

Revision Number: 002.2

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:

EMRA Product type/use: Lubrica Restriction of Use: None i Company address: Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067

BONDERITE S-FN 8301 DRYFILM COATING ACHESON known as EMRALON8301 Lubricant None identified

IDH number:

1224920

Item number:1224920Region:United StatesContact information:Telephone: +1 (860) 571-5100MEDICAL EMERGENCY Phone: Poison Control Center1-877-671-4608 (toll free) or 1-303-592-1711TRANSPORT EMERGENCY Phone: CHEMTREC1-800-424-9300 (toll free) or 1-703-527-3887Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW WARNING: CAUSES SKIN IRRITATION. CAUSES SERIOUS EYE IRRITATION.

2
2A

Precautionary Statements

Prevention:	Wash affected area thoroughly after handling. Wear protective gloves, eye protection, and face protection.
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 skin irritation occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing.
Storage:	Not prescribed
Disposal:	Not prescribed

18 % of the mixture consists of ingredient(s) of unknown acute toxicity.

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*
N-Methyl-2-pyrrolidone	872-50-4	5 - 10
Triethylamine	121-44-8	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:	If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist.
Skin contact:	Immediately wash skin thoroughly with soap and water. If symptoms develop and persist, get medical attention.
Eye contact:	In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.
Ingestion:	Get immediate medical attention. Do not induce vomiting. Never give anything by mouth to a victim who is unconscious or is having convulsions.
Symptoms:	See Section 11.
5. Fl	IRE FIGHTING MEASURES
Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Wear full protective clothing. Wear self-contained breathing apparatus.

Unusual fire or explosion hazards:

Hazardous combustion products:

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Oxides of nitrogen.

Closed containers may rupture (due to build up of pressure) when exposed to

6. ACCIDENTAL RELEASE MEASURES

extreme heat.

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

Environmental precautions:

Clean-up methods:

Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up. Do not allow product to enter sewer or waterways.

Absorb spill with inert material. Shovel material into appropriate container for disposal. Dispose of according to Federal, State and local governmental regulations.

7. HANDLING AND STORAGE

Handling:

Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Avoid breathing vapors or mists of this product. Use only with adequate ventilation. For industrial use only.

Storage:

For safe storage, store between 5 °C (41°F) and 30 °C (86°F) Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.

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

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
N-Methyl-2-pyrrolidone	None	None	10 ppm (40 mg/m3) TWA (SKIN)	None
Triethylamine	0.5 ppm TWA 1 ppm STEL (SKIN)	25 ppm (100 mg/m3) PEL	None	None

Engineering controls:

Respiratory protection:

Eye/face protection:

Skin protection:

Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.

If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

Wear chemical goggles; face shield (if splashing is possible).

Wear impervious gloves for prolonged contact. The use of neoprene gloves is recommended. Use of impervious apron and boots are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Color: Odor: Odor threshold: pH: Vapor pressure: Boiling point/range: Melting point/ range: Specific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity: Decomposition temperature:

Liquid White Slight Not available. 8.50 - 9.50 17 mm hg calculated 100 °C (212°F)calculated Not available. 1.067 1.0 100 °C (212°F) calculated Not available. Not available. Not determined Not applicable 1.0 Miscible Not determined 325 g/l 70 mPa.s Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions.
Hazardous reactions:	None under normal processing.
Hazardous decomposition products:	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Oxides of nitrogen.
Incompatible materials:	This product reacts with acids.
Reactivity:	Not available.
Conditions to avoid:	Elevated temperatures.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure:

Skin, Inhalation, Eyes

Potential Health Effects/Symptoms

Inhalation:	This product is irritating to the respiratory system.
Skin contact:	This product is irritating to the skin. A component in this product may be absorbed through the
	skin, especially if skin is damaged.
Eye contact:	This product is irritating to the eyes.
Ingestion:	Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be harmful if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
N-Methyl-2-pyrrolidone	Oral LD50 (Rat) = 3,914 mg/kg Dermal LD50 (Rabbit) = 8,000 mg/kg	Blood, Bone Marrow, Central nervous system, Immune system, Irritant, Lung
Triethylamine	Oral LD50 (Rabbit) = 365 mg/kg Oral LD50 (Rabbit) = 1,460 mg/kg Oral LD50 (Rabbit) = 730 mg/kg Oral LD50 (Rat) = 730 mg/kg Oral LD50 (Rat) = 460 mg/kg Oral LD50 (Mouse) = 546 mg/kg Dermal LD50 (Rabbit) = 416 mg/kg Dermal LD50 (Rabbit) = 420 mg/kg	Allergen, Blood, Central nervous system, Corrosive, Eyes, Heart, Irritant, Kidney, Liver, Nervous System, Respiratory

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
N-Methyl-2-pyrrolidone	No	No	No
Triethylamine	No	No	No

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.

 Hazardous waste number:
 Material, if discarded, is not expected to be a characteristic hazardous waste under RCRA.

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:	Not regulated
Hazard class or division:	None
Identification number:	None
Packing group:	None

International Air Transportation (ICAO/IATA)

Proper shipping name:
Hazard class or division:
Identification number:
Packing group:

Not regulated None None None

Water Transportation (IMO/IMDG)

Proper shipping name:
Hazard class or division:
Identification number:
Packing group:

Not regulated None None None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status:	All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory. This product contains one or more components with a Polymer Exemption in accordance with 40 CFR 723.250.
TSCA 12 (b) Export Notification:	Organic solvent (CAS# 872-50-4).
CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312: CERCLA/SARA Section 313:	None above reporting de minimis. Immediate Health, Delayed Health 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). N-Methyl-2-pyrrolidone (CAS# 872-50-4).
California Proposition 65:	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:	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.

This safety data sheet contains changes from the previous version in sections: This Safety Data Sheet contains changes

16. OTHER INFORMATION

Prepared by: Product Safety and Regulatory Affairs

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from the previous version in Section(s): 15

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