## MATERIAL SAFETY DATA SHEET

### DB3857 BLACK

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#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION 8155 Cobb Center Drive, Kennesaw, GA 30152

Telephone Emergency telephone number	:	Product Stewardship (770) 590-3500 x.3563 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	DB3857 BLACK
Product code	:	FO20010608
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

### 2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Antimony trioxide	1309-64-4	1 - 5
Calcium oxide	1305-78-8	1 - 5
Carbon black	1333-86-4	1 - 5
Magnesium carbonate	546-93-0	1 - 5
Misc00016- Bituminous Coal	Not Available	1 - 5
Calcium carbonate	1317-65-3	10 - 30

#### 3. HAZARDS IDENTIFICATION

#### **EMERGENCY OVERVIEW**

This mixture has not been evaluated as a whole for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants 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. See sections 8 and 11 for special precautions.

#### POTENTIAL HEALTH EFFECTS

Routes of Exposure:	: Inhalation, Skin contact, Ingestion
Acute exposure	
Inhalation	: Inhalation of airborne droplets may cause irritation of the respiratory tract.
Ingestion Eyes	<ul><li>May be harmful if swallowed.</li><li>May cause eye/skin irritation.</li></ul>
Skin	: Experience shows no unusual dermatitis hazard from routine handling.

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Medical Conditions	: None known.
Aggravated by Exposure:	
	4. FIRST AID MEASURES
Inhalation	: Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. When symptoms persist or in all cases o 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 for at least 15 minutes. If ey irritation persists, seek medical attention.
Skin	: Wash off with soap and plenty of water. If skin irritation persists see medical attention.
	5. FIRE-FIGHTING MEASURES
Flash point	: No data available
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media	<ul> <li>No data available</li> <li>No data available</li> <li>Not applicable</li> <li>Carbon dioxide blanket, water spray, dry powder, foam.</li> </ul>
Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	<ul> <li>Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.</li> <li>May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), oxide of nitrogen (NOx), other hazardous materials, and smoke are all possible.</li> </ul>
	6. ACCIDENTAL RELEASE MEASURES
Personal precautions	: Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls.
Environmental precautions	: The product should not be allowed to enter drains, water courses or th soil. Should not be released into the environment.
Methods for cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder universal binder, sawdust). Package all material in appropriate container for disposal. Refer to Section 13 of this MSDS for proper



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	disposal methods.	
	7. HANDLING AND STORAGE	-
Handling	: Heat only in areas with appropriate exhaust ventilation. Processing fume condensates may contain combustible or toxic residue. Periodically clean hoods, ducts, and other surfaces to minimize accumulation of these materials.	
Storage	: Keep containers dry and tightly closed to avoid moisture absorption and contamination. Store in a cool dry place.	
8. EXP	SURE CONTROLS / PERSONAL PROTECTION	
Respiratory protection	: No personal respiratory protective equipment normally required.	
Eye/Face Protection	: Safety glasses with side-shields.	
Hand protection	: Protective gloves.	
Skin and body protection	: Long sleeved clothing.	
Additional Protective Measures	: Safety shoes.	
General Hygiene Considerations	: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.	
Engineering measures	: Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery.	
Exposure limit(s)		

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Components	Value	Exposure time	Exposure type	List:
Antimony trioxide	0.5 mg/m3	PEL:	as Sb	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
Calcium carbonate	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
Calcium oxide	2 mg/m3	Time Weighted Average (TWA):	Dust.	ACGIH
	5 mg/m3	PEL:	Dust.	OSHA Z1
Carbon black	3.5 mg/m3	Time Weighted Average (TWA):	Total dust. as carbon black	ACGIH
	3.5 mg/m3	PEL:	Total dust. as carbon black	OSHA Z1
Magnesium carbonate	10 mg/m3	Time Weighted Average (TWA):	Dust.	ACGIH
	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
Misc00016- Bituminous Coal	2.4 mg/m3	PEL:	Respirable fraction.	Z3
	2.0 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH

### 9. PHYSICAL AND CHEMICAL PROPERTIES

- Form Appearance Color Odor Melting point/range Boiling Point: Water solubility
- liquid
  Viscous, liquid
  BLACK
  Very faint
  Not applicable
  Not applicable
  Immiscible

Evaporation rate Specific Gravity: Bulk density Vapor pressure Vapour density pH

- Not establishedNot determined
- : Not applicable
- : Not determined
- : Not determined
- : Not applicable

	10. STABILITY AND REACTIVITY
Stability	: Stable.
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., Avoid contact with acetal homopolymers and acetal copolymers during processing.
Hazardous decomposition products	<ul> <li>Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), hydrogen chloride (HCl), other hazardous materials, and smoke are all possible. Prolonged heating may result in product degradation. As a general rule of thumb, degradation begins to occur after one hour at 177 °C (350 °F), after 10 minutes at 204 °C (400 °F), and within 5 minutes at 232 °C (450 °F).</li> </ul>

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### **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
1309-64-4	Antimony trioxide	Systemic effects	Eyes, Respiratory system.
		sensitizer	Skin.
1305-78-8	Calcium oxide	Irritant	Skin.
		Systemic effects	Eyes, Skin, Respiratory system.
		Corrosive	Skin.
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
546-93-0	Magnesium carbonate	Irritant	Skin.
		Systemic effects	Eyes, Skin, Respiratory system.
Not Available	Misc00016- Bituminous Coal	Irritant	Eyes, Skin.
1317-65-3	Calcium carbonate	Irritant	Eyes, Skin.
		Systemic effects	Eyes, Skin, Respiratory system.

#### LC50 / LD50

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

CAS-No.	Chemical Name	Route	Value	Species
1309-64-4	Antimony trioxide	Oral LD50	> 34,600 mg/kg	rat
1333-86-4	Carbon black	Oral LD50	>15,400 mg/kg	rat
		Dermal LD50	> 3 gm/kg	rabbit

Carcinogenicity

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

CAS-No.	Chemical Name	OSHA	IARC	NTP
1309-64-4	Antimony trioxide	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.

#### Additional Health Hazard Information:

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Antimony trioxide 1309-64-4 Can cause eye irritation. Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Additional symptoms of skin contact may include: antimony measles (a red, pimply rash).

#### Additional Health Hazard Information:

Carbon black 1333-86-4 Carcinogenicity: Many inhalation toxicologists believe that the tumor response observed in the referenced rat studies is species specific and does not correlate to human exposure. However, the IARC evaluation in Monograph Volume 65, issued in April 1996 concluded that, "There is sufficient evidence in experimental animals for the carcinogenicity of carbon black". Based on this evaluation, along with their evaluation of inadequate evidence of carcinogenicity in humans, IARC's overall evaluation is that "Carbon Black is possibly carcinogenic to humans (Group 2B). The IARC 2B listing only pertains to airborne, unbound carbon black particles of respirable size. Carbon Black has not been listed as a carcinogen by the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA). The National Institute of Occupational Safety and Health (NIOSH) criteria document on carbon black recommends that only carbon black with PAH (polynuclear aromatic hydrocarbon) levels greater than 0.1% be considered suspect carcinogens.

Persistence and degradability	: Not readily biodegradable.
Environmental Toxicity	: Environmental toxicity has not been established for this mixture as a whole.
Bioaccumulation Potential	: No data available
Additional advice	: No data available
	13. DISPOSAL CONSIDERATIONS
Product	: 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.
Contaminated packaging	: Recycling is preferred when possible. The generator of waste materia has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.
	14. TRANSPORT INFORMATION
U.S. DOT Classification	: Refer to specific regulation.
ICAO/IATA (air)	: Refer to specific regulation.
IMO / IMDG (maritime)	: Refer to specific regulation.
	15. REGULATORY INFORMATION

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<text><text><text><text><text><text><text><text><text><text><text></text></text></text></text></text></text></text></text></text></text></text>	US Regulations:	
Inventory.         US. EPA CERCLA Hazardous Substances (40 CFR 302)         Not applicable         Chifornia Proposition       WARNING! This product contains a chemical known to the State of California to cause cancer., WARNING! This product contains a chemical known to the State of California to cause birth defects or the reproductive harm.         SARA Title III Section 302 Extremely Hazardous Substance Notapileable         SARA Title III Section 313 Toxic Chemicals <u>Antimony comprounds in a construction of the states of California to cause birth defects or the applicable         SARA Title III Section 313 Toxic Chemicals         <u>Chemical Name to Notable Controls in 1309-64-4 4.002</u> <u>Antimony comprounds in 1309-64-4 4.002</u> <u>DolycyCHLORINATED ALKANES (Clo TO Cl3) 61788-76-9 8.06</u>         State Regulations         <u>Muter Solution Regulations</u> <u>Muter Solution Regulati</u></u>	OSHA Status :	Classified as hazardous based on components.
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<ul> <li>62 California to cause cancer., WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.</li> <li>SARA Title III Section 302 Extremely Hazardous Substance Not applicable</li> <li>SARA Title III Section 313 Toxic Chemicals:</li> <li> <u><u>Manne</u> <u>CAS-No. Weight %</u> <u>ANTIMONY COMPOUNDS 1309-64-4 4.02</u> <u>POLYCHLORINATED ALKANES (C10 TO C13) 61788-76-9 8.06</u> </u></li> <li>Canadian Regulations:         <u>National Pollutant Release Inventory (NPRI)</u> <u><u>Manne</u> <u>CAS-No. Weight % NPRI ID#</u> <u>Antimony trioxide</u> 1309-64-4 4.02 17         <u>17</u> </u></li> <li>MHMIS Classification : D2A         <u>MHMIS Classification</u> : D2A         <u>D130-64-4 1.02 17         <u>1309-64-4 1.02 17         </u> <u>1309-64-4 1.02 17         </u> <u>1309-64-4 1.02 17         </u> <u>1309-64-4 1.02 17         </u> <u>Intimony trioxide</u> <u>Intimony trio</u></u></li></ul>	TT	
Not applicable         SARA Title III Section 313 Toxic Chemicals: <u>Antimony compounds</u> <u>1309-64.4</u> <u>4.02</u> <u>POLYCHLORINATED ALKANES (C10 TO C13)</u> <u>OLYCHLORINATED ALKANES (C10 TO C13)</u> <u>Canadian Regulations:</u> <u>National Pollutant Release Inventory (NPRI)</u> <u>Chemical Name</u> <u>CAS-No.</u> <u>Meight %</u> <u>Nutional Pollutant Release Inventory (NPRI)</u> <u>Chemical Name</u> <u>CAS-No.</u> <u>Mutions trioxide</u> <u>Mutions trioxide</u> <u>Mutions trioxide</u> <u>Mutions Ingredient Disclosure List</u> <u><u>Saga 6-4</u> <u>1309-64-4</u> <u>1305-78-8</u> <u>1333-86-4</u>         DSL           Mitanes List (DSL) or are exempt.   </u>	65	California to cause cancer., WARNING! This product contains a chemical known to the State of California to cause birth defects or
Chemical NameCAS-No.Weight % ALODANTIMONY COMPOUNDS1309-64-44.02POLYCHLORINATED ALKANES (CIO TO CI3)61788-76-98.06Statistical Regulations:National Pollutant Release Inventory (NPRI)Chemical NameCAS-No.Weight %Antimony trioxide1309-64-44.02Atimony trioxide1309-64-44.02MMIS ClassificationEQAMUMIS ClassificationEQAMission StatisticationEQAMutication StatisticationEQAMuticatisti		ly Hazardous Substance
ANTIMONY COMPOUNDS       1309-64-4       4.02         POLYCHLORINATED ALKANES (C10 TO C13)       61788-76-9       8.06         Canadian Regulations:       National Pollutant Release Inventory (NPRI)         Chemical Name       CAS-No.       Weight %       NPRI ID#         Antimony trioxide       1309-64-4       4.02       17         WHMIS Classification : D2A       WHMIS Ingredient Disclosure List         CAS-No.       1309-64-4       1305-78-8         1333-86-4       I       I         DSL       : All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.	SARA Title III Section 313 Toxic Cl	hemicals:
Canadian Regulations:         National Pollutant Release Inventory (NPRI)         Chemical Name       CAS-No.         Minimony trioxide       1309-64-4         HMIS Classification       : D2A         WHMIS Ingredient Disclosure List	ANTIMONY COMPOUNDS	S 1309-64-4 4.02
National Pollutant Release Inventory (NPRI)         Chemical Name       CAS-No.       Weight %       NPRI ID#         Antimony trioxide       1309-64-4       4.02       17         WHMIS Classification : D2A         WHMIS Ingredient Disclosure List         Image: state of the state of th		
Chemical Name       CAS-No.       Weight %       NPRI ID#         Antimony trioxide       1309-64-4       4.02       17         WHMIS Classification : D2A       WHMIS Ingredient Disclosure List       Image: CAS-No.       Image: CAS-No.         I309-64-4       1309-64-4       Image: Substances List (DSL) or are exempt.       Image: Substances List (DSL) or are exempt.	-	
Antimony trioxide       1309-64-4       4.02       17         WHMIS Classification : D2A         WHMIS Ingredient Disclosure List         CAS-No.         1309-64-4         1305-78-8         1333-86-4         DSL       : All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.		
CAS-No.         1309-64-4         1305-78-8         1333-86-4         DSL       : All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.	Antimony trioxide	
CAS-No.         1309-64-4         1305-78-8         1333-86-4         DSL       : All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.		
CAS-No.         1309-64-4         1305-78-8         1333-86-4         DSL       : All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.	WHMIS Classification :	D2A
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1309-64-4         1305-78-8         1333-86-4         DSL         :       All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.	WHMIS Ingredient Disclosur	e List
1305-78-8         1333-86-4         DSL       : All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.		
1333-86-4         DSL       : All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.		
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Australia AICS	:	Not determined
China IECS	:	Not determined
Europe EINECS	:	Listed
Japan ENCS	:	Not determined
Korea KECI	:	Not determined
Philippines PICCS	:	Not determined

### **16. OTHER INFORMATION**

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 when used in combination with any other materials and/or in any particular process or processing conditions.