

Safety Data Sheet

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Document Group:

11-2355-3

Version Number:

15.01

Issue Date:

06/20/17

Supercedes Date:

04/16/15

Product identifier

3M™ Scotch-Weld™ Epoxy Potting Compound/Adhesive DP270 Clear

ID Number(s):

62-3262-1430-1, 62-3262-1431-9, 62-3262-1435-0, 62-3262-1436-8, 62-3262-3530-6, 62-3262-3830-0

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:

11-2356-1, 11-2357-9

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| 3M™ Scotch-Weld™ Epoxy Potting Compound/Adhesive DP270 Clear 06/20/ | /17 |
|---|-----|

3M USA SDSs are available at www.3M.com



Safety Data Sheet

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Document Group:

11-2357-9

Version Number:

23.01

Issue Date:

06/20/17

Supercedes Date:

06/30/16

SECTION 1: Identification

1.1. Product identifier

3M[™] Scotch-Weld[™] Epoxy Potting Compound/Adhesive DP270 Clear, 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

Acute Toxicity (dermal): Category 3. Acute Toxicity (oral): Category 4.

Serious Eye Damage/Irritation: Category 2A.

Skin Corrosion/Irritation: Category 2.

Reproductive Toxicity: Category 2.

2.2. Label elements

Signal word

Danger

Symbols

Skull and crossbones | Exclamation mark | Health Hazard |

Pictograms

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Hazard Statements

Toxic in contact with skin.

Harmful if swallowed.

Causes serious eye irritation.

Causes skin irritation.

Suspected of damaging 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, protective clothing, and eye/face protection.

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

Wash thoroughly after handling.

Response:

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 occurs: Get medical advice/attention.

Take off immediately all contaminated clothing and wash it before reuse.

Rinse mouth.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

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.

2.3. Hazards not otherwise classified

10% of the mixture consists of ingredients of unknown acute oral toxicity. 10% of the mixture consists of ingredients of unknown acute dermal toxicity.

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|--|------------|------------------------|
| 4-Nonylphenol, branched with isomers | 84852-15-3 | 40 - 60 Trade Secret * |
| 4,4'-Methylenebis(2-methylcyclohexylamine) | 6864-37-5 | 15 - 40 Trade Secret * |
| 2-Nonylphenol, branched | 91672-41-2 | < 10 Trade Secret * |
| Benzyl Alcohol | 100-51-6 | 1 - 10 Trade Secret * |

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

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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. Get medical attention. Wash clothing before reuse.

Eye 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

See Section 11.1. Information on toxicological effects.

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

SubstanceConditionAmine CompoundsDuring CombustionCarbon monoxideDuring CombustionCarbon dioxideDuring CombustionOxides of NitrogenDuring CombustionToxic Vapor, Gas, ParticulateDuring Combustion

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

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

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bodies of water.

6.3. Methods and material for containment and cleaning up

Contain spill. 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 metal container approved for use in transportation by appropriate authorities. The container must be lined with polyethylene plastic or contain a plastic drum liner made of polyethylene. 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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial or professional use only. Do not handle until all safety precautions have been read and understood. Avoid breathing 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. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities

Store away from acids. Store away from oxidizing agents.

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 |
|----------------|------------|--------|------------------------|---------------------|
| Benzyl Alcohol | 100-51-6 | AIHA | TWA:44.2 mg/m3(10 ppm) | |

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

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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: Polymer laminate

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

General Physical Form: Liquid

Odor, Color, Grade: clear, very mild pungent odor.

Odor threshold No Data Available pН Not Applicable Melting point No Data Available

Boiling Point 401 °F [Details: CONDITIONS: @ 760mm Hg (benzyl alcohol)]

Flash Point > 240 °F [Test Method:Closed Cup]

Evaporation rate No Data Available Flammability (solid, gas) Not Applicable Flammable Limits(LEL) No Data Available Flammable Limits(UEL) No Data Available

Vapor Pressure 0.1 mmHg [Details:CONDITIONS: @ 86F (30C); 13.3mm Hg

> @ 212F (100C).] 3.72 [*Ref Std*:AIR=1]

Vapor Density **Density** 1.0 g/ml

Specific Gravity 1.0 [Ref Std:WATER=1] Slight (less than 10%) Solubility in Water 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 12,000 - 15,000 centipoise [Details: CONDITIONS: (@ Room

Temperature)]

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

Molecular weight No Data Available

VOC Less H2O & Exempt Solvents <= 10 g/l [Test Method:tested per EPA method 24]

[Details: when used as intended with Part B]

VOC Less H2O & Exempt Solvents <= 1 % [Test Method:tested per EPA method 24] [Details:when

used as intended with Part B]

VOC Less H2O & Exempt Solvents <= 90 g/l [Test Method:calculated SCAQMD rule 443.1]

[Details: as supplied]

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.

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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

Strong acids

Strong oxidizing agents

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.

Skin Contact:

Toxic in contact with skin. Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.

Eye Contact:

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

Ingestion:

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

May cause additional health effects (see below).

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Additional Health Effects:

Reproductive/Developmental Toxicity:

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

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 ATE200 - 1,000 mg/kg |
| Overall product | Ingestion | | No data available; calculated ATE300 - 2,000 mg/kg |
| 4-Nonylphenol, branched with isomers | Dermal | Rabbit | LD50 > 2,000 mg/kg |
| 4-Nonylphenol, branched with isomers | Ingestion | Rat | LD50 1,531 mg/kg |
| 4,4'-Methylenebis(2-methylcyclohexylamine) | Dermal | Rabbit | LD50 > 200 mg/kg |
| 4,4'-Methylenebis(2-methylcyclohexylamine) | Inhalation- Dust/Mist (4 hours) | Rat | LC50 0.42 mg/l |
| 4,4'-Methylenebis(2-methylcyclohexylamine) | Ingestion | Rat | LD50 > 320 mg/kg |
| Benzyl Alcohol | Inhalation- Dust/Mist (4 hours) | Rat | LC50 8.8 mg/l |
| Benzyl Alcohol | Ingestion | Rat | LD50 1,230 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|--|-------------------------------|---------------|
| Overall product | In vitro data | Irritant |
| 4-Nonylphenol, branched with isomers | Rabbit | Согтоѕіче |
| 4,4'-Methylenebis(2-methylcyclohexylamine) | Rabbit | Согтоѕіче |
| Benzyl Alcohol | Multiple animal species | Mild irritant |

Serious Eye Damage/Irritation

| Name | Species | Value |
|--|------------------------------|-----------------|
| Overall product | similar health hazards | Severe irritant |
| 4-Nonylphenol, branched with isomers | Rabbit | Согтовіче |
| 4,4'-Methylenebis(2-methylcyclohexylamine) | Rabbit | Corrosive |
| Benzyl Alcohol | Rabbit | Severe irritant |

Skin Sensitization

| Skin Sensitization | | | |
|--|---------|----------------|--|
| Name | Species | Value | |
| 4-Nonylphenol, branched with isomers | Guinea | Not classified | |
| | pig | | |
| 4,4'-Methylenebis(2-methylcyclohexylamine) | Guinea | Not classified | |
| | pig | | |
| Benzyl Alcohol | Human | Not classified | |
| | and | | |
| | animal | | |

Respiratory Sensitization

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

Germ Cell Mutagenicity

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| Name | Route | Value |
|--|----------|--|
| | | |
| 4-Nonylphenol, branched with isomers | In Vitro | Not mutagenic |
| 4-Nonylphenol, branched with isomers | In vivo | Not mutagenic |
| 4,4'-Methylenebis(2-methylcyclohexylamine) | In Vitro | Not mutagenic |
| Benzyl Alcohol | In vivo | Not mutagenic |
| Benzyl Alcohol | In Vitro | Some positive data exist, but the data are not |
| | | sufficient for classification |

Carcinogenicity

| Name | Route | Species | Value |
|----------------|-----------|----------|------------------|
| Benzyl Alcohol | Ingestion | Multiple | Not carcinogenic |
| | | animal | |
| | | species | |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test Result | Exposure Duration |
|--|------------|--------------------------------------|--------------------------------|------------------------|----------------------------|
| 4-Nonylphenol, branched with isomers | Ingestion | Not classified for male reproduction | Rat | NOAEL 400 mg/kg/day | 28 days |
| 4-Nonylphenol, branched with isomers | Ingestion | Toxic to female reproduction | official classifica tion | NOAEL Not available | |
| 4-Nonylphenol, branched with isomers | Ingestion | Toxic to development | official classifica tion | NOAEL Not available | |
| 4,4'-Methylenebis(2- methylcyclohexylamine) | Ingestion | Not classified for male reproduction | Rat | NOAEL 12 mg/kg/day | 3 months |
| 4,4'-Methylenebis(2- methylcyclohexylamine) | Inhalation | Not classified for male reproduction | Rat | NOAEL 0.048 mg/l | 3 months |
| 4,4'-Methylenebis(2- methylcyclohexylamine) | Ingestion | Not classified for development | Rat | NOAEL 45 mg/kg/day | during gestation |
| Benzyl Alcohol | Ingestion | Not classified for development | Mouse | NOAEL 550 mg/kg/day | during organogenes s |

Lactation

| Name | | Species | Value |
|--------------------------------------|-----------|---------|--|
| 4-Nonylphenol, branched with isomers | Ingestion | Rat | Not classified for effects on or via lactation |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|--|------------|--------------------------------------|--|---------|------------------------|----------------------|
| 4,4'-Methylenebis(2- methylcyclohexylamine) | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL Not available | - |
| Benzyl Alcohol | Inhalation | central nervous system depression | May cause drowsiness or dizziness | | NOAEL Not available | |
| Benzyl Alcohol | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | | NOAEL Not available | |
| Benzyl Alcohol | Ingestion | central nervous system depression | May cause drowsiness or dizziness | | NOAEL Not available | |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|-------------------------|-----------|------------------|----------------|---------|-------------|----------------------|
| 4-Nonylphenol, branched | Ingestion | endocrine system | Not classified | Rat | NOAEL 400 | 28 days |

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| with isomers | | hematopoietic system liver | | | mg/kg/day | |
|--|------------|--|--|-------|------------------------|-----------------------|
| 4-Nonylphenol, branched with isomers | Ingestion | kidney and/or bladder heart bone, teeth, nails, and/or hair immune system muscles nervous system respiratory system | Not classified | Rat | NOAEL 150 mg/kg/day | 90 days |
| 4,4'-Methylenebis(2- methylcyclohexylamine) | Inhalation | hematopoietic system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 0.012 mg/l | 3 months |
| 4,4'-Methylenebis(2- methylcyclohexylamine) | Inhalation | endocrine system liver kidney and/or bladder respiratory system | Not classified | Rat | NOAEL 0.048 mg/l | 3 months |
| 4,4'-Methylenebis(2- methylcyclohexylamine) | Inhalation | skin | Not classified | Human | NOAEL Not available | occupational exposure |
| 4,4'-Methylenebis(2- methylcyclohexylamine) | Ingestion | heart | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 2.5 mg/kg/day | 3 months |
| 4,4'-Methylenebis(2- methylcyclohexylamine) | Ingestion | hematopoietic system liver | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 12 mg/kg/day | 3 months |
| 4,4'-Methylenebis(2- methylcyclohexylamine) | Ingestion | endocrine system kidney and/or bladder | Not classified | Rat | NOAEL 60 mg/kg/day | 3 months |
| Benzyl Alcohol | Ingestion | endocrine system muscles kidney and/or bladder | Not classified | Rat | NOAEL 400 mg/kg/day | 13 weeks |
| Benzyl Alcohol | Ingestion | nervous system respiratory system | Not classified | Mouse | NOAEL 645 mg/kg/day | 8 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

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06/20/17

respective regulating authorities to determine the available treatment and disposal facilities.

EPA Hazardous Waste Number (RCRA): D002 (Corrosive)

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.

311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

EPCRA 311/312 Hazard Classifications (effective January 1, 2018):

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

| Health Hazards | |
|--------------------------------------|--|
| Acute toxicity | |
| Reproductive toxicity | |
| Serious eye damage or eye irritation | |
| Skin Corrosion or Irritation | |

This material contains a chemical which requires export notification under TSCA Section 12[b]:

| Ingredient (Category if applicable) | C.A.S. No | Regulation | Status |
|--|------------|---------------------------------------|----------|
| 4-Nonylphenol, branched with isomers (Phenol, 4- | 84852-15-3 | Toxic Substances Control Act (TSCA) 5 | Proposed |
| nonyl-, branched) | | SNUR or Consent Order Chemicals | • |
| 4-Nonylphenol, branched with isomers (Phenol, | 84852-15-3 | Toxic Substances Control Act (TSCA) 5 | Proposed |
| nonyl-) | | SNUR or Consent Order Chemicals | • |
| 4-Nonylphenol, branched with isomers | 84852-15-3 | Toxic Substances Control Act (TSCA) 5 | Proposed |
| • • | | SNUR or Consent Order Chemicals | - |
| 2-Nonylphenol, branched | 91672-41-2 | Toxic Substances Control Act (TSCA) 5 | Proposed |
| | | SNUR or Consent Order Chemicals | - |

This material contains a chemical subject to a proposed EPA Significant New Use Rule (TSCA Section 5)

| Ingredient (Category if applicable) | C.A.S. No | Reference |
|--------------------------------------|------------|-------------|
| 4-Nonylphenol, branched with isomers | 84852-15-3 | 79 FR 59186 |
| 2-Nonylphenol, branched | 91672-41-2 | 79 FR 59186 |

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.

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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: 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:

11-2357-9

Version Number:

23.01

Issue Date:

06/20/17

Supercedes Date:

06/30/16

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Document Group:

11-2356-1

Version Number:

17.02

Issue Date:

06/20/17

Supercedes Date:

10/26/15

SECTION 1: Identification

1.1. Product identifier

3M™ Scotch-Weld™ Epoxy Potting Compound/Adhesive DP270 Clear, Part B

1.2. Recommended use and restrictions on use

Recommended use

Structural adhesive

1.3. Supplier's details

MANUFACTURER:

3M

DIVISION: ADDRESS:

Industrial Adhesives and Tapes Division 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 2B.

Skin Sensitizer: Category 1.

Reproductive Toxicity: Category 1B.

2.2. Label elements

Signal word

Danger

Symbols

Exclamation mark | Health Hazard |

Pictograms

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Hazard Statements

Causes eye irritation.

May cause an allergic skin reaction.

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.

Avoid breathing vapors.

Wear protective gloves.

Wash thoroughly after handling.

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

Response:

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.

Wash contaminated clothing before reuse.

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.

2.3. Hazards not otherwise classified

5% of the mixture consists of ingredients of unknown acute oral toxicity.

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|-------------------|------------|------------------------|
| Epoxy Resin | 25068-38-6 | 90 - 99 Trade Secret * |
| Hydrocarbon Resin | 9003-53-6 | 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.

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

See Section 11.1. Information on toxicological effects.

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

| Substance | <u>Condition</u> |
|-------------------------------|-------------------|
| Aldehydes | During Combustion |
| Hydrocarbons | During Combustion |
| Carbon monoxide | During Combustion |
| Carbon dioxide | During Combustion |
| Ketones | During Combustion |
| Toxic Vapor, Gas, Particulate | During Combustion |
| | |

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

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

Contain spill. 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

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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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial or professional use only. 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. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities

Store away from acids. Store away from oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this SDS.

8.2. Exposure controls

8.2.1. Engineering controls

No engineering controls required.

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. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended: Polymer laminate

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.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Physical Form:

Liquid

Odor, Color, Grade:

clear, very mild odor.

Odor threshold

No Data Available Not Applicable

pН

No Data Available

Melting point Boiling Point

>=300 °F

Flash Point

>=300 °F [Test Method:Closed Cup]

Evaporation rate Flammability (solid, gas)

Not Applicable
Not Applicable
No Data Available

Flammable Limits(LEL)
Flammable Limits(UEL)

No Data Available No Data Available

Vapor Pressure Vapor Density <=650 mmHg [@ 131 °F] Not Applicable

Density

1.15 g/ml

Specific Gravity

1.15 [*Ref Std*:WATER=1]

Solubility in Water

Nil

Solubility- non-water Partition coefficient: n-octanol/ water No Data Available No Data Available No Data Available

Autoignition temperature

No Data Available
No Data Available

Decomposition temperature Viscosity

No Data Available

Viscosity

13,000 - 16,000 centipoise [Details: CONDITIONS: (@ Room

Temperature)]

Hazardous Air Pollutants

0 % weight [Test Method: Calculated]

Molecular weight

No Data Available

VOC Less H2O & Exempt Solvents

< 10 g/l [Test Method:tested per EPA method 24]

[Details: when used as intended with Part A]

VOC Less H2O & Exempt Solvents

0 g/l [Test Method:calculated SCAOMD rule 443.1] [Details:as

supplied]

VOC Less H2O & Exempt Solvents

<= 1 % [Test Method:tested per EPA method 24] [Details:when

used as intended with Part A]

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

Strong acids

Strong oxidizing agents

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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.

Skin Contact:

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

Eve Contact:

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

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.

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 | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| Epoxy Resin | Dermal | Rat | LD50 > 1,600 mg/kg |
| Epoxy Resin | Ingestion | Rat | LD50 > 1,000 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| N | lame | Species | Value |
|---|------|---------|-------|
| ╙ | | | |

| Epoxy Resin | Rabbit | Mild irritant |
|-------------|--------|---------------|
| | | |

Serious Eye Damage/Irritation

| Name | Species | Value |
|-------------|---------|-------------------|
| Epoxy Resin | Rabbit | Moderate irritant |

Skin Sensitization

| Name | Species | Value |
|-------------|---------|-------------|
| Epoxy Resin | Human | Sensitizing |
| | and | · |
| | animal | |

Respiratory Sensitization

| Name | Species | Value |
|-------------|---------|----------------|
| Epoxy Resin | Human | Not classified |

Germ Cell Mutagenicity

| Name | Route | Value |
|-------------|----------|--|
| Epoxy Resin | In vivo | Not mutagenic |
| Epoxy Resin | In Vitro | Some positive data exist, but the data are not sufficient for classification |

Carcinogenicity

| Name | Route | Species | Value |
|-------------|--------|---------|--|
| Epoxy Resin | Dermal | Mouse | Some positive data exist, but the data are not |
| | 1 | | sufficient for classification |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test Result | Exposure Duration |
|-------------------|-----------|--|---------|------------------------|-----------------------------|
| Epoxy Resin | Ingestion | Not classified for female reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation |
| Epoxy Resin | Ingestion | Not classified for male reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation |
| Epoxy Resin | Dermal | Not classified for development | Rabbit | NOAEL 300 mg/kg/day | during organogenesi s |
| Epoxy Resin | Ingestion | Not classified for development | Rat | NOAEL 750 mg/kg/day | 2 generation |
| Hydrocarbon Resin | Ingestion | Toxic to female reproduction | Rat | NOAEL 5 mg/kg/day | premating into lactation |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

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

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|-------------|--------|-----------------|----------------|---------|-----------------------------|----------------------|
| Epoxy Resin | Dermal | liver | Not classified | Rat | NOAEL 1,000 mg/kg/day | 2 years |
| Epoxy Resin | Dermal | nervous system | Not classified | Rat | NOAEL 1,000 mg/kg/day | 13 weeks |

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|--|----------|--|

| Epoxy Resin | Ingestion | auditory system | Not classified | Rat | NOAEL | 28 days |
|-------------|-----------|-----------------------|----------------|-----|-----------|---------|
| | 1 | heart endocrine | | | 1,000 | • |
| | l | system | | | mg/kg/day | |
| | | hematopoietic | | i | | |
| | 1 | system liver eyes | | | | |
| | | kidney and/or | | | | |
| | į | bladder | | | | |

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 waste product in a permitted industrial waste facility. As a disposal alternative, incinerate 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.

EPA Hazardous Waste Number (RCRA): Not regulated

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.

311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

EPCRA 311/312 Hazard Classifications (effective January 1, 2018):

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Physical Hazards

Not applicable

Health Hazards

Reproductive toxicity

Serious eye damage or eye irritation

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.

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: 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.

HMIS Hazard Classification

Health: *2 Flammability: 1 Physical Hazard: 0 Personal Protection: X - See PPE section.

Hazardous Material Identification System (HMIS® IV) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

 Document Group:
 11-2356-1
 Version Number:
 17.02

 Issue Date:
 06/20/17
 Supercedes Date:
 10/26/15

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|--------------------------|---|----------|--|

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