

Aquakast 2

Revision Date August 23, 2016

1. Product and Company Identification

Product Information	
Trade Name	Aquakast 2
Product Description	Water-based graphite coating
Recommended Uses	Lubricant, protective coating
Company	Southwestern Graphite, Inc. (a division of Asbury Carbons Inc.) 2564 Highway 12 DeQuincy, LA 70633
Emergency Telephone	US: 1-800-255-3924; International: +01-813-248-0585; China: 400-120-0751; Brazil: 0-800-591-6042; India: 000-800-100-4086; Mexico: 01-800-099-0731 ChemTel contract number: MIS0001931 (collect calls accepted)
Information Phone	1-908-537-2155
Website	www.asbury.com

2. Hazards Identification

Classification	Not a hazardous substance
Labeling	Not a hazardous substance, no label elements are required

3. Composition / Information on Ingredients

Components	CAS No.	EINECS No.	Weight %	Hazard Statement(s)
Water	7732-18-5	231-791-2	78-87%	---
Graphite	7782-42-5	231-955-3	13-22%	---

4. First Aid Measures

Inhalation	Remove patient to particulate-free environment. Wear approved dust mask to avoid breathing dust. Seek medical attention if irritation persists.
Skin Contact	Wash with mild soap and warm water.
Eye contact	Rinse with tepid water until eyes are clear of particulates. Seek medical attention if irritation persists.
Ingestion	Get immediate medical attention. Do not induce vomiting unless directed by medical personnel. Graphite is not known to be toxic by ingestion. However, ingestion may cause digestive system blockage.

5. Fire Fighting Measures

Graphite is not flammable under normal conditions	
Extinguishing media	Dry chemical extinguisher, water, sand, limestone powder
Special fire hazards	At temperatures above 1500 C, graphite reacts with substances containing oxygen, including water and carbon dioxide. In case of intensely hot fire events, use sand to cover and isolate graphite.
Products of Combustion	Carbon dioxide (CO ₂), carbon monoxide (CO).
Advice for Fire Fighters	Use self contained air pack, gloves, safety goggles
NFP Rating	110

6. Accidental Release Measures

Personal precautions	Wear approved dust mask, safety goggles, and water-proof work gloves. Graphite is electrically conductive and any cleanup methods should avoid contacting graphite with electrical circuitry.
Environmental precautions	Graphite is inert and insoluble and will not pose any soluble ion hazards to the environment. However, good housekeeping practices should be followed and spilled material should be cleaned up, and disposed of in an appropriate manner.

Methods for cleaning up	Contain spillage, and then collect with non-combustible absorbent material. Place in suitable, closed containers for disposal.
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7. Handling and Storage

Precautions for safe handling	Keep containers closed when not in use. Loosen closures slowly. Graphite is a conductor of electricity. Avoid contact between graphite and electrical circuitry.
Fire and explosion protection	No special instructions - material is not combustible.
Storage precautions	Protect from freezing. Keep container tightly closed in a dry and well-ventilated place. Graphite is incompatible with all oxidizing agents

8. Exposure Controls/ Personal Protection

Ingredients with control parameters / occupational exposure limits			
Component	CAS No.	TWA	Control Reference
Water	7732-18-5	---	---
Graphite	7782-42-5	2.0 mg/m ³	Respirable dust, 2014 ACGIH Handbook
Engineering controls	Use adequate dust collection to maintain dust levels below the control or recommended values.		
Respiratory Protection	Use approved dust mask, type N95 recommended.		
Eye Protection	Safety glasses with side shields or goggles.		
Skin Protection	Conventional work gloves and clothing.		
Hygiene measures	Graphite spilled on pedestrian surfaces may pose a significant slip hazard.		

9. Physical and Chemical Properties

Appearance	Gray to black liquid	Lower explosion limit	n/a
Odor	Mild	Upper explosion limit	n/a
pH	9.0 – 10.0	Vapor pressure	As water
Freezing point	32°F (0°C)	Vapor density	As water
Boiling range	212°F (100°C)	Water solubility	Dispersible
Flash point	n/a	Partition coefficient: n-octanol/water	No data available
Evaporation rate	As water	Autoignition temperature	No data available
Specific gravity	1.10 g/ml	% volatile by weight	78%

10. Stability and Reactivity

Chemical stability	Stable. Will not polymerize or self react spontaneously.
Possibility of hazardous reactions	None known
Conditions to avoid	Graphite will begin to oxidize at temperatures above 450 C.
Materials to avoid	Oxidizing agents
Hazardous decomposition products	Carbon Dioxide (CO ₂), Carbon Monoxide (CO)

11. Toxicological Information

Acute Toxicity:		
Test (species)	Results	Remarks
Ingestion (rat)	LD50 > 2000 mg/kg bw	OECD 423
Inhalation (rat)	LC50 > 2000 mg/m ³	Dust, OECD 403
Eye contact (rabbit)	Not irritating	OECD 405
Skin contact (rabbit)	Not irritating	OECD 404
Sensitization (mouse)	Not sensitizing	OECD 429
Chronic Toxicity:		
Test (species)	Results	Remarks
Genotoxicity (in vitro)	Negative	OECD 471, OECD 473, OECD 476

Carcinogenicity	Not carcinogenic	Literature
Reproductive toxicity (rat)	NOAEL > 1000 mg/kg bw	OECD 422

12. Ecological Information

Persistence and degradability	Graphite is a reduced form of carbon and will not degrade further under normal conditions. This form of carbon is stable, unreactive in water under ambient conditions, and is insoluble.			
Bioaccumulation potential	There is no evidence indicating that graphite is bioaccumulative.			
Mobility	Graphite is not expected to have mobility in soil as it is an insoluble, inorganic substance.			
Aquatic Toxicity:				
Test	Effect dose	Exposure time	Method	Remarks
Acute fish toxicity	LC50 > 100 mg/l	96 hour	OECD 203	No adverse reaction observed.
Acute daphnia toxicity	EC50 > 100 mg/l	48 hour	OECD 202	No adverse reaction observed.
Acute algae toxicity	EC50 > 100 mg/l	72 hour	OECD 201	No adverse reaction observed.

13. Disposal Considerations

Material Disposal	Dispose of in a manner which conforms to local, state and Federal regulations. Graphite is non-hazardous but disposal of graphite waste should be handled in a responsible matter.
Packaging Disposal	Packaging should be completely emptied of contents and disposed of in a manner specified by the recycler/regional disposal contractor.

14. Transport Information

UN number	Not regulated
Proper shipping name	n/a
Transport hazard class	n/a
Packing group	n/a
Marine pollutant?	No

15. Regulatory Information

Inventory Information (graphite):	
US TSCA	Yes
Canada DSL	Yes
Canada NDSL	No
Australian AICS	Yes
Korean ECL	Yes
Asia PAC	Yes
Swiss Giftliste 1	Yes #G8422
IECSC	Yes
PICCS	Yes
New Zealand NZLoC	Yes
RoHS: Graphite is compliant with the EU RoHS directive	
WEEE: Graphite is compliant with the EU waste electrical and electronic equipment directive	

16. Other Information

The information contained herein is accurate to the best of our knowledge. Asbury Carbons makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.		
NFPA Classification	Health Hazard:	1
	Fire Hazard:	1
	Reactivity Hazard:	0