MATERIAL SAFETY DATA SHEET DIAMOND GRAPHITE (DBC 5873) ABS

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone Emergency telephone number	:	Product Stewardship (770) 271-5902 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	DIAMOND GRAPHITE (DBC 5873) ABS
Product code	:	CC10092078
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Titanium dioxide	13463-67-7	5 - 10
Aluminum	7429-90-5	10 - 30

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole. Information provided on the health effects of this product is based on individual components. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure.

POTENTIAL HEALTH EFFECTS

Routes of Exposure:	: Inhalation, Ingestion, Skin contact				
Acute exposure					
Inhalation Ingestion Eyes	 Resin particles, like other inert materials, can be mechanically irritating. May be harmful if swallowed. Resin particles, like other inert materials, are mechanically irritating to 				
Skin	eyes. : Experience shows no unusual dermatitis hazard from routine handling.				
Chronic exposure	: Refer to Section 11 for Toxicological Information.				
Medical Conditions Aggravated by Exposure:	: None known.				

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Inhalation	:	Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. When symptoms persist or in all cases of doubt seek medical advice.			
Ingestion	:	Do not induce vomiting without medical advice. When symptoms persist or in all cases of doubt seek medical advice.			
Eyes	:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, seek medical attention.			
Skin	:	Wash off with soap and plenty of water. If skin irritation persists seek medical attention.			
		5. FIRE-FIGHTING MEASURES			
Flash point	:	Not applicable			
F 1					
Flammable Limits Upper explosion limit		Not applicable			
Lower explosion limit	:	Not applicable			
Autoignition temperature	:	Not applicable			
Suitable extinguishing media	:	Carbon dioxide blanket, water spray, dry powder, foamnone.			
Special Fire Fighting Procedures	:	Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.			
Unusual Fire/Explosion Hazards	:	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.			
	6. A	CCIDENTAL RELEASE MEASURES			
Personal precautions	:	Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls.			
Environmental precautions	:	Should not be released into the environment. The product should not be allowed to enter drains, water courses or the soil.			
Methods for cleaning up	:	Clean up promptly by sweeping or vacuum. Package all material in plastic, cardboard or metal containers for disposal. Refer to Section 13 of this MSDS for proper disposal methods.			
		7. HANDLING AND STORAGE			
Handling	:	Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation.			
Storage	:	Keep containers dry and tightly closed to avoid moisture absorption			

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	a	nd contamination. Keep in a d	lry, cool place.	
8. E	XPOSURE	CONTROLS / PERSONAL	PROTECTION	
Respiratory protection	: N	lo personal respiratory protecti	ve equipment normally r	equired.
Eye/Face Protection	: S	afety glasses with side-shields		
Hand protection	: P	Protective gloves.		
Skin and body protection	: L	ong sleeved clothing.		
Additional Protective Measures	: S	afety shoes.		
General Hygiene Considerations		Iandle in accordance with good Vash hands before breaks and a		afety practice
Engineering measures		leat only in areas with appropri ppropriate exhaust ventilation a		Provide
	<u></u>	E an and an	E	T to to
Exposure limit(s) Components	Value	Exposure time	Exposure type	List:
	10 mg/m3	Time Weighted Average (TWA):	Dust.	ACGIH
Components	10 mg/m3 15 mg/m3	Time Weighted Average (TWA): PEL:	Dust. Total dust. as Al	ACGIH OSHA Z1
Components	10 mg/m3	Time Weighted Average (TWA): PEL: PEL:	Dust.	ACGIH
Components	10 mg/m3 15 mg/m3	Time Weighted Average (TWA): PEL:	Dust. Total dust. as Al	ACGIH OSHA Z1
Components	10 mg/m3 15 mg/m3 5 mg/m3	Time Weighted Average (TWA): PEL: PEL: Time Weighted Average	Dust. Total dust. as Al Respirable dust. as Al	ACGIH OSHA Z1 OSHA Z1
Components Aluminum	10 mg/m3 15 mg/m3 5 mg/m3 10 mg/m3	Time Weighted Average (TWA): PEL: PEL: Time Weighted Average (TWA): Time Weighted Average	Dust. Total dust. as Al Respirable dust. as Al	ACGIH OSHA Z1 OSHA Z1 MX OEL
Components Aluminum	10 mg/m3 15 mg/m3 5 mg/m3 10 mg/m3 10 mg/m3	Time Weighted Average (TWA): PEL: PEL: Time Weighted Average (TWA): Time Weighted Average (TWA):	Dust. Total dust. as Al Respirable dust. as Al Dust.	ACGIH OSHA Z1 OSHA Z1 MX OEL ACGIH
Components Aluminum	10 mg/m3 15 mg/m3 5 mg/m3 10 mg/m3 10 mg/m3 15 mg/m3 20 mg/m3	Time Weighted Average (TWA): PEL: PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL: Short Term Exposure Limit	Dust. Total dust. as Al Respirable dust. as Al Dust. Total dust. as Ti	ACGIH OSHA Z1 OSHA Z1 MX OEL ACGIH OSHA Z1
Components Aluminum Titanium dioxide	10 mg/m3 15 mg/m3 5 mg/m3 10 mg/m3 10 mg/m3 15 mg/m3 20 mg/m3 9. PHYSIC	Time Weighted Average (TWA): PEL: PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL: Short Term Exposure Limit (STEL): CAL AND CHEMICAL PRO	Dust. Total dust. as Al Respirable dust. as Al Dust. Total dust. as Ti DPERTIES	ACGIH OSHA Z1 OSHA Z1 MX OEL ACGIH OSHA Z1 MX OEL
Components Aluminum Titanium dioxide	10 mg/m3 15 mg/m3 5 mg/m3 10 mg/m3 10 mg/m3 15 mg/m3 20 mg/m3 9. PHYSIC : Solid	Time Weighted Average (TWA): PEL: PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL: Short Term Exposure Limit (STEL): CAL AND CHEMICAL PRO	Dust. Total dust. as Al Respirable dust. as Al Dust. Total dust. as Ti DPERTIES ration rate : Not	ACGIH OSHA Z1 OSHA Z1 MX OEL ACGIH OSHA Z1 MX OEL
Components Aluminum Titanium dioxide Form Appearance	10 mg/m3 15 mg/m3 5 mg/m3 10 mg/m3 10 mg/m3 15 mg/m3 20 mg/m3 9. PHYSIC : Solic : Pelle	Time Weighted Average (TWA): PEL: PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL: Short Term Exposure Limit (STEL): CAL AND CHEMICAL PRO	Dust. Total dust. as Al Respirable dust. as Al Dust. Total dust. as Ti DPERTIES ration rate : Not ic Gravity: : Not	ACGIH OSHA Z1 OSHA Z1 MX OEL ACGIH OSHA Z1 MX OEL applicable determined
Components Aluminum Titanium dioxide	10 mg/m3 15 mg/m3 5 mg/m3 10 mg/m3 10 mg/m3 15 mg/m3 20 mg/m3 9. PHYSIC : Solic : Pelle : GRE	Time Weighted Average (TWA): PEL: PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL: Short Term Exposure Limit (STEL): CAL AND CHEMICAL PRO	Dust. Total dust. as Al Respirable dust. as Al Dust. Total dust. as Ti DPERTIES ration rate : Not ic Gravity: : Not lensity : Not	ACGIH OSHA Z1 OSHA Z1 MX OEL ACGIH OSHA Z1 MX OEL applicable determined established
Components Aluminum Titanium dioxide Form Appearance Color Ddor	10 mg/m3 15 mg/m3 5 mg/m3 10 mg/m3 10 mg/m3 15 mg/m3 20 mg/m3 9. PHYSIC : Solic : Pelle : GRE : Very	Time Weighted Average (TWA): PEL: PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL: Short Term Exposure Limit (STEL): CAL AND CHEMICAL PRO d Evapor Ets Specific EY Bulk d v faint Vapor	Dust. Total dust. as Al Respirable dust. as Al Dust. Total dust. as Ti DPERTIES ration rate : Not ic Gravity: : Not lensity : Not pressure : Not	ACGIH OSHA Z1 OSHA Z1 MX OEL ACGIH OSHA Z1 MX OEL applicable determined established applicable
Components Aluminum	10 mg/m3 15 mg/m3 5 mg/m3 10 mg/m3 10 mg/m3 15 mg/m3 20 mg/m3 9. PHYSIC : Solic : Pelle : GRE : Very : Not of	Time Weighted Average (TWA): PEL: PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL: Short Term Exposure Limit (STEL): CAL AND CHEMICAL PRO d Evapor Ets Specific EY Bulk d v faint Vapor	Dust. Total dust. as Al Respirable dust. as Al Dust. Total dust. as Ti DPERTIES ration rate : Not ic Gravity: : Not lensity : Not pressure : Not r density : Not	ACGIH OSHA Z1 OSHA Z1 MX OEL ACGIH OSHA Z1 MX OEL applicable determined established

10. STABILITY AND REACTIVITY

Stability

: Stable.

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Hazardous Polymerization	:	Will not occur.
Conditions to avoid	:	Keep away from oxidizing agents and open flame. To avoid thermal decomposition, do not overheat.
Incompatible Materials	:	Incompatible with strong acids and oxidizing agents.
Hazardous decomposition products	:	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.

11. TOXICOLOGICAL INFORMATION

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Toxicity Overview

This product contains the following components which in their pure form have the following characteristics:

CAS-No.	Chemical Name	Effect	Target Organ
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
7429-90-5	Aluminum	Irritant	Skin, Respiratory system.
		Systemic effects	Eyes, Skin, Respiratory system.

Carcinogenicity

This product contains the following components which, in their pure form, have the following carcinogenicity data:

CAS-No.	Chemical Name	OSHA	IARC	NTP
13463-67-7	Titanium dioxide	no	2B	no

IARC Carcinogen Classifications:

1 - The component is carcinogenic to humans.

2A - The component is probably carcinogenic to humans.

2B - The component is possibly carcinogenic to humans.

NTP Carcinogen Classifications:

1 - The component is known to be a human carcinogen.

2 - The component is reasonably anticipated to be a human carcinogen.

12. ECOLOGICAL INFORMATION

Persistence and degradability	:	Not readily biodegradable.
Environmental Toxicity	:	Chemicals are not readily available as they are bound within the polymer matrix.
Bioaccumulation Potential	:	Chemicals are not readily available as they are bound within the polymer matrix.



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: No data available
13. DISPOSAL CONSIDERATIONS
: Like most thermoplastic plastics the product can be recycled. Where possible recycling is preferred to disposal or incineration. The generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.
: Recycling is preferred when possible. The generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.
14. TRANSPORT INFORMATION
: Not regulated for transportation.
: Refer to specific regulation.
: Refer to specific regulation.
15. REGULATORY INFORMATION
: Classified as hazardous based on components.
: All components of this product are listed on or exempt from the TSCA Inventory.
s Substances (40 CFR 302)
: Not applicable
stremely Hazardous Substance
identified under this section, this product is Not Applicable under this regulat

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SARA Title III Section 313 Toxic Chemicals:

Chemical Name	lucilitieu ulluci	this section, this produ			
ALUMINUM (FUME OR		CAS-No. 7429-90-5		Weight % 10.00 - 30.00	
ALUMINUM (FUME OK	DUST)	1429-	90-3	10.00	- 30.00
Canadian Regulations:					
National Pollutant Rel	ease Inventory (
Chemical Name		CAS-No. 7429-90-5		<u>ght %</u>) - 30.00	NPRI ID# 12
Aluminum		7429-90-5	10.00) - 30.00	12
WHMIS Classificatio					
CAS-No. 7429-90-5 DSL		ponents of this product es List (DSL) or are ex		Canadian	Domestic
National Inventories:					
Australia AICS	: Listed				
China IECS	: Listed				
Europe EINECS	: Listed				
Japan ENCS	: Not deter	rmined			
Korea KECI	: Listed				
Philippines PICCS	: Listed				
			1		

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.