

## **Material Safety Data Sheet**

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**PRODUCT NAME:** 3M(TM) Scotch-Weld(TM) Epoxy Adhesive DP-420 NS, Black or 3M(TM)

Scotch-Weld(TM) Epoxy Adhesive 420 B/A NS, Black

**MANUFACTURER:** 3M

**DIVISION:** Industrial Adhesives and Tapes Division

**ADDRESS:** 3M Center

St. Paul, MN 55144-1000

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

**Issue Date:** 03/04/2008 **Supercedes Date:** 11/21/2003

**Document Group:** 17-9873-5

## **ID** Number(s):

62-3299-1430-3, 62-3299-1435-2, 62-3299-3532-4, 62-3299-3832-8

This product is a kit or a multipart product which consists of multiple, independently packaged components. An MSDS for each of these components is included. Please do not separate the component MSDSs from this cover page. The document numbers of the MSDSs for components of this product are:

17-9858-6, 17-9844-6

**Revision Changes:** 

Copyright was modified.

Page Heading: Product name was modified.

Kit: Product name was modified. Kit: Division name was modified. Kit: ID Number Heading was added. Kit: ID Number(s) was added.

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## **SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:** 3M<sup>TM</sup> Scotch-Weld<sup>TM</sup> Epoxy Adhesive DP-420 NS, Black or 3M<sup>TM</sup> Scotch-Weld<sup>TM</sup> Epoxy

Adhesive 420 NS, Black (Part A)

MANUFACTURER:

**DIVISION:** Industrial Adhesives and Tapes Division

**ADDRESS:** 3M Center

St. Paul, MN 55144-1000

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

**Issue Date:** 01/14/11 Supercedes Date: 07/06/09

**Document Group:** 17-9844-6

**Product Use:** 

Specific Use: Part A of 2 part epoxy adhesive system.

Intended Use: Industrial use

## **SECTION 2: INGREDIENTS**

| Ingredient   | <u>C.A.S. No.</u> | <u>% by Wt</u> |
|--|-------------------|----------------|
| Modified Epoxy Resin - N.J.T.S. Reg. No. 04499600-6839 | Trade Secret      | 50 - 80        |
| 4,7,10-Trioxatridecane-1,13-Diamine                    | 4246-51-9         | 20 - 40        |
| Amorphous Silica                                       | 67762-90-7        | 5 - 10         |
| Calcium Salt   | 55120-75-7        | 1 - 5          |
| 2,4,6-Tris((Dimethylamino)Methyl))Phenol               | 90-72-2           | 1 - 5          |
| Diethylene glycol mono(3-aminopropyl) ether            | 112-33-4          | < 1            |

## **SECTION 3: HAZARDS IDENTIFICATION**

## 3.1 EMERGENCY OVERVIEW

Specific Physical Form: Paste

Odor, Color, Grade: slight amine odor, off-white

General Physical Form: Liquid

**Immediate health, physical, and environmental hazards:** May cause chemical eye burns. May cause chemical skin burns. May cause chemical gastrointestinal burns.

### 3.2 POTENTIAL HEALTH EFFECTS

#### **Eye Contact:**

Corrosive (Eye Burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Dust created by cutting, grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

#### **Skin Contact:**

Corrosive (Skin Burns): Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

#### **Inhalation:**

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

Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

#### **Ingestion:**

Gastrointestinal Corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain; nausea; vomiting; and diarrhea; blood in the feces and/or vomitus may also be seen.

## **SECTION 4: FIRST AID MEASURES**

## 4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

**Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water for at least 15 minutes. Get immediate medical attention. Wash contaminated clothing and clean shoes before reuse.

**Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention.

If Swallowed: Do not induce vomiting. Give victim two glasses of water. Never give anything by mouth to an unconscious

person. Get immediate medical attention.

## **SECTION 5: FIRE FIGHTING MEASURES**

#### 5.1 FLAMMABLE PROPERTIES

**Autoignition temperature**No Data Available

Flash Point >=340 °F [Test Method: Tagliabue Closed Cup]

Flammable Limits(LEL)

No Data Available

No Data Available

No Data Available

OSHA Flammability Classification: Class IIIB Combustible Liquid

## 5.2 EXTINGUISHING MEDIA

Ordinary combustible material. Use fire extinguishers with class A extinguishing agents (e.g., water, foam).

#### 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** Not applicable. Non-flammable: ordinary combustible material.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Read and follow safety precautions on the solvent label and MSDS.

#### **6.2.** Environmental precautions

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. Dispose of collected material as soon as possible.

## Clean-up methods

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill. Collect as much of the spilled material as possible. Clean up residue with an appropriate organic solvent.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

## **SECTION 7: HANDLING AND STORAGE**

#### 7.1 HANDLING

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Contents may be under pressure, open carefully. Avoid breathing of vapors created during cure cycle. Avoid skin contact with hot material. Avoid breathing

Page 3 of 8

of dust created by cutting, sanding, grinding or machining. For industrial or professional use only.

#### 7.2 STORAGE

Store away from acids. Store away from flammable and combustible materials.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 ENGINEERING CONTROLS

Provide ventilated enclosure for heat curing. Provide appropriate local exhaust for cutting, grinding, sanding or machining. Curing enclosures must be exhausted to outdoors or to a suitable emission control device. Provide appropriate local exhaust when product is heated.

## 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### 8.2.1 Eye/Face Protection

The following eye protection(s) are recommended: Safety Glasses with side shields Indirect Vented Goggles

#### 8.2.2 Skin Protection

Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Gloves made from the following material(s) are recommended: Polyethylene/Ethylene Vinyl Alcohol

#### 8.2.3 Respiratory Protection

Avoid breathing of vapors created during cure cycle. Avoid breathing of dust created by cutting, sanding, grinding or machining. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with N95 particulate filters

. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

#### 8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

#### 8.3 EXPOSURE GUIDELINES

| <u>Ingredient</u>                        | <b>Authority</b> | <b>Type</b> | <u>Limit</u>           | <b>Additional Information</b> |
|--|------------------|-------------|------------------------|-------------------------------|
| Calcium Salt                             | 3M               | TWA         | $\overline{0.1}$ mg/m3 | Skin Notation*                |
| Amorphous Silica                         | CMRG             | CEIL        | 5 mg/m3                |                               |
| 2,4,6-Tris((Dimethylamino)Methyl))Phenol | CMRG             | TWA         | 5 ppm                  |                               |

<sup>\*</sup> Substance(s) refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

## SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline OSHA: Occupational Safety and Health Administration

Pogo 4 of

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Specific Physical Form: Paste

Odor, Color, Grade: slight amine odor, off-white

General Physical Form: Liquid

**Autoignition temperature** No Data Available

Flash Point >=340 °F [Test Method: Tagliabue Closed Cup]

Flammable Limits(LEL)

No Data Available
No Data Available
No Data Available

**Boiling Point** > 340 °F **Density** 1.15 g/ml

Vapor Density 3.72 [Ref Std: AIR=1]

Vapor Pressure <=27 psia [@ 131 °F]

Specific Gravity 1.15 [Ref Std: WATER=1]

pH Not Applicable

Melting point

No Data Available

**Solubility in Water Evaporation rate**Slight (less than 10%)
Not Applicable

Hozordous Air Pollutents

O % weight [Test Metho

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

Volatile Organic Compounds 11 g/l [Test Method: tested per EPA method 24] [Details: EU VOC

content]

**Kow - Oct/Water partition coef Percent volatile**No Data Available

0 - 1 % weight

VOC Less H2O & Exempt Solvents 11 g/l [Test Method: tested per EPA method 24]

VOC Less H2O & Exempt Solvents 4 g/l [Test Method: tested per EPA method 24] [Details: when used

as intended with Part B]

**Viscosity** 8,000 - 10,000 centipoise [@ 73 °F]

## **SECTION 10: STABILITY AND REACTIVITY**

Stability: Stable.

#### **Materials and Conditions to Avoid:**

#### 10.1 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 reaction (exothem) with production of intense heat and smoke.

#### 10.2 Materials to avoid

Strong oxidizing agents

**Hazardous Polymerization:** Hazardous polymerization will not occur.

Dogo 5 of 9

## **Hazardous Decomposition or By-Products**

<u>Substance</u> <u>Condition</u>

Amine Compounds
Carbon monoxide
During Combustion
During Combustion
Carbon dioxide
During Combustion
Oxides of Nitrogen
During Combustion
Toxic Vapor, Gas, Particulate
During Combustion

## **SECTION 11: TOXICOLOGICAL INFORMATION**

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

## **SECTION 12: ECOLOGICAL INFORMATION**

#### ECOTOXICOLOGICAL INFORMATION

Not determined.

#### CHEMICAL FATE INFORMATION

Not determined.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** Dispose of completely cured (or polymerized) wastes in a sanitary landfill. Incinerate uncured product in a permitted hazardous waste incinerator in the presence of a combustible material. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

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

Since regulations vary, consult applicable regulations or authorities before disposal.

## **SECTION 14:TRANSPORT INFORMATION**

**ID Number(s):** 

62-3399-8530-1, 62-3399-9530-0

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

## **SECTION 15: REGULATORY INFORMATION**

## 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 - No

#### STATE REGULATIONS

Contact 3M for more information.

#### **CHEMICAL INVENTORIES**

The components of this product are in compliance with the chemical notification requirements of TSCA.

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS. Contact 3M for more information.

## INTERNATIONAL REGULATIONS

Contact 3M for more information.

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

## **SECTION 16: OTHER INFORMATION**

#### NFPA Hazard Classification

Health: 3 Flammability: 1 Reactivity: 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.

**Revision Changes:** 

Copyright was modified.

Section 3: Immediate skin hazard(s) was modified.

Section 3: Potential effects from eye contact was modified.

Section 3: Potential effects from skin contact information was modified.

Section 3: Potential effects from inhalation information was modified.

Page 7 of 8

- Section 8: Eye/face protection information was modified.
- Section 8: Skin protection recommended gloves information was modified.
- Section 8: Respiratory protection recommended respirators information was modified.
- Section 4: First aid for inhalation termination of exposure was modified.
- Section 4: First aid for inhalation medical assistance was modified.
- Section 14: Transportation legal text was modified.
- Section 15: Inventories information was modified.
- Section 9: Vapor pressure value was modified.
- Section 9: Boiling point information was modified.
- Section 5: Flammable limits (UE) information was modified.
- Section 5: Flammable limits (LEL) information was modified.
- Section 9: Property description for optional properties was modified.
- Section 9: Flammable limits (LEL) information was modified.
- Section 9: Flammable limits (UEL) information was modified.
- Section 2: Ingredient table was modified.
- Section 9: Density information was added.
- Section 6: 6.2. Environmental precautions heading was added.
- Section 6: 6.1. Personal precautions, protective equipment and emergency procedures heading was added.
- Section 10.1 Conditions to avoid heading was added.
- Section 10.2 Materials to avoid heading was added.
- Section 6: Personal precautions information was added.
- Section 6: Environmental procedures information was added.
- Section 6: Methods for cleaning up information was added.
- Section 10: Materials to avoid physical property was added.
- Section 10: Conditions to avoid physical property was added.
- Section 6: Clean-up methods heading was added.
- Section 6: Release measures information was deleted.
- Section 6: Release measures heading was deleted.
- Section 10: Materials and conditions to avoid physical property was deleted.

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## **SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:** 3M<sup>TM</sup> Scotch-Weld<sup>TM</sup> Epoxy Adhesive DP-420NS, Black or 3M<sup>TM</sup> Scotch-Weld<sup>TM</sup> Epoxy

Adhesive 420NS, Black (Part B)

**MANUFACTURER:** 3M

**DIVISION:** Industrial Adhesives and Tapes Division

**ADDRESS:** 3M Center

St. Paul, MN 55144-1000

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

Issue Date: 07/06/09 Supercedes Date: 11/15/07

**Document Group:** 17-9858-6

**Product Use:** 

Intended Use: Adhesive

## **SECTION 2: INGREDIENTS**

| <u>Ingredient</u>                                      | <u>C.A.S. No.</u> | <u>% by Wt</u> |  |
|--|-------------------|----------------|--|
| Epoxy Resin  | 25068-38-6        | 70 - 100       |  |
| Acrylic Polymer- N.J.T.S. Registry No. #04499600-5018P | Trade Secret      | 10 - 20        |  |
| Amorphous Silica                                       | 67762-90-7        | 1 - 5          |  |
| Adhesion Promotor                                      | 2530-83-8         | < 0.5          |  |
| Carbon Black   | 1333-86-4         | 0.01 - 0.1     |  |

## **SECTION 3: HAZARDS IDENTIFICATION**

## 3.1 EMERGENCY OVERVIEW

Specific Physical Form: Paste

Odor, Color, Grade: Black, epoxy odor

General Physical Form: Liquid

Immediate health, physical, and environmental hazards:

May cause allergic skin reaction.

## 3.2 POTENTIAL HEALTH EFFECTS

#### **Eye Contact:**

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

Vapors released during curing may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Dust created by cutting, grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

#### **Skin Contact:**

Moderate 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.

#### **Inhalation:**

Vapors released during curing may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

#### **Ingestion:**

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

## **SECTION 4: FIRST AID MEASURES**

## 4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

**Eve Contact:** Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

**Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

**Inhalation:** If signs/symptoms develop, remove person to fresh air. If signs/symptoms persist, get medical attention.

**If Swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

## **SECTION 5: FIRE FIGHTING MEASURES**

#### 5.1 FLAMMABLE PROPERTIES

**Autoignition temperature** No Data Available

Flash Point >=250 °F

Flammable Limits - LEL

Flammable Limits - UEL

No Data Available

No Data Available

## 5.2 EXTINGUISHING MEDIA

Ordinary combustible material. Use fire extinguishers with class A extinguishing agents (e.g., water, foam).

## 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** Non-flammable: ordinary combustible material.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. 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. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

## **SECTION 7: HANDLING AND STORAGE**

#### 7.1 HANDLING

Avoid breathing of vapors created during cure cycle. Avoid eye contact with vapors, mists, or spray. Keep container closed when not in use. For industrial or professional use only. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits. If ventilation is not adequate, use respiratory protection equipment. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Avoid breathing of dust created by cutting, sanding, grinding or machining. Avoid skin contact with hot material. Keep out of the reach of children.

## 7.2 STORAGE

Store away from heat. Store out of direct sunlight.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 ENGINEERING CONTROLS

Provide appropriate local exhaust for cutting, grinding, sanding or machining. Curing enclosures must be exhausted to outdoors or to a suitable emission control device. Provide appropriate local exhaust when product is heated. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment.

## 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### **8.2.1** Eye/Face Protection

Avoid eye contact.

The following eye protection(s) are recommended: Full Face Shield, Safety Glasses with side shields, Indirect Vented Goggles.

#### 8.2.2 Skin Protection

Avoid skin contact. Avoid skin contact with hot material.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials. Gloves made from the following material(s) are recommended: Neoprene, Nitrile Rubber.

#### **8.2.3** Respiratory Protection

Avoid breathing of dust created by cutting, sanding, grinding or machining.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

#### 8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

## 8.3 EXPOSURE GUIDELINES

| <u>Ingredient</u> | <u>Authority</u> | <b>Type</b> | <u>Limit</u> | <b>Additional Information</b> |
|-------------------|------------------|-------------|--------------|-------------------------------|
| Adhesion Promotor | CMRG             | TWA         | 5 ppm        |                               |
| Carbon Black      | ACGIH            | TWA         | 3.5 mg/m3    | Table A4                      |
| Carbon Black      | CMRG             | TWA         | 0.5 mg/m3    |                               |
| Carbon Black      | OSHA             | TWA         | 3.5 mg/m3    | Table Z-1                     |
| Amorphous Silica  | CMRG             | CEIL        | 5 mg/m3      |                               |

#### SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Specific Physical Form: Paste

Odor, Color, Grade: Black, epoxy odor

General Physical Form: Liquid

Autoignition temperature No Data Available

Flash Point >=250 °F

Flammable Limits - LEL
No Data Available
Flammable Limits - UEL
No Data Available

**Boiling point**  $> 250 \, ^{\circ}\text{F}$ 

Vapor Density Not Applicable

Vapor Pressure Not Applicable

Specific Gravity 0.97 - 1.1 [Ref Std: WATER=1]

pH Not Applicable
Melting point Not Applicable

Solubility in Water Nil

Evaporation rateNot ApplicableVolatile Organic CompoundsNo Data Available

Percent volatile <=0.1 %

VOC Less H2O & Exempt Solvents No Data Available

Viscosity 60000 - 100000 centipoise

## **SECTION 10: STABILITY AND REACTIVITY**

Stability: Stable.

**Materials and Conditions to Avoid:** Amines; Heat; Heat is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature reaction (exothem) with production of intense heat and smoke.

Hazardous Polymerization: Hazardous polymerization will not occur.

## **Hazardous Decomposition or By-Products**

SubstanceConditionAldehydesDuring Combustion

Carbon monoxide During Combustion
Carbon dioxide During Combustion
Irritant Vapors or Gases During Combustion

## **SECTION 11: TOXICOLOGICAL INFORMATION**

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

## **SECTION 12: ECOLOGICAL INFORMATION**

## **ECOTOXICOLOGICAL INFORMATION**

Not determined.

## CHEMICAL FATE INFORMATION

Not determined.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** Dispose of completely cured (or polymerized) wastes in a sanitary landfill. Incinerate uncured product in a permitted hazardous waste incinerator in the presence of a combustible material. Incinerate in a permitted hazardous waste incinerator in the presence of a combustible material. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

Since regulations vary, consult applicable regulations or authorities before disposal.

## **SECTION 14:TRANSPORT INFORMATION**

#### **ID Number(s):**

62-3299-8535-2, 62-3299-9530-2

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

## **SECTION 15: REGULATORY INFORMATION**

## US FEDERAL REGULATIONS

Contact 3M for more information.

## 311/312 Hazard Categories:

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

## STATE REGULATIONS

Contact 3M for more information.

### **CHEMICAL INVENTORIES**

The components of this product are in compliance with the chemical notification requirements of TSCA.

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

Contact 3M for more information.

#### INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS 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 Reactivity: 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 Reactivity: 0 Protection: X - See PPE section.

Hazardous Material Identification System (HMIS(r)) 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(r) ratings are to be used with a fully implemented HMIS(r) program. HMIS(r) is a registered mark of the National Paint and Coatings Association (NPCA).

**Revision Changes:** 

Section 1: Product name was modified.

Copyright was modified.

Section 3: Potential effects from skin contact information was modified.

Page Heading: Product name was modified.

Section 3: Carcinogenicity phrase was deleted.

Section 3: Immediate other hazard(s) was deleted.

Section 3: Carcinogenicity table was deleted.

Section 3: Carcinogenicity heading was deleted.

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3M MSDSs are available at www.3M.com

# 3M ID Number: 62-3299-1430-3 Product Description: 3M(TM) Scotch-Weld(TM) Epoxy Adhesive DP420NS Black, 1.25 fl oz / 37 mL, Duo-pak Sample, 1 per case Transport Protective Service: PROTECTIVE SERVICE NOT REQUIRED **NMFC Item:** 004620 NMFC Sub: 06 NMFC Class: 060.0 Flash Point (Closed-cup): 250°F/121°C UNITED STATES DEPARTMENT OF TRANSPORTATION - GROUND (U.S. DOT, 49 CFR) LIMITED QUANTITY UNITED STATES DEPARTMENT OF TRANSPORTATION - VESSEL (U.S. DOT, 49 CFR) UN2735, AMINES, LIQUID, CORROSIVE, N.O.S., (4,7,10-TRIOXATRIDECANE-1,13-DIAMINE), 8, II, LIMITED QUANTITY **INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA)** UN2735, AMINES, LIQUID, CORROSIVE, N.O.S., (4,7,10-TRIOXATRIDECANE-1,13-DIAMINE), 8, II **INTERNATIONAL MARITIME ORGANIZATION (IMO)** UN2735, AMINES, LIQUID, CORROSIVE, N.O.S., (4,7,10-TRIOXATRIDECANE-1,13-DIAMINE), 8, II, LIMITED QUANTITY

Date: June 25, 2015

The classification is authorized by the Competent Authority of the United States of America and may not meet the requirements of other competent authorities.

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