MATERIAL SAFETY DATA SHEET V0022G-4 BLACK

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone Emergency telephone	:	Product Stewardship (440) 930-1395 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	V0022G-4 BLACK
Product code	:	EM10009566
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Benzenepropanoic acid, 3,5-bis(1,1-	32687-78-8	1 - 5
dimethylethyl)-4-hydroxy-,2-[3-[3,5-bis(1,1-		
dimethylethyl)-4-hydroxyphenyl]-1-		
oxopropyl]hydrazide		
Silica, amorphous, diatomaceous earth	68855-54-9	0.1 - 1
Carbon black	1333-86-4	1 - 5
Antimony trioxide	1309-64-4	10 - 30
Decabromodiphenyl oxide	1163-19-5	30 - 60

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 Skin	 Particulates, like other inert materials can be mechanically irritating. May be harmful if swallowed. Particulates, like other inert materials can be mechanically irritating. Experience shows no unusual dermatitis hazard from routine handling.

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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. FIRE-FIGHTING MEASURES
Flash point	:	Not applicable
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media	: : :	Not applicable Not applicable Not applicable Carbon dioxide blanket, Water spray, Dry powder, Foam.
Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	:	Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. 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.

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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 and contamination. Keep in a dry, cool place.
8. EX	POSU	RE 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.

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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	Time Weighted Average (TWA):		ACGIH
	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
Silica, amorphous, diatomaceous earth	0.8 mg/m3	Time Weighted Average (TWA):		Z3
	10 mg/m3	Time Weighted Average (TWA):	Inhalable particulate.	MX OEL
	3 mg/m3	Time Weighted Average (TWA):	Respirable dust.	MX OEL

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Color Odour Melting point/range Boiling Point: Water solubility

Solid pellets, Slabs BLACK Very faint Not determined Not applicable Insoluble

Evaporation rate Specific Gravity Bulk density Vapour pressure Vapour density pH

Not applicable
Not determined
Not established
Not applicable
Not applicable
Not applicable

10. STABILITY AND REACTIVITY

Stability	:	Stable.

Hazardous Polymerization : Will not occur.

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

Incompatible Materials

: Strong acids, oxidizing and reducing agents

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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
32687-78-8	Benzenepropanoic acid, 3,5-bis(1,1- dimethylethyl)-4-hydroxy- ,2-[3-[3,5-bis(1,1- dimethylethyl)-4- hydroxyphenyl]-1- oxopropyl]hydrazide	Chronic effects	Liver.
68855-54-9	Silica, amorphous, diatomaceous earth	Irritant	Eyes, Skin, Respiratory system.
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
1309-64-4	Antimony trioxide	Systemic effects	Eyes, Respiratory system.
		sensitizer	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
32687-78-8	Benzenepropanoic acid, 3,5-bis(1,1- dimethylethyl)-4-hydroxy- ,2-[3-[3,5-bis(1,1- dimethylethyl)-4- hydroxyphenyl]-1- oxopropyl]hydrazide	Oral LD50	> 7,000 mg/kg	rat
1333-86-4	Carbon black	Oral LD50 Dermal LD50	> 15,400 mg/kg > 3 gm/kg	rat 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
1333-86-4	Carbon black	no	2B	no
1309-64-4	Antimony trioxide	no	2B	no

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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:

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.

12. ECOLOGICAL INFORMATION
: Not readily biodegradable.
: Chemicals are not readily available as they are bound within the polymer matrix.
: Chemicals are not readily available as they are bound within the polymer matrix.
: Not applicable
13. DISPOSAL CONSIDERATIONS
: Like most thermoplastic plastics the product can be recycled. Where possible recycling is preferred to disposal or incineration. The

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		classi	fication, transportation an	the responsibility for proper waste d disposal in accordance with cial and local regulations.
Contar	ninated packaging	mater transp	ial has the responsibility	ossible. The generator of waste for proper waste classification, accordance with applicable federal, ations.
		14. TR	ANSPORT INFORMAT	ION
U.S. D	OT Classification	: Not re	egulated for transportation	1.
ICAO/	/IATA (air)	: Refer	to specific regulation.	
IMO /	IMDG (maritime)	: Refer	to specific regulation.	
<u> </u>		15 DEC		TION
		15. REG	ULATORY INFORMA	TION
US Re	gulations:			
	OSHA Status	: Class	ified as hazardous based of	on components.
	TSCA Status			t are listed on or exempt from the
		TSCA	A Inventory.	
US. EI	PA CERCLA Hazar	dous Substances	(40 CFR 302)	
	Chemical Name	CAS-No.	RQ for component	RQ for
-	Arsenic	7440-38-2	001 lbs	Mixture/Product 2,049 LB
L				
	California Dronosi	tion . WAD	NINCL This product con	toing a chamical known to the State of
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Chemical Name	CAS-No.	Weight %
DECABROMODIPHENYL OXIDE	1163-19-5	30.00 - 60.00

Canadian Regulations:

National Pollutant Release Inventory (NPRI))
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Chemical Name	CAS-No.	Weight %	NPRI ID#
Antimony trioxide	1309-64-4	10.00 - 30.00	
Decabromodiphenyl oxide	1163-19-5	30.00 - 60.00	

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

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

DSL

All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.

National Inventories:

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ot determined

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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.