Revision Number: 003.2

Issue date: 08/07/2020

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: **BONDERITE S-FN 213 ACHESON known as DAG 213**

IDH number: 1224764

Product type/use: Lubricant

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:	HIGHLY FLAMMABLE LIQUID AND VAPOR. MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. CAUSES SKIN IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE IRRITATION. MAY CAUSE DROWSINESS OR DIZZINESS. SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD. MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

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

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. Keep container tightly closed. No release into water. Use explosion-proof equipment. Use non-sparking tools. Take action to prevent static discharges. Do not breathe vapors, mist, or spray. Wash affected area thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, clothing, eye 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. IF exposed or concerned: Get medical attention. Do NOT induce vomiting. 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 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 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*
Toluene	108-88-3	10 - 30
2-methoxy-1-methylethyl acetate	108-65-6	10 - 30
n-Butyl alcohol	71-36-3	10 - 30
CP Bisphenol A Diglycidylether	25036-25-3	10 - 30
Graphite	7782-42-5	5 - 10
Urea, polymer with formaldehyde, butylated	68002-19-7	5 - 10
Xylenes	1330-20-7	5 - 10
2-Butoxyethanol	111-76-2	1 - 5
Ethylbenzene	100-41-4	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:	Get medical attention. DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
Symptoms:	See Section 11.
Notes to physician:	Treat symptomatically and supportively.

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. Oxides of nitrogen. Hydrogen chloride. Hazardous decomposition products include chlorine compounds.

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

Clean-up methods: Absorb spill with inert material. Shovel material into appropriate container for disposal. Scrape up as much material as possible. Dispose of according to Federal, State and local governmental regulations. Eliminate ignition sources including sources of electrical, static or frictional sparks.

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. Ground and bond all equipment as required (when transferring products).

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. 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
Toluene	20 ppm TWA	200 ppm TWA 300 ppm Ceiling 500 ppm MAX. CONC 10 minutes	None	None
2-methoxy-1-methylethyl acetate	None	None	50 ppm TWA	None
n-Butyl alcohol	20 ppm TWA	100 ppm (300 mg/m3) PEL	None	None
CP Bisphenol A Diglycidylether	None	None	None	None
Graphite	2 mg/m3 TWA Respirable fraction.	5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust.	None	None
Urea, polymer with formaldehyde, butylated	None	None	None	None
Xylenes	100 ppm TWA 150 ppm STEL	100 ppm (435 mg/m3) PEL	None	None
2-Butoxyethanol	20 ppm TWA	50 ppm (240 mg/m3) PEL (SKIN)	None	None
Ethylbenzene	20 ppm TWA	100 ppm (435 mg/m3) PEL	None	None

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

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

Eye/face protection:	Wear chemical goggles; face shield (if splashing is possible). 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:	Solvent
Odor threshold:	Not available.
pH:	Not applicable
Vapor pressure:	25.33 mbar calculated
Boiling point/range:	110 °C (230°F)
Melting point/ range:	Not determined
Specific gravity:	0.972 - 0.996
Vapor density:	Not available.
Flash point:	7.22 °C (45°F) Pensky Martens closed cup
Flammable/Explosive limits - lower:	Not available.
Flammable/Explosive limits - upper:	Not available.
Autoignition temperature:	> 272 °C (> 521.6 °F)
Flammability:	Not applicable
Evaporation rate:	Not determined
Solubility in water:	Insoluble
Partition coefficient (n-octanol/water):	Not determined
VOC content:	708 g/l
Viscosity:	2,000 - 3,500 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. Oxides of nitrogen. Hydrogen chloride. Hazardous decomposition products include chlorine compounds.
Incompatible materials:	Strong oxidizing agents.
Reactivity:	Not available.
Conditions to avoid:	Excessive heat.

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. May cause central nervous system effects with nausea, dizziness and headache.

Skin contact: Causes skin irritation. May cause an allergic skin reaction. Contact may dry the skin; prolonged contact may cause moderate irritation. A component in this product may be absorbed through the skin, especially if skin is damaged. May cause skin sensitization. Repeated exposure may cause skin dryness or cracking. Defatting.

Eye contact: Causes serious eye irritation. Liquid or vapors may irritate the eyes.

Ingestion: May irritate mouth, throat, and stomach if swallowed. May cause dizziness, incoordination, headache, nausea, and vomiting. Principal hazard of ingestion is aspiration into the lungs and subsequent pneumonitis.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Toluene	Oral LD50 (Rat) = 2.6 g/kg Dermal LD50 (Rabbit) = 12,124 mg/kg	Behavioral, Cardiac, Central nervous system, Developmental, Ear, Irritant
2-methoxy-1-methylethyl acetate	None	Irritant, Central nervous system
n-Butyl alcohol	Oral LD50 (Rat) = 790 mg/kg Dermal LD50 (Rabbit) = 3,400 mg/kg	Allergen, Central nervous system, Ear, Eyes, Irritant
CP Bisphenol A Diglycidylether	None	Irritant, Allergen
Graphite	Inhalation LC50 (Rat, 4 h) = > 2,000 mg/m3	Lung
Urea, polymer with formaldehyde, butylated	None	Irritant, Allergen
Xylenes	Oral LD50 (Rat) = 6,670 mg/kg Oral LD50 (Rat) = 3,523 - 8,600 mg/kg Oral LD50 (Rat) = 4,300 mg/kg Dermal LD50 (Rabbit) = > 43 g/kg	Cardiac, Central nervous system, Irritant, Kidney, Liver
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 Inhalation LC50 (Rat, 4 h) = 450 ppm	Blood, Central nervous system, Irritant, Kidney, Liver
Ethylbenzene	Oral LD50 (Rat) = 5.46 g/kg Oral LD50 (Rat) = 3,500 mg/kg Dermal LD50 (Rabbit) = 17,800 mg/kg	Irritant, Central nervous system

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Toluene	No	No	No
2-methoxy-1-methylethyl acetate	No	No	No
n-Butyl alcohol	No	No	No
CP Bisphenol A Diglycidylether	No	No	No
Graphite	No	No	No
Urea, polymer with formaldehyde, butylated	No	No	No
Xylenes	No	No	No
2-Butoxyethanol	No	No	No
Ethylbenzene	No	Group 2B	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

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: If discarded, this product is considered a RCRA ignitable waste, D001.

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:	Coating solution
Hazard class or division:	3
Identification number:	UN 1139
Packing group:	II
DOT Hazardous Substance(s):	Xylene (mixed), Toluene

International Air Transportation (ICAO/IATA)

Proper shipping name:	Coating solution
Hazard class or division:	3
Identification number:	UN 1139
Packing group:	II

Water Transportation (IMO/IMDG)

Proper shipping name:	COATING SOLUTION
Hazard class or division:	3
Identification number:	UN 1139
Packing group:	II

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.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis.
Formaldehyde (CAS# 50-00-0).

CERCLA/SARA Section 311/312: Immediate Health, Delayed Health, Fire

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). Toluene (CAS# 108-88-3). n-Butyl alcohol (CAS# 71-36-3). Xylenes (CAS# 1330-20-7). 2-Butoxyethanol (CAS# 111-76-2). Ethylbenzene (CAS# 100-41-4).

CERCLA Reportable quantity: Xylenes (CAS# 1330-20-7) 100 lbs. (45.4 kg)
n-Butyl alcohol (CAS# 71-36-3) 5,000 lbs. (2,270 kg)
Toluene (CAS# 108-88-3) 1,000 lbs. (454 kg)

California Proposition 65: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

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

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: This Safety Data Sheet contains changes from the previous version in Section(s): 15

Prepared by: Product Safety and Regulatory Affairs

Issue date: 08/07/2020

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