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Safety Data Sheet

Revision Number: 008.0

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name: **LOCTITE M 2010RS E&C known as M-2010RS**

IDH number: 1263364

Product type: Ink

Restriction of Use: None identified

Region: United States

Company address:
Henkel Corporation
One Henkel Way
Rocky Hill, Connecticut 06067

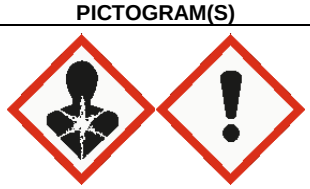
Contact information:
Telephone: +1 (860) 571-5100
MEDICAL EMERGENCY Phone: Poison Control Center
1-877-671-4608 (toll free) or 1-303-592-1711
TRANSPORT EMERGENCY Phone: CHEMTREC
1-800-424-9300 (toll free) or 1-703-527-3887
Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW	
DANGER:	COMBUSTIBLE LIQUID. CAUSES SKIN IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE IRRITATION. SUSPECTED OF CAUSING GENETIC DEFECTS. CAUSES DAMAGE TO ORGANS. MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE LIQUID	4
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1
GERM CELL MUTAGENICITY	2
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	1
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	2

PICTOGRAM(S)



Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames, hot surfaces - no smoking. Do not breathe vapors, mist, or spray. Wash affected area thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, clothing, eye and face protection.

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Response:	IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed: Call a poison center or physician. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing. In case of fire: Use foam, dry chemical or carbon dioxide to extinguish.
Storage:	Store in a well-ventilated place. Keep cool. Store locked up.
Disposal:	Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Silver	7440-22-4	30 - 40
Diethylene glycol monobutyl ether	112-34-5	20 - 30
Graphite	7782-42-5	5 - 10
Synthetic resin	Proprietary	5 - 10
Phenol formaldehyde resin	Proprietary	5 - 10
Butoxyethyl acetate	112-07-2	5 - 10
Methanol	67-56-1	1 - 5
Carbon black	1333-86-4	1 - 5
Diethyleneglycol monoethyl ether	111-90-0	1 - 5
Vinyl Resin	Proprietary	1 - 5
Phenol	108-95-2	1 - 5
2-Butoxyethanol	111-76-2	0.1 - 1

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel. If vomiting occurs, prevent aspiration by keeping the patient's head below the knees. Never give anything by mouth to an unconscious person. Get medical attention.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. In case of fire, keep containers cool with water spray.

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Unusual fire or explosion hazards:	Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.
Hazardous combustion products:	Oxides of carbon. Oxides of Metals in Section 3. Toxic fumes. Irritating vapors.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:	Do not allow product to enter sewer or waterways.
Clean-up methods:	Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Store in a closed container until ready for disposal.

7. HANDLING AND STORAGE

Handling:	Use only with adequate ventilation. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Keep container closed.
Storage:	For safe storage, store between 5.0 °C (41°F) and 30.0 °C (86°F) Outside temperature limits, the properties of the product will change. Store in original container until ready to use. Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Keep away from heat, spark and flame. Protect from direct sunlight.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Silver	0.1 mg/m3 TWA Dust and fume.	0.01 mg/m3 PEL (as Ag)	None	None
Diethylene glycol monobutyl ether	10 ppm TWA Inhalable fraction and vapor.	None	None	50 ppm TWA 75 ppm STEL
Graphite	2 mg/m3 TWA Respirable fraction.	5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust. 15 MPPCF TWA	None	None
Synthetic resin	None	None	None	None
Phenol formaldehyde resin	None	None	None	None
Butoxyethyl acetate	20 ppm TWA	None	None	None
Methanol	200 ppm TWA (SKIN) 250 ppm STEL	200 ppm (260 mg/m3) PEL	None	None
Carbon black	3 mg/m3 TWA Inhalable fraction.	3.5 mg/m3 PEL	None	None
Diethyleneglycol monoethyl ether	None	None	25 ppm (140 mg/m3) TWA	None
Vinyl Resin	None	None	None	None
Phenol	5 ppm TWA (SKIN)	5 ppm (19 mg/m3) PEL (SKIN)	None	None
2-Butoxyethanol	20 ppm TWA	50 ppm (240 mg/m3) PEL (SKIN)	None	None

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Respiratory protection: Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists.

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists. Safety showers and eye wash stations should be available.

Skin protection: Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Paste
Color: Black
Odor: None
Odor threshold: Not available.
pH: Not applicable
Vapor pressure: 0.1 mm hg
Boiling point/range: 192 °C (377.6 °F)
Melting point/ range: Not available.
Specific gravity: 1.522
Vapor density: 1.0
Flash point: 74 °C (165.2 °F)
Flammable/Explosive limits - lower: 0 %
Flammable/Explosive limits - upper: 8.5 %
Autoignition temperature: Not available.
Flammability: Not applicable

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Evaporation rate:	1 (Butyl acetate = 1)
Solubility in water:	Insoluble
Partition coefficient (n-octanol/water):	Not applicable
VOC content:	437 g/l
Viscosity:	Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.
Hazardous reactions:	None under normal processing.
Hazardous decomposition products:	Oxides of carbon. Oxides of Metals in Section 3. Toxic fumes. Irritating vapors.
Incompatible materials:	Strong oxidizing agents.
Reactivity:	Not available.
Conditions to avoid:	Keep away from heat, ignition sources and incompatible materials. Protect from direct sunlight.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes

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Potential Health Effects/Symptoms

Inhalation: May cause respiratory tract irritation. May cause dizziness, incoordination, headache, nausea, and vomiting.

Skin contact: Causes skin irritation. May cause allergic skin reaction. Argyria (a non-toxic, cosmetic blue-gray discoloration of the skin and mucous membranes that is irreversible).

Eye contact: Causes serious eye irritation. May cause irreversible damage.

Ingestion: Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Silver	Oral LD50 (Rat) = > 5,000 mg/kg Dermal LD50 (Rat) = > 2,000 mg/kg	Allergen, Eyes, Irritant, Respiratory, Skin
Diethylene glycol monobutyl ether	Oral LD50 (Rabbit) = 2,200 mg/kg Oral LD50 (Rat) = 4,500 mg/kg Oral LD50 (Rat) = 5,660 mg/kg Oral LD50 (Rat) = 7,292 mg/kg Oral LD50 (Mouse) = 2,400 mg/kg Oral LD50 (Rat) = 6,600 mg/kg Oral LD50 (Rat) = 6,560 mg/kg Dermal LD50 (Rabbit) = 2,700 mg/kg Dermal LD50 (Rabbit) = 4,120 mg/kg	Blood, Central nervous system, Irritant, Kidney
Graphite	None	Lung
Synthetic resin	None	Allergen, Corrosive, Irritant, Kidney, Respiratory, Skin
Phenol formaldehyde resin	None	No Records
Butoxyethyl acetate	Oral LD50 (Rat) = 2,400 mg/kg Oral LD50 (Rat) = 3,000 mg/kg Dermal LD50 (Rabbit) = 1,500 mg/kg	Behavioral, Blood, Bone Marrow, Central nervous system, Irritant, Kidney, Liver, Lung
Methanol	Oral LD50 (Rat) = 5,628 mg/kg Oral LD50 (Mouse) = 7,300 mg/kg Oral LD50 (Rabbit) = 14.4 g/kg Dermal LD50 (Rabbit) = 15,800 mg/kg Inhalation LC50 (Rat, 4 h) = 64000 ppm	Eyes, Irritant, Metabolic, Nervous System
Carbon black	Oral LD50 (Rat) = > 8,000 mg/kg	Respiratory, Some evidence of carcinogenicity
Diethyleneglycol monoethyl ether	Oral LD50 (Rat) = 1,920 mg/kg Oral LD50 (Rat) = 5.54 g/kg Oral LD50 (Rat) = 5,900 mg/kg Oral LD50 (Mouse) = 6.58 g/kg Oral LD50 (Rabbit) = 3,620 mg/kg Oral LD50 (Rat) = 6,500 mg/kg Oral LD50 (Mouse) = 7,863 mg/kg Oral LD50 (Mouse) = 12,400 mg/kg Oral LD50 (Rabbit) = 4,450 mg/kg Oral LD50 (Rat) = 7,500 mg/kg Oral LD50 (Mouse) = 7,248 mg/kg Dermal LD50 (Mouse) = 6,000 mg/kg Dermal LD50 (Rabbit) = 10,300 mg/kg Dermal LD50 (Rat) = 6,000 mg/kg Dermal LD50 (Rabbit) = 11,176 mg/kg Dermal LD50 (Rabbit) = 8,500 mg/kg Dermal LD50 (Rabbit) = 8,476 mg/kg	Blood, Central nervous system, Irritant, Kidney
Vinyl Resin	None	Irritant
Phenol	Oral LD50 (Mouse) = 270 mg/kg Oral LD50 (Rat) = 317 mg/kg Oral LD50 (Rat) = 530 mg/kg Dermal LD50 (Rat) = 669 mg/kg Dermal LD50 (Rabbit) = 850 mg/kg	Blood, Cardiac, Corrosive, Developmental, Eyes, Irritant, Kidney, Liver, Mutagen, Nervous System, Skin, Vascular

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2-Butoxyethanol	Oral LD50 (Rat) = 560 mg/kg Oral LD50 (Mouse) = 1.2 g/kg Oral LD50 (Rabbit) = 0.32 g/kg Oral LD50 (Rat) = 1.48 g/kg Oral LD50 (Mouse) = 1,519 mg/kg Dermal LD50 (Rabbit) = 400 mg/kg Inhalation LC50 (Rat, 4 h) = 486 ppm	Blood, Central nervous system, Irritant, Kidney, Liver

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Silver	No	No	No
Diethylene glycol monobutyl ether	No	No	No
Graphite	No	No	No
Synthetic resin	No	No	No
Phenol formaldehyde resin	No	No	No
Butoxyethyl acetate	No	No	No
Methanol	No	No	No
Carbon black	No	Group 2B	No
Diethyleneglycol monoethyl ether	No	No	No
Vinyl Resin	No	No	No
Phenol	No	No	No
2-Butoxyethanol	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Do not empty into drains / surface water / ground water.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: This product contains a component or components identified as hazardous under 40 CFR 261.24. D011: Silver (Check TCLP Level).

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Combustible liquid, n.o.s. (2-Butoxyethyl acetate)
Hazard class or division: Combustible Liquid
Identification number: NA 1993
Packing group: III
DOT Hazardous Substance(s): Silver

International Air Transportation (ICAO/IATA)

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Silver)
Hazard class or division: 9
Identification number: UN 3082
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Silver)
Hazard class or division: 9
Identification number: UN 3082
Packing group: III
Marine pollutant: Silver

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15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status:	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12 (b) Export Notification:	None above reporting de minimis
CERCLA/SARA Section 302 EHS:	Phenol (CAS# 108-95-2).
CERCLA/SARA Section 311/312:	Fire, Immediate Health, Delayed Health
CERCLA/SARA Section 313:	This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Silver (CAS# 7440-22-4). Diethylene glycol monobutyl ether (CAS# 112-34-5). Butoxyethyl acetate (CAS# 112-07-2). Diethyleneglycol monoethyl ether (CAS# 111-90-0). 2-Butoxyethanol (CAS# 111-76-2). Methanol (CAS# 67-56-1). Phenol (CAS# 108-95-2).
CERCLA Reportable quantity:	Silver (CAS# 7440-22-4) 1,000 lbs. (454 kg)
California Proposition 65:	This product contains a chemical known in the State of California to cause cancer. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Canada Regulatory Information

CEPA DSL/NDSL Status:	Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2,3,4,6,14

Prepared by: Product Safety and Regulatory Affairs

Issue date: 02/08/2018

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