



Revision Date: 09/12/2005

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: QMI 519 (QM0519)
Product type: Die Attach Adhesive
Company address:
Henkel Corporation
15051 East Don Julian Road
Industry, California 91746

Item No. : QMI 519
Region: United States
Contact Information:
Telephone: 626.968.6511
Emergency Telephone: 860.571.5100
Internet: www.electronics.henkel.us

Contains one or more components for which a Toxic Substances Control Act Low Volume Exemption (LVE) applies. Quantities of import and/or manufacturer of the component within this product are limited to the LVE submittor.

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous components</u>	<u>%</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>OTHER</u>
Silver 7440-22-4	60-100	0.1 mg/m ³ TWA	0.01 mg/m ³ TWA	None
Carbocyclic acrylate Proprietary	10-30	None	None	None
Bismaleimide resin Proprietary	1-5	None	None	None
Acrylate Proprietary	1-5	None	None	None
Additive Proprietary	1-5	None	None	None

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HMIS:

Physical state: Paste
Color: Grey
Odor: Mild

HEALTH: 2*
FLAMMABILITY: 1
PHYSICAL HAZARD: 0
Personal Protection: See Section 8

WARNING: MAY CAUSE ALLERGIC SKIN REACTION.
MAY BE HARMFUL IF SWALLOWED.
MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects

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Inhalation:	May cause respiratory tract irritation. Excessive inhalation of fumes from many metals can produce an acute reaction known as "metal fume fever". Symptoms consist of chills and fever (very similar to and easily confused with flu symptoms) which come on a few hours after large exposures. Tightness of the chest. Shortness of breath. Coughing.
Skin contact:	Moderate skin irritation. May cause allergic skin reaction. Repeated or prolonged skin contact may result in argyria (a non-toxic, cosmetic blue-gray discoloration of the skin and mucous membranes that is irreversible). Pain and discomfort. Rash.
Eye contact:	Moderate eye irritation. Pain and discomfort. Excess tearing. Stinging. Redness.
Ingestion:	May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Existing conditions aggravated by exposure: Eye, skin, and respiratory disorders. Pre-existing skin or lung allergies may increase the chance of developing exaggerated allergic symptoms from exposure to this product. Dermatitis. Asthma.

See Section 11 for additional toxicological information.

4. FIRST AID MEASURES

Inhalation:	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms develop and persist, get medical attention.
Skin contact:	Remove contaminated clothing and shoes. Immediately flush skin with plenty of water (using soap, if available). Get medical attention if symptoms develop and persist. Wash clothing before reuse. Thoroughly clean shoes before reuse.
Eye contact:	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Ingestion:	DO NOT induce vomiting unless directed to do so by medical personnel. Give a conscious person several glasses of water. Never give anything by mouth to an unconscious person. Get medical attention if symptoms develop and persist.

5. FIRE-FIGHTING MEASURES

Flash point:	110.5°C (231°F) Closed cup
Autoignition temperature:	Not available
Flammable/Explosive limits-lower %:	Not available
Flammable/Explosive limits-upper %:	Not available
Extinguishing media:	Foam, dry chemical or carbon dioxide.
Special fire fighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. Use water spray to keep fire exposed containers cool.
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 nitrogen. Butadiene. Hydrocarbons.

6. ACCIDENTAL RELEASE MEASURES

Environmental precautions:	Prevent product from entering drains or open waters.
Clean-up methods:	Ensure adequate ventilation. Wear suitable protective clothing, gloves and eye/face protection. Scrape up as much material as possible. Store in a closed container until ready for disposal.

7. HANDLING AND STORAGE

Handling:	Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Do not taste or swallow. Do not breathe mist or vapors. Keep container closed. Wash thoroughly after handling.
Storage:	Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.
Incompatible products:	Refer to Section 10.

For information on product shelf life contact Henkel Customer Service at (626) 968-6511

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls:	Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination below occupational exposure limits.
Respiratory protection:	Use NIOSH approved respirator if there is potential to exceed exposure limit(s).
Skin protection:	Use impermeable gloves and protective clothing as necessary to prevent skin contact. Latex gloves.
Eye/face protection:	Chemical splash goggles or safety glasses with side shields.

See Section 2 for exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Paste
Color:	Grey
Odor:	Mild
Vapor pressure:	Nil
pH:	Not applicable
Boiling point/range:	Not available
Melting point/range:	Not available
Specific gravity:	3.8
Vapor density:	Not available
Evaporation rate:	Not available
Solubility in water:	Insoluble
Partition coefficient (n-octanol/water):	Not available
VOC content:	1.1%; 41.8 grams/liter (EPA Method 24)

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions
Hazardous polymerization:	None under normal processing.
Hazardous decomposition products:	Oxides of carbon. Oxides of nitrogen. Butadiene. Hydrocarbons.
Incompatibility:	Strong oxidizers. Strong reducing agents. Strong acids and strong bases. Free radical initiators. Peroxides. Acetylene. Ammonia.
Conditions to avoid:	Oxidizing conditions. Storage with incompatible materials. Heat, flames, sparks and other sources of ignition. Exposure to sunlight.

11. TOXICOLOGICAL INFORMATION

Carcinogen Status

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen
Silver 7440-22-4	No	No	No
Carbocyclic acrylate Proprietary	No	No	No
Bismaleimide resin Proprietary	No	No	No
Acrylate Proprietary	No	No	No
Additive Proprietary	No	No	No

Literature Referenced Target Organ & Other Health Effects

Hazardous components	Health Effects/Target Organs
Silver 7440-22-4	Skin, Respiratory, Irritant, Eyes, Allergen
Carbocyclic acrylate Proprietary	No data
Bismaleimide resin Proprietary	No data
Acrylate Proprietary	Allergen, Irritant
Additive Proprietary	No Records

12. ECOLOGICAL INFORMATION

Ecological information: Not available

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

EPA hazardous waste number: D011 Silver

14. TRANSPORT INFORMATION

The shipping classifications in this section are for non-bulk packaging only (unless otherwise specified). Shipping classification may be different for bulk packaging.

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

Proper shipping name: Not regulated (Up to 55 ml when shipped as originally packaged by Henkel only)
Hazard class or division: None
Identification number: None
Packing group: None

International Air Transportation (ICAO/IATA):

Proper shipping name: Not regulated (Up to 55 ml when shipped as originally packaged by Henkel only)
Hazard class or division: None
Identification number: None
Packing group: None

Water Transportation (IMO/IMDG):

Proper shipping name: Not regulated (Up to 55 ml when shipped as originally packaged by Henkel only)
Hazard class or division: None
Identification number: None
Packing group: None

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15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status:	Contains one or more component(s) for which a Toxic Substances Control Act Low Volume Exemption (LVE) applies. Quantities of import and/or manufacturer of the component within this product are limited to the LVE submittor.
TSCA 12 (b) Export Notification:	None.
CERCLA/SARA Section 302 EHS:	None above reporting de minimus.
CERCLA/SARA Section 311/312:	Immediate Health Hazard, Delayed Health Hazard
CERCLA/SARA 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).
California Proposition 65:	No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDL Status:	One or more components are not listed on, and are not exempt from listing on either the Domestic Substances List or the Non-Domestic Substances List.
WHMIS hazard class:	D.2.B

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: New information added in section(s): 1 - 16

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