

## SAFETY DATA SHEET

DRYFLO™

Date of Preparation: 09/08/2020

SDS #: 004-16831-01MSDS

### SECTION 1: IDENTIFICATION

**Product Identification:** DRYFLO™

**CAS Number:** Not Applicable

**Volumes:** 3 L, 3L Not boxed

**Other Designations:** Not Applicable

**Recommended Use:** For laboratory use only.

**Restrictions:** For laboratory use only.

**Supplier Information:**

Micromeritics Instrument Corp. Contact: Human Resources  
4356 Communications Drive Phone: (770) 662-3636  
Norcross, GA 30093-2901 USA Fax: (770) 662-3696

**Manufacturer:** Micromeritics Instrument Corp., 4356 Communications Dr, Norcross, GA 30093-2901  
USA, Phone: (770) 662-3678

### SECTION 2: HAZARDS IDENTIFICATION

**GHS Classification:** This product is considered hazardous by the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

**Signal word:** Danger

**Hazard Statement:**

H305: May be harmful if swallowed and enters airways

H316: Causes mild skin irritation

H350: May cause cancer

**Pictograms:**



**Precautionary Statements:**

P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray

P280 - Wear eye protection/ face protection

P285 - In case of inadequate ventilation wear respiratory protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

**Potential Health Effects**

**Primary Entry Routes:** Inhalation

**Target Organs:** Not Applicable

**Acute Effects**

**Inhalation:** Inhalation may cause lung irritation.

**Eye:** Eye contact may cause irritation.

**Skin:** Not Applicable

**Ingestion:** Not Applicable

**Carcinogenicity:** This product contains crystalline silica (quartz). ACGIH: (American Conference of Governmental Industrial Hygienists) states that the material used in this product is a Suspected Human Carcinogen. IARC (International Agency for Research on Cancer) has identified the materials used in the product as a Group 1 - Carcinogenic to Humans

**Medical Conditions Aggravated by Long-Term Exposure:** Not Applicable

**Chronic Effects:** Not Applicable

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Ingredient Name	CAS Number	% wt
Natural Graphite	7782-42-5	Proprietary
Ceramic Microspheres	93924-19-7	Proprietary

Ingredient Name	OSHA	ACGIH TLV	NIOSH
	TWA	TWA	IDLH
Natural Graphite	(vacated) TWA: 0.1 mg/m3 respirable dust : (30)/(%SiO2 + 2) mg/m3 TWA total dust : (250)/(%SiO2 + 5) mppcf TWA respirable fraction : (10)/(%SiO2 + 2) mg/m3 TWA respirable fraction	0.025 mg/m3 respirable fraction	IDLH: 50 mg/m3 respirable dust TWA: 0.05 mg/m3 respirable dust
Ceramic Microspheres	Not Established	Not Established	Not Established

**SECTION 4: FIRST-AID MEASURES**

**Inhalation:** Remove person to fresh air - if breathing problem persists call doctor.

**Eye Contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Skin Contact:** Wash skin with soap and water.

**Ingestion:** Clean mouth with water and afterwards drink plenty of water

**Note to Physicians:** Treat symptomatically.

**Special Precautions/Procedures:** N/A

**SECTION 5: FIRE-FIGHTING MEASURES**

**Flammability Classification:** N/A

**Extinguishing Media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unusual Fire or Explosion Hazards:** N/A

**Hazardous Combustion Products:** N/A



**Protective Equipment and Precautions for Firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Ensure adequate ventilation. Do not create dust

**Spill /Leak Procedures:** Prevent further leakage or spillage if safe to do so. Wet material, sweep up, vacuum and transfer to properly labeled containers.

**Environmental Precautions:** The product is not classified as dangerous to the environment. Spillage to ground or water systems should be avoided as it may float on the water surface. See Section 12 for additional Ecological Information.

## SECTION 7: HANDLING AND STORAGE

**Handling Precautions:** Avoid breathing dust and avoid contact with eyes. Minimize dust generation.

Avoid dry sweeping.

**Storage Requirements:** Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from food supplies/utensils/ingredients.

**Incompatible Products:** None known based on information supplied.

**Regulatory Requirements:** N/A

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines**

Ingredient Name	OSHA	ACGIH TLV	NiOSH
	TWA	TWA	IDLH
Natural Graphite	(vacated) TWA: 0.1 mg/m3 respirable dust : (30)/(%SiO2 + 2) mg/m3 TWA total dust : (250)/(%SiO2 + 5) mppcf TWA respirable fraction : (10)/(%SiO2 + 2) mg/m3 TWA respirable fraction	0.025 mg/m3 respirable fraction	IDLH: 50 mg/m3 respirable dust TWA: 0.05 mg/m3 respirable dust
Ceramic Microspheres	Not Established	Not Established	Not Established

**Engineering Controls:** Showers, Eyewash stations, Ventilation systems

**Ventilation:** Local exhaust to keep within prescribed limits of the exposure guidelines.

**Respiratory Protection:** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Protective Clothing/Equipment:** Eye Protection: Risk of contact, wear: Safety glasses with side-shields  
Gloves: Repeated or prolonged contact: Gloves should be worn.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Property	Values	Remarks/ - Method
Physical State	Powder	

Appearance	Gray particles	
Odor	None	
Odor Threshold	No information available	
pH	No data available	None known
Melting Point/Range	3652 °C	None known
Boiling Point/Boiling Range	No data available	None known
Flash Point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air upper flammability limit	No data available	
Flammability Limits in Air lower flammability limit	No data available	
Vapor Pressure	No data available	None known
Vapor Density	No data available	None known
Specific Gravity	2.26	None known
Water Solubility	Insoluble in water	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	No data available	None known
Flammable Properties	Not flammable	
Explosive Properties	No data available	
Oxidizing Properties	No data available	
Other information		
VOC Content (%)	No data available	

## SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** No data available

**Stability:** Stable

**Polymerization:** N/A

**Chemical Incompatibilities:** Avoid hydrofluoric acid, chlorine trifluoride, manganese trioxide, and other powerful oxidizers.

**Conditions to Avoid:** None

**Hazardous Decomposition Products:** N/A

## SECTION 11: TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure:**

**Inhalation** There is no data available for this product. Product dust may cause irritation of respiratory tract.

**Eye Contact** There is no data available for this product.

**Skin Contact** There is no data available for this product.

**Ingestion** There is no data available for this product.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Quartz silica	= 500 mg/kg ( Rat )	-	-

**Symptoms related to the physical, chemical and toxicological characteristics**

Symptoms No information available.

**Delayed and immediate effects and also chronic effects from short and long term exposure**

Sensitization No information available

Mutagenic Effects No information available.

Carcinogenicity This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product.

Chemical Name	ACGIH	IARC	IARC	OSHA
Quartz silica	A2	Group 1	Known	X

**Legend:**

ACGIH: (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

OSHA: (Occupational Safety & Health Administration)

X – Present

Reproductive Toxicity No information available STOT

- single exposure No information available. STOT -

repeated exposure No information available.

Aspiration Hazard No information available.

**SECTION 12: ECOLOGICAL INFORMATION**

Ecotoxicity: The environmental impact of this product has not been fully investigated.

Environmental Fate: Not Available

Environmental Degradation: Not Available

Soil Absorption/Mobility: Not Available

**SECTION 13: DISPOSAL CONSIDERATIONS**

Waste Disposal Methods: This material is not a hazardous waste according to Federal regulations (40 CFR 261). Consult 40 CFR 261 and the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging Do not re-use empty containers.

**SECTION 14: TRANSPORT INFORMATION**

DOT Not regulated

ICAO Not regulated

IMDG/IMO Not regulated

**SECTION 15: REGULATORY INFORMATION**

International Inventories



TSCA Complies  
 DSL Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard No  
 Chronic Health Hazard No  
 Fire Hazard No  
 Sudden Release of Pressure Hazard No  
 Reactive Hazard No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product may contain substance(s) which are known to the State of California to cause cancer or reproductive harm.

Chemical Name	CAS-No	California Prop. 65
Quartz silica	14808-60-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Quartz silica	X	X	X		

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

## SECTION 16: OTHER INFORMATION

Prepared By: Zuniga, A.

### Revision Notes:

REV	REVISION DESCRIPTION	BY	DATE CHK	REL. NO
D	Revised to updated characteristics and EU Reach	TP	09/08/20	190066
C	Update to new standard	AZ	10/24/14	140435
B	Remove aluminum oxide, add ceramic microspheres	CV	11/15/11	110327
A	Revision	MD	03/03/03	030127
-	Formal Release	ADG	09/21/00	000120D

### Abbreviations Key:

CAS: Chemical Abstracts Service

GHS: Globally Harmonized System

OSHA: Occupational Safety and Health Act

PEL: Permissible Exposure Limit

ACGIH: American Conference of Government Industrial Hygienists

TLV: Threshold Limit Values

NIOSH: National Institute for Occupational Safety and Health

REL: Recommended Exposure Limit

TWA: Time Weighted Average

STEL: Short-Term Exposure Limit

IDLH: Immediately Dangerous to Life or Health

### Additional Hazard Rating Systems:

NFPA	Health Hazard 1	Flammability 0	Instability 0	Physical and Chemical Hazards –
HMIS	Health Hazard 1	Flammability 0	Physical Hazard 0	Personal Protection X

**Disclaimer:** The information presented herein is believed to be accurate and was obtained from sources believed to be reliable. However, the information is provided without any representation or warranty, expressed or implied, with respect to its accuracy or completeness. It is the users' responsibility to determine the suitability of this product and the relevance of this information for their use.

### Hazard Determination Statement:

The hazardous characteristics of this product has been determined by the hazards identified in the materials used the produce this product.