

POLYONE CORPORATION**MATERIAL SAFETY DATA SHEET****GRAY RPVC**Version Number 1.1
Revision Date 09/20/2012Page 1 of 9
Print Date 9/20/2012**1. PRODUCT AND COMPANY IDENTIFICATION****POLYONE CORPORATION**
33587 Walker Road, Avon Lake, OH 44012Telephone : 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 : GRAY RPVC
Product code : CC10169291
Chemical Name : Mixture
CAS-No. : Mixture
Product Use : Industrial Applications**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Components	CAS-No.	Weight percent
1,6-Hexanediamine, N,N'-bis(2,2,6,6-tetramethyl-4-piperidiny)-,polymer with 2,4,6-trichloro-1,3,5-triazine, reaction products	70624-18-9	1 - 5
8-Oxa-3,5-dithia-4-stannatetradecanoic acid, 10-ethyl-4,4-dimethyl-7-oxo-, 2-ethylhexyl ester	57583-35-4	1 - 5
Stannane, methyltris(2-ethylhexyloxycarbonylmethylthio)-	57583-34-3	1 - 5
Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylpropyl)-	25973-55-1	5 - 10
Aluminum	7429-90-5	1 - 5
Carbon black	1333-86-4	1 - 5
Titanium dioxide	13463-67-7	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

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

GRAY RPVC

Version Number 1.1
Revision Date 09/20/2012

Page 2 of 9
Print Date 9/20/2012

Routes of Exposure: : Inhalation, Ingestion, Skin contact

Acute exposure

- Inhalation : Particulates, like other inert materials can be mechanically irritating. Excessive inhalation of product vapors, especially during heating or processing, may be irritating to respiratory system.
- 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.

Chronic exposure : Refer to Section 11 for Toxicological Information.

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 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 (NO_x), other hazardous materials, and smoke are all possible. May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions.

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

GRAY RPVC

Version Number 1.1
Revision Date 09/20/2012

Page 3 of 9
Print Date 9/20/2012

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 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)

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

GRAY RPVC

Version Number 1.1

Revision Date 09/20/2012

Page 4 of 9

Print Date 9/20/2012

Components	Value	Exposure time	Exposure type	List:	
Aluminum	1 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH	
	10 mg/m3	Recommended exposure limit (REL):	Total	NIOSH	
	5 mg/m3	Recommended exposure limit (REL):	Respirable.	NIOSH	
	5 mg/m3	Recommended exposure limit (REL):	Welding fume or pyrophoric powder. as Al	NIOSH	
	15 mg/m3	PEL:	Total dust. as Al	OSHA Z1	
	5 mg/m3	PEL:	Respirable dust. as Al	OSHA Z1	
	15 mg/m3	Time Weighted Average (TWA):	Total dust. as Al	OSHA Z1A	
	5 mg/m3	Time Weighted Average (TWA):	Respirable dust. as Al	OSHA Z1A	
	5 mg/m3	Time Weighted Average (TWA):	Pyrophoric powder. as Al	OSHA Z1A	
	5 mg/m3	Time Weighted Average (TWA):	Fume. as Al	OSHA Z1A	
	5 mg/m3	Time Weighted Average (TWA):	Welding fume.	MX OEL	
	10 mg/m3	Time Weighted Average (TWA):	Dust.	MX OEL	
	5 mg/m3	Time Weighted Average (TWA):	Pyrophoric powder.	MX OEL	
	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	
Titanium dioxide	10 mg/m3	Time Weighted Average (TWA):		ACGIH	
	15 mg/m3	PEL:	Total dust.	OSHA Z1	
	10 mg/m3	Time Weighted Average (TWA):	Total dust.	OSHA Z1A	
	10 mg/m3	Time Weighted Average (TWA):	as Ti	MX OEL	
	20 mg/m3	Short Term Exposure Limit (STEL):	as Ti	MX OEL	

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

GRAY RPVC

Version Number 1.1
Revision Date 09/20/2012

Page 5 of 9
Print Date 9/20/2012

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: solid	Evaporation rate	: Not applicable
Appearance	: pellets	Specific Gravity	: Not determined
Colour	: GREY	Bulk density	: Not established
Odour	: very faint	Vapour pressure	: not applicable
Melting point/range	: Not determined	Vapour density	: not applicable
Boiling Point:	: not applicable	pH	: not applicable
Water solubility	: insoluble		

10. STABILITY AND REACTIVITY

Stability	: The product is stable if stored and handled as prescribed.
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	: Avoid contact with strong oxidizers. Also, avoid contact with acetal or acetal copolymers and with amine containing materials during processing. At processing conditions, these materials are mutually destructive and involve rapid degradation. Thoroughly purge and mechanically clean processing equipment to avoid even trace quantities of these materials from coming in contact with each other. Prevent cross contamination of feedstocks.
Hazardous decomposition products	: Carbon dioxide (CO ₂), carbon monoxide (CO), oxides of nitrogen (NO _x), hydrogen chloride (HCl), other hazardous materials, and smoke are all possible. Prolonged heating (approximately 30 minutes or more) above 392 °F (200 °C) or short term heating at 482 °F (250 °C) may result in product decomposition and evolution of carbon monoxide and hydrogen chloride.

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
70624-18-9	1,6-Hexanediamine, N,N'-bis(2,2,6,6-tetramethyl-4-piperidiny)-,polymer with 2,4,6-trichloro-1,3,5-triazine, reaction products	Irritant	Eyes, Skin, Respiratory system.

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

GRAY RPVC

Version Number 1.1

Revision Date 09/20/2012

Page 6 of 9

Print Date 9/20/2012

57583-35-4	8-Oxa-3,5-dithia-4-stannatetradecanoic acid, 10-ethyl-4,4-dimethyl-7-oxo-, 2-ethylhexyl ester	Irritant	Eyes, Skin.
57583-34-3	Stannane, methyltris(2-ethylhexyloxycarbonylmethylthio)-	Irritant	Eyes, Skin.
25973-55-1	Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylpropyl)-	Systemic effects	Kidney, Liver, reproductive system.
7429-90-5	Aluminum	Irritant	Skin, Respiratory system.
		Systemic effects	Eyes, Skin, Respiratory system.
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
13463-67-7	Titanium dioxide	Systemic effects	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
70624-18-9	1,6-Hexanediamine, N,N'-bis(2,2,6,6-tetramethyl-4-piperidiny)-,polymer with 2,4,6-trichloro-1,3,5-triazine, reaction products	Oral LD50 Dermal LD50	> 2,000 mg/kg > 3,000 mg/kg	rat rat
57583-34-3	Stannane, methyltris(2-ethylhexyloxycarbonylmethylthio)-	Oral LD50	920 mg/kg	rat
1333-86-4	Carbon black	Oral LD50 Dermal LD50	> 15,400 mg/kg > 3 gm/kg	rat 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
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.

Additional Health Hazard Information:

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

GRAY RPVC

Version Number 1.1
Revision Date 09/20/2012

Page 7 of 9
Print Date 9/20/2012

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.

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.

Additional advice : no data available

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

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.



POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

GRAY RPVC

Version Number 1.1
Revision Date 09/20/2012

Page 8 of 9
Print Date 9/20/2012

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 65 : Not applicable

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
ALUMINUM (FUME OR DUST)ALUMINUM (FUME OR DUST)	7429-90-5	1.00 - 5.00

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight percent	NPRI ID#
Aluminum	7429-90-5	1.00 - 5.00	
Aluminum oxide	1344-28-1	0.10 - 1.00	
Phthalocyanine green	1328-53-6	0.10 - 1.00	

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.
7429-90-5
1333-86-4
57583-34-3

DSL : All of the components of this product are listed on the Canadian Inventories or are exempt. However, at least one component of this

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

GRAY RPVC

Version Number 1.1
Revision Date 09/20/2012

Page 9 of 9
Print Date 9/20/2012

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 : Not determined
- 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.