFACTURER: 3M

DIVISION: Industrial Adhesives and Tapes Division

ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA

Telephone: 1-888-3M HELPS (1-888-364-3577)

Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet (SDS), Article Information Sheet (AIS), or Article Information Letter (AIL) for each of these components is included. Please do not separate the component documents from this cover page. The document numbers for components of this product are:

11-2404-9, 11-2405-6

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 Document Group:
 11-2405-6
 Version Number:
 19.01

 Issue Date:
 12/23/21
 Supercedes Date:
 05/21/18

SECTION 1: Identification

1.1. Product identifier

3MTM Scotch-WeldTM Urethane Adhesive DP605NS Off-White, (Part A)

1.2. Recommended use and restrictions on use

Recommended use

Structural adhesive

1.3. Supplier's details

MANUFACTURER: 3M

DIVISION: Industrial Adhesives and Tapes Division **ADDRESS:** 3M Center, St. Paul, MN 55144-1000, USA

Telephone: 1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

2.1. Hazard classification

Serious Eye Damage/Irritation: Category 2A.

Skin Corrosion/Irritation: Category 2. Respiratory Sensitizer: Category 1.

Skin Sensitizer: Category 1.

Specific Target Organ Toxicity (single exposure): Category 3. Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements

Signal word

Danger

Symbols

Exclamation mark | Health Hazard |

Pictograms





Hazard Statements

Causes serious eve irritation.

Causes skin irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

May cause respiratory irritation.

Causes damage to organs through prolonged or repeated exposure:

respiratory system

Precautionary Statements

Prevention:

Do not breathe dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

In case of inadequate ventilation wear respiratory protection.

Wear protective gloves and eye/face protection.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

Get medical advice/attention if you feel unwell.

Storage:

Keep container tightly closed.

Store locked up in a well-ventilated place.

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

Supplemental Information:

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates.

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|--------------------------------------|------------|------------------------|
| Higher Oligomers of MDI | 9016-87-9 | 20 - 45 Trade Secret * |
| P,P'-Methylenebis(phenyl isocyanate) | 101-68-8 | 15 - 35 Trade Secret * |
| Diphenylmethane Diisocynate | 26447-40-5 | 5 - 25 Trade Secret * |
| Polypropylene Glycols | 25322-69-4 | 10 - 25 Trade Secret * |

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| Amorphous Silica | 67762-90-7 | 1 - 10 Trade Secret * |
|------------------|------------|-----------------------|
| | | |

^{*}The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eve Contact:

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Irritating to the respiratory tract (coughing, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain). Allergic respiratory reaction (difficulty breathing, wheezing, cough, and tightness of chest). Allergic skin reaction (redness, swelling, blistering, and itching). Target organ effects following prolonged or repeated exposure. See Section 11 for additional details.

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

SubstanceConditionCarbon monoxideDuring CombustionCarbon dioxideDuring CombustionHydrogen CyanideDuring CombustionOxides of NitrogenDuring Combustion

5.3. Special protective actions for fire-fighters

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Or pour water on spill and allow to react for more than 30 minutes. Cover with absorbent material. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from amines.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

| Ingredient | C.A.S. No. | Agency | Limit type | Additional Comments |
|--------------------------|------------|--------|--------------------------|----------------------------|
| P,P'-Methylenebis(phenyl | 101-68-8 | ACGIH | TWA:0.005 ppm | |
| isocyanate) | | | | |
| P,P'-Methylenebis(phenyl | 101-68-8 | OSHA | CEIL:0.2 mg/m3(0.02 ppm) | |
| isocyanate) | | | | |
| Polypropylene Glycols | 25322-69-4 | AIHA | TWA(as aerosol):10 mg/m3 | |
| SILICA, AMORPHOUS | 67762-90-7 | OSHA | TWA:20 millions of | |
| | | | particles/cu. ft.;TWA | |
| | | | concentration:0.8 mg/m3 | |

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

OSHA: United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended: Butyl Rubber

Neoprene

Nitrile Rubber

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical stateLiquidColorBrown

Specific Physical Form: OdorPaste

Isocyanate

Odor threshold
PH
No Data Available
Not Applicable
Melting point
Not Applicable
Soiling Point
Not Applicable
>=178 °C

Flash Point >=352 °F [Test Method: Closed Cup]

Evaporation rateNot ApplicableFlammability (solid, gas)Not ApplicableFlammable Limits(LEL)Not ApplicableFlammable Limits(UEL)Not ApplicableVapor PressureNot ApplicableVapor DensityNot ApplicableDensity1.17 g/ml

Specific Gravity 1.17 [Ref Std:WATER=1]

Solubility in WaterNegligibleSolubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNo Data AvailableDecomposition temperatureNo Data Available

Viscosity 10,000 centipoise [@, 73.4 °F]

12/23/21

Hazardous Air Pollutants 0 % weight [Test Method: Calculated]

Molecular weight No Data Available

VOC Less H2O & Exempt Solvents 0 g/l [Test Method:calculated SCAQMD rule 443.1]

[Details: when used as intended with Part B]

VOC Less H2O & Exempt Solvents 0 g/l [Test Method:calculated SCAQMD rule 443.1] [Details:as

supplied]

VOC Less H2O & Exempt Solvents 0 % [Test Method: calculated per CARB title 2] [Details: when

used as intended with Part B]

SECTION 10: Stability and reactivity

10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature exothermic reaction with production of intense heat and smoke.

10.5. Incompatible materials

Amines

Alcohols

Water

Reaction with water, alcohols, and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup.

10.6. Hazardous decomposition products

Substance

Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Allergic Respiratory Reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest.

May cause additional health effects (see below).

Skin Contact:

Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eve Contact:

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

Additional Information:

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

| Name | Route | Species | Value |
|--------------------------------------|-------------|---------|--|
| Overall product | Inhalation- | | No data available; calculated ATE >50 mg/l |
| • | Vapor(4 hr) | | |
| Overall product | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| Higher Oligomers of MDI | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Higher Oligomers of MDI | Inhalation- | Rat | LC50 0.368 mg/l |
| | Dust/Mist | | |
| | (4 hours) | | |
| Higher Oligomers of MDI | Ingestion | Rat | LD50 31,600 mg/kg |
| P,P'-Methylenebis(phenyl isocyanate) | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| P,P'-Methylenebis(phenyl isocyanate) | Inhalation- | Rat | LC50 0.368 mg/l |
| | Dust/Mist | | |
| | (4 hours) | | |
| P,P'-Methylenebis(phenyl isocyanate) | Ingestion | Rat | LD50 31,600 mg/kg |
| Polypropylene Glycols | Dermal | Rabbit | LD50 > 10,000 mg/kg |
| Polypropylene Glycols | Ingestion | Rat | LD50 > 2,000 mg/kg |
| Diphenylmethane Diisocynate | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Diphenylmethane Diisocynate | Inhalation- | Rat | LC50 0.368 mg/l |
| | Dust/Mist | | |
| | (4 hours) | | |
| Diphenylmethane Diisocynate | Ingestion | Rat | LD50 31,600 mg/kg |
| Amorphous Silica | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Amorphous Silica | Inhalation- | Rat | LC50 > 0.691 mg/l |
| - | Dust/Mist | | |
| | (4 hours) | | |
| Amorphous Silica | Ingestion | Rat | LD50 > 5,110 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|--------------------------------------|--------------------------------|---------------------------|
| Higher Oligomers of MDI | official classifica tion | Irritant |
| P,P'-Methylenebis(phenyl isocyanate) | official classifica tion | Irritant |
| Polypropylene Glycols | Rabbit | No significant irritation |
| Diphenylmethane Diisocynate | official classifica tion | Irritant |
| Amorphous Silica | Rabbit | No significant irritation |

Serious Eye Damage/Irritation

| Name | Species | Value |
|--------------------------------------|--------------------------------|---------------------------|
| Higher Oligomers of MDI | official classifica tion | Severe irritant |
| P,P'-Methylenebis(phenyl isocyanate) | official classifica | Severe irritant |
| Polypropylene Glycols | Rabbit | No significant irritation |
| Diphenylmethane Diisocynate | official classifica tion | Severe irritant |
| Amorphous Silica | Rabbit | No significant irritation |

Skin Sensitization

| Name | Species | Value |
|--------------------------------------|------------|----------------|
| Higher Oligomers of MDI | official | Sensitizing |
| | classifica | |
| | tion | |
| P,P'-Methylenebis(phenyl isocyanate) | official | Sensitizing |
| | classifica | |
| | tion | |
| Diphenylmethane Diisocynate | official | Sensitizing |
| | classifica | |
| | tion | |
| Amorphous Silica | Human | Not classified |
| | and | |
| | animal | |

Respiratory Sensitization

| Name | Species | Value |
|--------------------------------------|---------|-------------|
| Higher Oligomers of MDI | Human | Sensitizing |
| P,P'-Methylenebis(phenyl isocyanate) | Human | Sensitizing |
| Diphenylmethane Diisocynate | Human | Sensitizing |

Germ Cell Mutagenicity

| Germ Cen Mutagementy | | |
|--------------------------------------|----------|--|
| Name | Route | Value |
| | | |
| Higher Oligomers of MDI | In Vitro | Some positive data exist, but the data are not |
| | | sufficient for classification |
| P,P'-Methylenebis(phenyl isocyanate) | In Vitro | Some positive data exist, but the data are not |
| | | sufficient for classification |
| Diphenylmethane Diisocynate | In Vitro | Some positive data exist, but the data are not |
| | | sufficient for classification |
| Amorphous Silica | In Vitro | Not mutagenic |

Carcinogenicity

| 1 | 2 | 23 | /21 |
|---|---|----|-----|
| | | | |

| Name | Route | Species | Value |
|--------------------------------------|------------------|---------|--|
| Higher Oligomers of MDI | Inhalation | Rat | Some positive data exist, but the data are not sufficient for classification |
| P,P'-Methylenebis(phenyl isocyanate) | Inhalation | Rat | Some positive data exist, but the data are not sufficient for classification |
| Diphenylmethane Diisocynate | Inhalation | Rat | Some positive data exist, but the data are not sufficient for classification |
| Amorphous Silica | Not Specified | Mouse | Some positive data exist, but the data are not sufficient for classification |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test Result | Exposure Duration |
|--------------------------------------|------------|--|---------|--------------------------|-----------------------------|
| Higher Oligomers of MDI | Inhalation | Not classified for development | Rat | NOAEL 0.004 mg/l | during organogenesi s |
| P,P'-Methylenebis(phenyl isocyanate) | Inhalation | Not classified for development | Rat | NOAEL 0.004 mg/l | during organogenesi s |
| Diphenylmethane Diisocynate | Inhalation | Not classified for development | Rat | NOAEL 0.004 mg/l | during organogenesi s |
| Amorphous Silica | Ingestion | Not classified for female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| Amorphous Silica | Ingestion | Not classified for male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |
| Amorphous Silica | Ingestion | Not classified for development | Rat | NOAEL 1,350 mg/kg/day | during organogenesi s |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|--------------------------------------|------------|------------------------|----------------------------------|--------------------------------|------------------------|----------------------|
| Higher Oligomers of MDI | Inhalation | respiratory irritation | May cause respiratory irritation | official classifica tion | NOAEL Not available | |
| P,P'-Methylenebis(phenyl isocyanate) | Inhalation | respiratory irritation | May cause respiratory irritation | official classifica tion | NOAEL Not available | |
| Diphenylmethane Diisocynate | Inhalation | respiratory irritation | May cause respiratory irritation | official classifica tion | NOAEL Not available | |

Specific Target Organ Toxicity - repeated exposure

| specific ranger organ | 1 OAICIC | cpeated exposure | | | | |
|--------------------------------------|------------|-----------------------------------|--|---------|---------------------|-----------------------|
| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
| Higher Oligomers of MDI | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.004 mg/l | 13 weeks |
| P,P'-Methylenebis(phenyl isocyanate) | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.004 mg/l | 13 weeks |
| Diphenylmethane Diisocynate | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.004 mg/l | 13 weeks |
| Amorphous Silica | Inhalation | respiratory system silicosis | Not classified | Human | NOAEL Not available | occupational exposure |

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information

on this material and/or its components.

SECTION 12: Ecological information

Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

SECTION 14: Transport Information

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

EPCRA 311/312 Hazard Classifications:

| Physical Hazards | |
|------------------|--|
| Not applicable | |

Health Hazards

Respiratory or Skin Sensitization

Serious eye damage or eye irritation

Skin Corrosion or Irritation

Specific target organ toxicity (single or repeated exposure)

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

| <u>Ingredient</u> | C.A.S. No | % by Wt | | |
|--|-----------|--------------|------|----|
| Higher Oligomers of MDI | 9016-87-9 | Trade Secret | 20 - | 45 |
| Higher Oligomers of MDI (DIISOCYANATES | 9016-87-9 | Trade Secret | 20 - | 45 |
| (CERTAIN CHEMICALS ONLY)) | | | | |
| P,P'-Methylenebis(phenyl isocyanate) | 101-68-8 | Trade Secret | 15 - | 35 |
| P,P'-Methylenebis(phenyl isocyanate) (Benzene, 1,1'- | 101-68-8 | Trade Secret | 15 - | 35 |

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methylenebis[4-isocyanato-) P,P'-Methylenebis(phenyl isocyanate) (DIISOCYANATES (CERTAIN CHEMICALS ONLY))

101-68-8 Trade Secret 15 - 35

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification

Health: 2 Flammability: 1 Instability: 1 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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SECTION 1: Identification

1.1. Product identifier

3MTM Scotch-WeldTM Urethane Adhesive DP605NS, Off-White (Part B)

1.2. Recommended use and restrictions on use

Recommended use

Structural adhesive

1.3. Supplier's details

MANUFACTURER: 3M

DIVISION: Industrial Adhesives and Tapes Division **ADDRESS:** 3M Center, St. Paul, MN 55144-1000, USA

Telephone: 1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

2.1. Hazard classification

Reproductive Toxicity: Category 1B.

2.2. Label elements

Signal word

Danger

Symbols

Health Hazard |

Pictograms



Hazard Statements

May damage fertility or the unborn child.

Precautionary Statements

Prevention:

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves.

Response:

IF exposed or concerned: Get medical advice/attention.

Storage:

Store locked up.

Disposal:

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|---|---------------|------------------------|
| Castor Oil | 8001-79-4 | 35 - 45 Trade Secret * |
| Polyester Resin (NJTS Reg. No. 04499600-7134) | Trade Secret* | 20 - 30 Trade Secret * |
| Polypropylene Glycol | 25322-69-4 | 10 - 20 Trade Secret * |
| Amorphous Silica | 67762-90-7 | 1 - 10 Trade Secret * |
| Titanium Dioxide | 13463-67-7 | 1 - 10 Trade Secret * |
| Polyoxypropylene Triol | 25723-16-4 | 1 - 5 Trade Secret * |
| Organosilane | 4420-74-0 | < 0.75 Trade Secret * |
| Dibutyltin Dilaurate | 77-58-7 | < 0.3 Trade Secret * |

NJTS or NJTSRN: New Jersey Trade Secret Registry Number.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Remove person to fresh air. If you are concerned, get medical advice.

Skin Contact:

Wash with soap and water. If you are concerned, get medical advice.

Eye Contact:

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

No critical symptoms or effects. See Section 11.1, information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

^{*}The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

SubstanceConditionCarbon monoxideDuring CombustionCarbon dioxideDuring CombustionOxides of SulfurDuring Combustion

5.3. Special protective actions for fire-fighters

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

| Ingredient | C.A.S. No. | Agency | Limit type | Additional Comments |
|------------------------|------------|--------|-----------------------------|----------------------------|
| Titanium Dioxide | 13463-67-7 | ACGIH | TWA:10 mg/m3 | A4: Not class. as human |
| | | | | carcin |
| Titanium Dioxide | 13463-67-7 | OSHA | TWA(as total dust):15 mg/m3 | |
| Polypropylene Glycol | 25322-69-4 | AIHA | TWA(as aerosol):10 mg/m3 | |
| SILICA, AMORPHOUS | 67762-90-7 | OSHA | TWA:20 millions of | |
| | | | particles/cu. ft.;TWA | |
| | | | concentration:0.8 mg/m3 | |
| TIN, ORGANIC COMPOUNDS | 77-58-7 | ACGIH | TWA(as Sn):0.1 | A4: Not class. as human |
| | | | mg/m3;STEL(as Sn):0.2 | carcin, SKIN |
| | | | mg/m3 | |
| TIN, ORGANIC COMPOUNDS | 77-58-7 | OSHA | TWA(as Sn):0.1 mg/m3 | |

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

OSHA: United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

None required.

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended: Butyl Rubber

Nitrile Rubber

Polymer laminate

Respiratory protection

Respiratory protection is not required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Liquid Color White

Specific Physical Form:

Odor

Paste
Polyether

12/27/21

Odor threshold No Data Available nН Not Applicable Not Applicable **Melting point**

Boiling Point >=179 °C **Flash Point** >=354 °F [Test Method:Closed Cup]

Evaporation rate Not Applicable Flammability (solid, gas) Not Applicable Flammable Limits(LEL) Not Applicable Not Applicable Flammable Limits(UEL) Not Applicable

Vapor Pressure Vapor Density Not Applicable **Density** 1.08 g/ml

Specific Gravity 1.08 [*Ref Std*:WATER=1]

Solubility in Water Negligible

Solubility- non-water No Data Available Partition coefficient: n-octanol/ water No Data Available **Autoignition temperature** No Data Available **Decomposition temperature** No Data Available

Viscosity 100,000 centipoise [@ 73.4 °F] **Hazardous Air Pollutants** 0 % weight [Test Method: Calculated]

Molecular weight No Data Available

VOC Less H2O & Exempt Solvents 0 g/l [Test Method:calculated SCAQMD rule 443.1]

[Details: when used as intended with Part A]

VOC Less H2O & Exempt Solvents 5.62 g/l [Test Method:calculated SCAQMD rule 443.1]

[Details: as supplied]

0 % [Test Method:calculated per CARB title 2] [Details:when **VOC Less H2O & Exempt Solvents**

used as intended with Part A]

SECTION 10: Stability and reactivity

10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Substance **Condition**

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient

classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

No health effects are expected.

Skin Contact:

Contact with the skin during product use is not expected to result in significant irritation.

Eve Contact:

Contact with the eyes during product use is not expected to result in significant irritation.

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause additional health effects (see below).

Additional Health Effects:

Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Carcinogenicity:

| Ingredient | CAS No. | Class Description | Regulation |
|------------------|------------|-------------------------------|---|
| Titanium dioxide | 13463-67-7 | Grp. 2B: Possible human carc. | International Agency for Research on Cancer |

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

| Name | Route | Species | Value |
|---|-------------|---------|--|
| Overall product | Dermal | | No data available; calculated ATE >5,000 mg/kg |
| Overall product | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| Castor Oil | Dermal | | LD50 estimated to be > 5,000 |
| Castor Oil | Ingestion | | LD50 estimated to be > 5,000 |
| Polyester Resin (NJTS Reg. No. 04499600-7134) | Ingestion | Rat | LD50 > 15,000 mg/kg |
| Polypropylene Glycol | Dermal | Rabbit | LD50 > 10,000 mg/kg |
| Polypropylene Glycol | Ingestion | Rat | LD50 > 2,000 mg/kg |
| Amorphous Silica | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Amorphous Silica | Inhalation- | Rat | LC50 > 0.691 mg/l |
| | Dust/Mist | | |
| | (4 hours) | | |
| Amorphous Silica | Ingestion | Rat | LD50 > 5,110 mg/kg |
| Titanium Dioxide | Dermal | Rabbit | LD50 > 10,000 mg/kg |
| Titanium Dioxide | Inhalation- | Rat | LC50 > 6.82 mg/l |
| | Dust/Mist | | |
| | (4 hours) | | |

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| Titanium Dioxide | Ingestion | Rat | LD50 > 10,000 mg/kg |
|------------------------|-----------|--------|---------------------|
| Polyoxypropylene Triol | Dermal | Rat | LD50 > 2,000 mg/kg |
| Polyoxypropylene Triol | Ingestion | Rat | LD50 > 2,500 mg/kg |
| Organosilane | Dermal | Rabbit | LD50 2,270 mg/kg |
| Organosilane | Ingestion | Rat | LD50 770 mg/kg |
| Dibutyltin Dilaurate | Dermal | Rat | LD50 > 2,000 mg/kg |
| Dibutyltin Dilaurate | Ingestion | Rat | LD50 1,290 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|------------------------|---------|---------------------------|
| | | |
| Castor Oil | Human | Minimal irritation |
| Polypropylene Glycol | Rabbit | No significant irritation |
| Amorphous Silica | Rabbit | No significant irritation |
| Titanium Dioxide | Rabbit | No significant irritation |
| Polyoxypropylene Triol | Rabbit | No significant irritation |
| Organosilane | Rabbit | No significant irritation |
| Dibutyltin Dilaurate | Rabbit | Corrosive |

Serious Eye Damage/Irritation

| Name | Species | Value |
|------------------------|---------|---------------------------|
| | | |
| Castor Oil | Rabbit | Mild irritant |
| Polypropylene Glycol | Rabbit | No significant irritation |
| Amorphous Silica | Rabbit | No significant irritation |
| Titanium Dioxide | Rabbit | No significant irritation |
| Polyoxypropylene Triol | Rabbit | Mild irritant |
| Organosilane | Rabbit | No significant irritation |
| Dibutyltin Dilaurate | Rabbit | Corrosive |

Skin Sensitization

| Name | Species | Value |
|----------------------|---------|----------------|
| Castor Oil | Human | Not classified |
| Amorphous Silica | Human | Not classified |
| | and | |
| | animal | |
| Titanium Dioxide | Human | Not classified |
| | and | |
| | animal | |
| Organosilane | Guinea | Sensitizing |
| | pig | |
| Dibutyltin Dilaurate | Guinea | Sensitizing |
| | pig | |

Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

| Name Route Value | | | |
|----------------------|----------|--|--|
| | | | |
| Castor Oil | In Vitro | Not mutagenic | |
| Castor Oil | In vivo | Not mutagenic | |
| Amorphous Silica | In Vitro | Not mutagenic | |
| Titanium Dioxide | In Vitro | Not mutagenic | |
| Titanium Dioxide | In vivo | Not mutagenic | |
| Organosilane | In Vitro | Not mutagenic | |
| Dibutyltin Dilaurate | In Vitro | Some positive data exist, but the data are not | |
| | | sufficient for classification | |
| Dibutyltin Dilaurate | In vivo | Mutagenic | |

Carcinogenicity

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| 1 | 2 | 12 | 7 | 1) | 1 |
|---|----|----|----|----|---|
| L | 41 | _ | // | 4 | |

| Name | Route | Species | Value |
|------------------|------------|----------|--|
| Amorphous Silica | Not | Mouse | Some positive data exist, but the data are not |
| | Specified | | sufficient for classification |
| Titanium Dioxide | Ingestion | Multiple | Not carcinogenic |
| | | animal | |
| | | species | |
| Titanium Dioxide | Inhalation | Rat | Carcinogenic |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test Result | Exposure Duration |
|----------------------|-----------|--|---------|--------------------------|-----------------------------|
| Amorphous Silica | Ingestion | Not classified for female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| Amorphous Silica | Ingestion | Not classified for male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |
| Amorphous Silica | Ingestion | Not classified for development | Rat | NOAEL 1,350 mg/kg/day | during organogenesi s |
| Dibutyltin Dilaurate | Ingestion | Toxic to female reproduction | Rat | NOAEL 2 mg/kg/day | premating into lactation |
| Dibutyltin Dilaurate | Ingestion | Toxic to development | Rat | NOAEL 2.5 mg/kg/day | during gestation |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| specific ranger organ romeity single exposure | | | | | | | |
|---|-----------|-----------------|-------------------------|---------|------------------|----------------------|--|
| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration | |
| Dibutyltin Dilaurate | Ingestion | immune system | Causes damage to organs | Rat | LOAEL 5 mg/kg | | |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|----------------------|------------|--|--|---------|------------------------------|-----------------------|
| Castor Oil | Ingestion | heart hematopoietic system liver | Not classified | Rat | NOAEL 4,800 mg/kg/day | 13 weeks |
| Castor Oil | Ingestion | kidney and/or bladder | Not classified | Mouse | NOAEL 13,000 mg/kg/day | 13 weeks |
| Amorphous Silica | Inhalation | respiratory system silicosis | Not classified | Human | NOAEL Not available | occupational exposure |
| Titanium Dioxide | Inhalation | respiratory system | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 0.01 mg/l | 2 years |
| Titanium Dioxide | Inhalation | pulmonary fibrosis | Not classified | Human | NOAEL Not available | occupational exposure |
| Dibutyltin Dilaurate | Ingestion | liver | Causes damage to organs through prolonged or repeated exposure | Rat | NOAEL 2 mg/kg/day | 2 weeks |
| Dibutyltin Dilaurate | Ingestion | immune system | Causes damage to organs through prolonged or repeated exposure | Rat | NOAEL 0.3 mg/kg/day | 28 days |

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

SECTION 14: Transport Information

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M for more information.

EPCRA 311/312 Hazard Classifications:

Physical Hazards

Not applicable

Health Hazards

Reproductive toxicity

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

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NFPA Hazard Classification

Health: 0 Flammability: 1 Instability: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

 Document Group:
 11-2404-9
 Version Number:
 18.04

 Issue Date:
 12/27/21
 Supercedes Date:
 08/03/18

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