Revision Number: 002.0

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name: **BONDERITE L-GP 154 ACHESON known as DAG 154**

IDH number: 1224738

Product type: Dry film lubricant

Restriction of Use: None identified

Region: Canada

Company address:
Henkel Canada Corporation
Meadowpine Boulevard 2515
Mississauga, Ontario L5N 6C3

Contact information:
Telephone: +1 (905) 814-6511
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:	HIGHLY FLAMMABLE LIQUID AND VAPOR. MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. CAUSES SKIN IRRITATION. CAUSES SERIOUS EYE IRRITATION. MAY CAUSE DROWSINESS OR DIZZINESS.

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE LIQUID	2
SKIN IRRITATION	2
EYE IRRITATION	2A
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3
ASPIRATION HAZARD	1

PICTOGRAM(S)



Precautionary Statements

Prevention: Keep away from heat, sparks, open flames, hot surfaces - no smoking. Keep container tightly closed. No release into water. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves, eye protection, and face protection.

Response: IF SWALLOWED: Immediately call a physician or poison control center. If on skin (or hair): Take off immediately all contaminated clothing. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Do NOT induce vomiting. If skin irritation 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 container tightly closed. 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 Canadian Hazardous Products Regulations (WHMIS 2015) and is consistent with the provision 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	Weight %*
2-Propanol	67-63-0	60 - 70
Graphite	7782-42-5	10 - 20
n-Butyl alcohol	71-36-3	1 - 5
1-Methoxy -2-propanol	107-98-2	1 - 5

* 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. Wash clothing before reuse. Get medical attention.

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. 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.

Unusual fire or explosion hazards: Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.

Hazardous combustion products: Carbon dioxide. Carbon monoxide. Hydrocarbons.

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: Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Wash spillage site thoroughly with soap and water or detergent solution.

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. Refer to Section 8.

Storage: For safe storage, store between 5.0 °C (41°F) and 30.0 °C (86°F) Keep container closed. Store in a cool, dry, well-ventilated area. Storage within given temperature limit Outside temperature limits, the properties of the product will change. Store in original container until ready to use. Keep out of reach of children and away from food and drink. Protect from direct sunlight.

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
2-Propanol	200 ppm TWA 400 ppm STEL	400 ppm (980 mg/m3) PEL	None	None
Graphite	2 mg/m3 TWA Respirable fraction.	5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust. 15 MPPCF TWA	None	None
n-Butyl alcohol	20 ppm TWA	100 ppm (300 mg/m3) PEL	None	None
1-Methoxy -2-propanol	50 ppm TWA 100 ppm STEL	None	None	None

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

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

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 impermeable gloves and protective clothing as necessary to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid
Color: Black
Odor: Alcohol
Odor threshold: 7.5 ppm
pH: Not applicable
Vapor pressure: 33 mm hg
Boiling point/range: 82 °C (179.6 °F)
Melting point/ range: -88.8 °C (-127.8 °F)
Specific gravity: 0.89
Vapor density: 2.07 (Air = 1)
Flash point: 11.6 °C (52.88 °F) Tagliabue closed cup
Flammable/Explosive limits - lower: 2 %
Flammable/Explosive limits - upper: 12 %
Autoignition temperature: 398.8 °C (749.84 °F)
Flammability: Not applicable
Evaporation rate: 2.9 (Butyl acetate = 1)
Solubility in water: Disperses in water as a suspension

Partition coefficient (n-octanol/water):	-0.14
VOC content:	710 g/l
Viscosity:	200 - 800 cp
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:	Carbon dioxide. Carbon monoxide. Hydrocarbons.
Incompatible materials:	Strong oxidizing agents. Strong acids. Aldehydes.
Reactivity:	Not available.
Conditions to avoid:	High temperatures. Oxidizing conditions.

11. TOXICOLOGICAL INFORMATION

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

Potential Health Effects/Symptoms

Inhalation: Inhalation of vapors or mists of the product may be irritating to the respiratory system. Breathing high concentrations of vapor may cause anesthetic effects. Excessive inhalation of this material causes headache, dizziness, nausea and incoordination.

Skin contact: Prolonged or excessive skin contact with this product may cause mild skin irritation. A component in this product may be absorbed through the skin, especially if skin is damaged. Repeated exposure may cause skin dryness or cracking. Dermatitis.

Eye contact: Causes eye irritation. Exposure to vapor may cause tearing of the eyes, irritation and burning sensation.

Ingestion: Principal hazard of ingestion is aspiration into the lungs and subsequent pneumonitis. May irritate mouth, throat, and stomach if swallowed. May cause central nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
2-Propanol	Oral LD50 (Rat) = 5,045 mg/kg Oral LD50 (Mouse) = 3,600 mg/kg Oral LD50 (Rabbit) = 6,410 mg/kg Oral LD50 (Rat) = 4.7 g/kg Oral LD50 (Mouse) = 4.5 g/kg Oral LD50 (Rabbit) = 8.0 g/kg Oral LD50 (Rabbit) = 5.03 g/kg Dermal LD50 (Rabbit) = 12,800 mg/kg	Allergen, Central nervous system, Irritant
Graphite	None	Lung
n-Butyl alcohol	Oral LD50 (Rat) = 790 mg/kg Dermal LD50 (Rabbit) = 3,400 mg/kg Inhalation LC50 (Rat, 4 h) = 8000 ppm	Allergen, Central nervous system, Ear, Eyes, Irritant
1-Methoxy -2-propanol	Oral LD50 (Rat) = 36 g/kg Oral LD50 (Rat) = 5.71 g/kg Oral LD50 (Rat) = 7.51 g/kg Oral LD50 (Mouse) = 10.8 g/kg Oral LD50 (Rabbit) = 5.3 g/kg Dermal LD50 (Rabbit) = 13 g/kg Inhalation LC50 (Rat, 4 h) = 54.6 mg/l Inhalation LC50 (Rat, 4 h) = 15,000 mg/l	Central nervous system, Developmental, Irritant

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
2-Propanol	No	No	No
Graphite	No	No	No
n-Butyl alcohol	No	No	No
1-Methoxy -2-propanol	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.

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.

Canada Transportation of Dangerous Goods - Ground

Proper shipping name:	PAINT
Hazard class or division:	3
Identification number:	UN 1263
Packing group:	II

International Air Transportation (ICAO/IATA)

Proper shipping name:	Paint
Hazard class or division:	3
Identification number:	UN 1263
Packing group:	II

Water Transportation (IMO/IMDG)

Proper shipping name:	PAINT
Hazard class or division:	3
Identification number:	UN 1263
Packing group:	II

15. REGULATORY INFORMATION

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

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.

16. OTHER INFORMATION

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

Prepared by: Timothy Pratt, Regulatory Affairs Specialist

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