

MATERIAL SAFETY DATA SHEET

FC-463

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 Revision Date 07/22/2002
 Print Date 11/5/2011

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION

33587 Walker Road, Avon Lake, OH 44012

NON-EMERGENCY : Product Stewardship (440)-930-1395

TELEPHONE

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

number or accident).

Product name : FC-463
Product code : EM09570170
Chemical Name : Mixture
CAS-No. : Mixture

Product Use : Industrial Applications

2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Components	CAS-No.	Weight %
Decabromodiphenyl oxide	1163-19-5	10 - 30
Magnesium oxide	1309-48-4	1 - 5
Zinc oxide	1314-13-2	1 - 5
Antimony trioxide	1309-64-4	5 - 10

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole. 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, Eyes, Skin contact

Acute exposure

Inhalation : Resin particles, like other inert materials, can be mechanically irritating.

Ingestion : May be harmful if swallowed.

Eyes : Resin particles, like other inert materials, are mechanically irritating to

eyes.

Skin : Avoid skin contact. Product contains unreacted organic peroxides

which may cause mild skin irritation.

Chronic exposure : Refer to Section 11 for Toxicological Information.



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Medical Conditions Aggravated by Exposure: : Individuals with chronic respiratory disorders (i.e. asthma, chronic bronchitis, etc.) may be adversely affected by any airborne contaminant.

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. FIRE-FIGHTING MEASURES

Flash point : Not applicable

Flammable Limits

Upper explosion limit : Not applicable Lower explosion limit : Not applicable Autoignition temperature : Not relevant

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

: None

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. 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

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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. Avoid direct heat,

sunlight, UV, or ionizing radiation.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory protection : Under normal handling conditions a respirator may not be 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. E-Beam or

UV curable products may give off trace amounts of free radicals. Under normal use, these free radicals have low volatility and are consumed within the reaction. Unreacted free radicals would typically be found at undetectably low levels. Nonetheless, user should take necessary precautions such as providing adequate ventilation to protect

employees from exposure.

Exposure limit(s)

Components	Value	Exposure time	Exposure type	List:
Antimony trioxide	0.5 mg/m3	PEL:	as Sb	OSHA Z1
Magnesium oxide	10 mg/m3	Time Weighted Average		ACGIH
		(TWA):		
Magnesium oxide	15 mg/m3	PEL:	Total particulate.	OSHA Z1
Zinc oxide	10 mg/m3	Time Weighted Average Total dust. as Zn		ACGIH
		(TWA):		
	5 mg/m3	PEL:	Respirable dust. as Zn	OSHA Z1
	15 mg/m3	PEL:	Total dust. as Zn	OSHA Z1

9. PHYSICAL AND CHEMICAL PROPERTIES

Evaporation rate Not applicable. Form : Solid Not determined Appearance : Pellets Specific Gravity : NO PIGMENT : Not established Color Bulk density Odor : characteristic Vapor pressure : Not applicable Melting point/range Vapor density : Not applicable : Not determined



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Boiling Point: : Not applicable pH : Not applicable

Water solubility : Insoluble

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 : strong acids oxidizing agents 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	
1163-19-5	Decabromodiphenyl oxide	Systemic effects	Liver, Kidney.	
1309-48-4	Magnesium oxide	Systemic effects	Eyes, Respiratory system.	
1314-13-2	Zinc oxide	Systemic effects	Respiratory system.	
1309-64-4	Antimony trioxide	Systemic effects	Eyes, Respiratory system.	
		sensitizer	Skin.	

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
1163-19-5	Decabromodiphenyl oxide	Oral LD50	> 5 gm/kg	rat
1314-13-2	Zinc oxide	LC50	2500 mg/m3	mouse
		Oral LD50	7,950 mg/kg	mouse
1309-64-4	Antimony trioxide	Oral LD50	> 34,600 mg/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

IARC Carcinogen Classifications:

1 - The component is carcinogenic to humans.



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- 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:

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. Animal studies at high feeding levels indicate some potential for liver effects form chronic overexposure.

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).

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Persistence and degradability : Not readily biodegradable.

Environmental Toxicity : Chemicals are not readily available as they are bound within the matrix

of the polymer.

Bioaccumulation Potential : Chemicals are not readily available as they are bound within the matrix

of the polymer.

Additional advice : Not applicable

13. DISPOSAL CONSIDERATIONS

Product : Like most thermoplastics 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

U.S. DOT / CA TDG

Classification

Not regulated for transportation.

ICAO/IATA : Not regulated for transportation.

IMO / IMDG : Not regulated for transportation.



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15. REGULATORY INFORMATION

US Regulations:

OSHA Status : Classified as hazardous based on components.

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

exempt.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Chemical Name	CAS-No.	% in Product	RQ for component	RQ for
				Mixture/Product
Antimony trioxide	1309-64-4	8.69	1,000 lbs	11,497 LB

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

California to cause cancer.

SARA Title III Section 313 Toxic Chemicals:

Chemical Name	CAS-No.	Weight %
ANTIMONY COMPOUNDS	1309-64-4	08.69
DECABROMODIPHENYL OXIDE	1163-19-5	25.50
ZINC COMPOUNDS	1314-13-2	02.40
ZINC COMPOUNDS	557-05-1	00.14

Canadian Regulations:

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.
1309-64-4
1309-48-4
1314-13-2

DSL : Listed.

National Inventories:

Australia AICS : Not determined.



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China IECS : Listed.

Europe EINECS : Not determined.

Japan ENCS : Not determined.

Korea KECI : Not determined.

Philippines PICCS : Listed.

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.