



Material Safety Data Sheet

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This material safety data sheet (MSDS) is provided as a courtesy in response to a customer request. This product is not regulated under, and a MSDS is not required for this product by the OSHA Hazard Communication Standard (29 CFR 1910.1200) because, when used as recommended or under ordinary conditions, it should not present a health and safety hazard. However, use or processing of the product not in accordance with the product's recommendations or not under ordinary conditions may affect the performance of the product and may present potential health and safety hazards.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SCOTCHLOK CONNECTORS: 314 AND 316 (EG-3 SEALANT)
MANUFACTURER: 3M
DIVISION: Electrical Markets Division

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

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

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Product Use:

Intended Use: Electrical
 Specific Use: LOW VOLTAGE AUTOMOTIVE WIRE CONNECTOR WITH SEALANT

SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
SOLID CONNECTOR	Mixture	75 - 85
WHITE MINERAL OIL	8042-47-5	1 - 10
POLYBUTYLENE	9003-29-6	1 - 10
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	67762-90-7	1 - 10

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Viscous Sealant

Odor, Color, Grade: LIGHT COLORED GREASE, SLIGHT AROMATIC ODOR, BLACK OR BLUE CAP

General Physical Form: Solid Connector

Immediate health, physical, and environmental hazards: This product, when used under reasonable conditions and in accordance with the 3M directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

No health effects are expected. Contact with the eyes during product use is not expected to result in significant irritation.

Skin Contact:

No health effects are expected.

Inhalation:

No health effects are expected.

Ingestion:

No health effects are expected.

Carcinogenicity:

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Class Description</u>	<u>Regulation</u>
OIL MIST, MINERAL	SEQ100910	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
OIL MIST, MINERAL	SEQ100910	Known human carcinogen	National Toxicology Program Carcinogens

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

Skin Contact: No need for first aid is anticipated.

Inhalation: No need for first aid is anticipated.

If Swallowed: No need for first aid is anticipated.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature	<i>No Data Available</i>
Flash Point	≥ 300 °F [<i>Test Method:</i> Tagliabue Closed Cup]
Flammable Limits - LEL	<i>No Data Available</i>

Flammable Limits - UEL

No Data Available

5.2 EXTINGUISHING MEDIA

Ordinary combustible material. Use fire extinguishers with class A extinguishing agents (e.g., water, foam). Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

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. No unusual fire or explosion hazards are anticipated.

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions

Ventilate the area with fresh air.

Environmental procedures

Not applicable.

Clean-up methods

Not applicable.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Avoid prolonged or repeated skin contact. This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions.

7.2 STORAGE

Not applicable. Store away from oxidizing agents.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Not applicable. Use in a well-ventilated area.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Not applicable.

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

8.2.2 Skin Protection

Not applicable. Gloves are not required.

8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

8.2.4 Prevention of Swallowing

Not applicable.

8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	<u>Additional Information</u>
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	CMRG	CEIL	5 mg/m3	
OIL MIST, MINERAL	ACGIH	TWA, as mist	5 mg/m3	
OIL MIST, MINERAL	ACGIH	STEL, as mist	10 mg/m3	
WHITE MINERAL OIL	CMRG	TWA	5 mg/m3	
WHITE MINERAL OIL	CMRG	STEL	10 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:	Viscous Sealant
Odor, Color, Grade:	LIGHT COLORED GREASE, SLIGHT AROMATIC ODOR, BLACK OR BLUE CAP
General Physical Form:	Solid Connector
Autoignition temperature	No Data Available
Flash Point	>=300 °F [Test Method: Tagliabue Closed Cup]
Flammable Limits - LEL	No Data Available
Flammable Limits - UEL	No Data Available
Boiling point	No Data Available
Density	No Data Available
Vapor Density	No Data Available
Vapor Pressure	No Data Available
Specific Gravity	0.91 [Ref Std: WATER=1] [Details: (Sealant)]
pH	Not Applicable
Melting point	No Data Available
Solubility in Water	Nil
Evaporation rate	No Data Available
Volatile Organic Compounds	No Data Available
Kow - Oct/Water partition coef	Not Applicable

Percent volatile
VOC Less H2O & Exempt Solvents
Viscosity

No Data Available
No Data Available
No Data Available

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

None known

10.2 Materials to avoid

None known

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified

Hazardous Decomposition: Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

Carbon dioxide and carbon monoxide and unidentified hydrocarbons.

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 applicable.

CHEMICAL FATE INFORMATION

Not applicable.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of waste product in a permitted hazardous waste facility.

EPA Hazardous Waste Number (RCRA): D008 (Lead)

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

SECTION 14: TRANSPORT INFORMATION

ID Number(s):

80-6102-5366-0, 80-6102-5367-8, 80-6107-3453-7

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 - No 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.

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

Contact 3M for more information.

Additional Information: (1) New Jersey Trade Secret Registry No. 04499600-5114P

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: 0 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:

Section 16: NFPA hazard classification for health was modified.
Copyright was modified.
Section 3: Potential effects from eye contact was modified.
Section 3: Potential effects from inhalation information was modified.
Section 3: Potential effects from ingestion information was modified.
Section 5: Extinguishing media information was modified.
Section 5: Unusual fire and explosion hazard information was modified.
Section 7: Handling information was modified.
Section 7: Storage information was modified.
Section 8: Engineering controls information was modified.
Section 8: Eye/face protection phrase was modified.
Section 8: Skin protection phrase was modified.
Section 8: Prevention of swallowing information was modified.
Section 8: Eye/face protection information was modified.
Section 14: Transportation legal text was modified.
Section 15: 311/312 Immediate Hazard score was modified.
Section 15: Inventories information was modified.
Section 9: Property description for optional properties was modified.
Section 12: Ecotoxicological phrase was modified.
Section 12: Chemical Fate phrase was modified.
Section 2: Ingredient table was modified.
Section 8: Exposure guidelines ingredient information was modified.
Section 5: Flammability note on stability and reactivity was added.
Section 10: Hazardous decomposition or by-products heading was added.
Section 10: Hazardous decomposition or by-products phrase was added.
Section 10: Hazardous decomposition or by-products table was added.
Section 3: Immediate other hazard(s) was added.
Article disclaimer text (following the copyright) was added.
Section 4: First aid for ingestion (swallowing) - none - was added.
Section 4: First aid for inhalation - none - was added.
Section 3: Carcinogenicity table was added.
Section 3: Carcinogenicity heading was added.
Section 6: Environmental procedures heading was added.
Section 6: Personal precautions 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 8: Hand protection information 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 4: First aid for inhalation - termination of exposure - was deleted.
Section 4: First aid for inhalation - medical assistance - was deleted.
Section 4: First aid for ingestion (swallowing) - decontamination - was deleted.
Section 4: First aid for ingestion (swallowing) - intervention - was deleted.
Section 4: First aid for ingestion (swallowing) - medical assistance - was deleted.
Section 10: Materials and conditions to avoid physical property was deleted.
Section 6: Release measures note - reportability - was deleted.

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