

### MATERIAL SAFETY DATA SHEET

## IT51-017 BLACK 11

Version Number 1.4 Page 1 of 8
Revision Date 03/12/2014 Print Date 3/17/2014

#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION

33587 Walker Road, Avon Lake, OH 44012

Telephone : 1 (440) 930-1000 or 1 (866) POLYONE

Emergency telephone : CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure

number or accident).

Product name : IT51-017 BLACK 11

Product code : EM10001127 Chemical Name : Mixture CAS-No. : Mixture

Product Use : Industrial Applications

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Carbon black	1333-86-4	1 - 5
Antimony trioxide	1309-64-4	5 - 10
Talc	14807-96-6	5 - 10
Decabromodiphenyl oxide	1163-19-5	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 enduser (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 : Particulates, like other inert materials can be mechanically irritating.

Ingestion : May be harmful if swallowed.

Eyes : Particulates, like other inert materials can be mechanically irritating.

Skin : Experience shows no unusual dermatitis hazard from routine handling.



### MATERIAL SAFETY DATA SHEET

## IT51-017 BLACK 11

 Version Number 1.4
 Page 2 of 8

 Revision Date 03/12/2014
 Print Date 3/17/2014

**Chronic exposure** : Refer to Section 11 for Toxicological Information.

**Medical Conditions Aggravated by Exposure:** 

: None known.

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 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. FIREFIGHTING MEASURES

Flash point : not applicable

Flammable Limits

Upper explosion limit : not applicable Lower explosion limit : not applicable Auto-ignition temperature : not applicable

Suitable extinguishing media : Carbon dioxide blanket, Water spray, Dry powder, Foam.

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. ACCIDENTAL 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.

7. HANDLING AND STORAGE

Handling : Take measures to prevent the build up of electrostatic charge. Heat



## MATERIAL SAFETY DATA SHEET

## IT51-017 BLACK 11

 Version Number 1.4
 Page 3 of 8

 Revision Date 03/12/2014
 Print Date 3/17/2014

only in areas with appropriate exhaust ventilation.

Storage : Keep containers dry and tightly closed to avoid moisture absorption

and contamination. Keep in a dry, cool place.

### 8. EXPOSURE 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)



## MATERIAL SAFETY DATA SHEET

# IT51-017 BLACK 11

Version Number 1.4 Revision Date 03/12/2014 Page 4 of 8 Print Date 3/17/2014

Components Value Exposure time		Exposure type	List:	
Antimony trioxide	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	MX OEL
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
	0.5 mg/m3	Recommended exposure limit (REL):	as Sb	NIOSH
	0.5 mg/m3	PEL:	as Sb	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	OSHA Z1A
Carbon black	3.5 mg/m3	Recommended exposure limit (REL):		NIOSH
	0.1 mg/m3	Recommended exposure limit (REL):		NIOSH
	3.5 mg/m3	PEL:		OSHA Z1
	3.5 mg/m3	Time Weighted Average (TWA):		OSHA Z1A
	3.5 mg/m3	Time Weighted Average (TWA):		MX OEL
	7 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
	3 mg/m3	Time Weighted Average (TWA):	Inhalable fraction.	ACGIH
Talc	2 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
	2 mg/m3	Recommended exposure limit (REL):	Respirable.	NIOSH
	2 mg/m3	Time Weighted Average (TWA):	Respirable dust.	OSHA Z1A
	0.1 mg/m3	Time Weighted Average (TWA):	Respirable.	Z3
	0.3 mg/m3	Time Weighted Average (TWA):	Total dust.	Z3

## 9. PHYSICAL AND CHEMICAL PROPERTIES

: solid : Not applicable Form Evapouration rate : pellets, Slabs Specific Gravity Not determined Appearance Colour : BLACK Bulk density Not established : very faint Vapour pressure not applicable Odour Melting point/range : Not determined Vapour density not applicable **Boiling Point:** : not applicable : not applicable pН

Water solubility : insoluble

### 10. STABILITY AND REACTIVITY

Stability : The product is stable if stored and handled as prescribed.

Hazardous Polymerization : Will not occur.



### MATERIAL SAFETY DATA SHEET

## IT51-017 BLACK 11

Version Number 1.4 Page 5 of 8
Revision Date 03/12/2014 Print Date 3/17/2014

Conditions to avoid : To avoid thermal decomposition, do not overheat.

Incompatible Materials : Strong acids, oxidizing and reducing agents

Hazardous decomposition : Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen

products (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
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
1309-64-4	Antimony trioxide	Systemic effects	Eyes, Respiratory system.
		sensitizer	Skin.
14807-96-6	Talc	Systemic effects	Eyes, Respiratory system, Skin.
1163-19-5	Decabromodiphenyl oxide	Systemic effects	Liver, Kidney.

### 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
1333-86-4	Carbon black	Oral LD50	> 15,400 mg/kg	rat
		Dermal LD50	> 3 gm/kg	rabbit
1309-64-4	Antimony trioxide	Oral LD50	> 34,600 mg/kg	rat
1163-19-5	Decabromodiphenyl oxide	Oral LD50	> 5 gm/kg	rat

### 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
14807-96-6	Talc	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.



### MATERIAL SAFETY DATA SHEET

## IT51-017 BLACK 11

 Version Number 1.4
 Page 6 of 8

 Revision Date 03/12/2014
 Print Date 3/17/2014

### **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.

#### Additional Health Hazard Information:

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:**

Decabromodiphenyl oxide 1163-19-5 A halogenated aromatic with some potential for hazardous exposure via inhalation or ingestion. Acute toxicity is low - oral LD50 in rats >50 mg/L. Studies on rats at high feeding levels indicate some potential for liver and kidney effects from chronic overexposure as well as thyroid toxicity.

	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.

Additional advice : not applicable

### 13. DISPOSAL CONSIDERATIONS

Product : 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.

Contaminated packaging : 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



### MATERIAL SAFETY DATA SHEET

## IT51-017 BLACK 11

 Version Number 1.4
 Page 7 of 8

 Revision Date 03/12/2014
 Print Date 3/17/2014

U.S. DOT Classification : Not regulated for transportation.

ICAO/IATA : Refer to specific regulation.

IMO/IMDG (maritime) : Refer to specific regulation.

### 15. REGULATORY INFORMATION

US Regulations:

OSHA Status : Classified as hazardous based on components.

TSCA Status : All components of this product are listed on or exempt from the

TSCA Inventory.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

California Proposition : WARNING! This product contains a chemical known to the State of

California to cause cancer.

SARA Title III Section 302 Extremely Hazardous Substance

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

SARA Title III Section 313 Toxic Chemicals:

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

Chemical Name	CAS-No.	Weight percent
ANTIMONY COMPOUNDS	1309-64-4	5.00 - 10.00
DECABROMODIPHENYL	1163-19-5	10.00 - 30.00
OXIDEDECABROMODIPHENYL OXIDE		

### Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight	NPRI ID#
		percent	
Antimony trioxide	1309-64-4	5.00 - 10.00	
Decabromodiphenyl oxide	1163-19-5	10.00 - 30.00	



### MATERIAL SAFETY DATA SHEET

## IT51-017 BLACK 11

 Version Number 1.4
 Page 8 of 8

 Revision Date 03/12/2014
 Print Date 3/17/2014

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No. 1309-64-4 1333-86-4

DSL : All of the components of this product are listed on the Canadian

Inventories or are exempt. However, at least one component of this product is on the Canadian Non-Domestic Substances List (NDSL).

Quantity use in Canada is restricted by regulations.

National Inventories:

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 used in combination with any other materials or in any process, unless specified in the text.