

POLYONE CORPORATION**MATERIAL SAFETY DATA SHEET****Geon™ V1811 Natural Antimicrobial PVC**Version Number 1.0
Revision Date 11/13/2013Page 1 of 6
Print Date 11/13/2013**1. PRODUCT AND COMPANY IDENTIFICATION****POLYONE CORPORATION**
8155 Cobb Center Drive, Kennesaw, GA 30152

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 : Geon™ V1811 Natural Antimicrobial PVC
Product code : FO20032312
Chemical Name : Mixture
CAS-No. : Mixture
Product Use : Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Zinc pyrithione	13463-41-7	1 - 5

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 : Resin particles, 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.

Chronic exposure : Refer to Section 11 for Toxicological Information.

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

Geon™ V1811 Natural Antimicrobial PVC

Version Number 1.0
Revision Date 11/13/2013

Page 2 of 6
Print Date 11/13/2013

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 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 : May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions. Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), 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

POLYONE CORPORATION**MATERIAL SAFETY DATA SHEET****Geon™ V1811 Natural Antimicrobial PVC**Version Number 1.0
Revision Date 11/13/2013Page 3 of 6
Print Date 11/13/2013

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. Keep in a dry, cool place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory protection : No personal respiratory protective equipment normally required. If dusty conditions occur wear appropriate respiratory protection.

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)

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: solid	Evaporation rate	: Not applicable
Appearance	: powder, granular	Specific Gravity	: Not determined
Colour	: NO PIGMENT	Bulk density	: Not determined
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 : To avoid thermal decomposition, do not overheat. Keep away from oxidizing agents and open flame.

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

Geon™ V1811 Natural Antimicrobial PVC

Version Number 1.0
Revision Date 11/13/2013

Page 4 of 6
Print Date 11/13/2013

- Incompatible Materials : Incompatible with strong acids and oxidizing agents., Avoid contact with acetal homopolymers and acetal copolymers during processing.
- Hazardous decomposition products : Carbon dioxide (CO₂), 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
13463-41-7	Zinc pyrithione	Highly Toxic	Refer to LC50 / LD50 Data on MSDS..

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
13463-41-7	Zinc pyrithione	LC50		rat
		Oral LD50	269 mg/kg	rat
		Dermal LD50	> 2,000 mg/kg	rabbit

12. ECOLOGICAL INFORMATION

- Persistence and degradability : Not readily biodegradable.
- Environmental Toxicity : Adverse ecological impact is not known or expected under normal use.
- 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

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

Geon™ V1811 Natural Antimicrobial PVC

Version Number 1.0
Revision Date 11/13/2013

Page 5 of 6
Print Date 11/13/2013

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 : Not regulated for transportation.
IMO/IMDG (maritime) : Not regulated for transportation.

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 : Not applicable
65

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
ZINC COMPOUNDS	13463-41-7	1.00 - 5.00
ZINC COMPOUNDS	0-05-5	0.10 - 1.00
THIABENDAZOLE [2-(4-THIAZOLYL)-1H-BENZIMIDAZOLE]THIABENDAZOLE [2-(4-THIAZOLYL)-1H-BENZIMIDAZOLE]	148-79-8	1.00 - 5.00

Canadian Regulations:

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

Geon™ V1811 Natural Antimicrobial PVC

Version Number 1.0
Revision Date 11/13/2013

Page 6 of 6
Print Date 11/13/2013

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight percent	NPRI ID#
Zinc pyrithione	13463-41-7	1.00 - 5.00	
Miscellaneous Zinc Compounds	0-05-5	0.10 - 1.00	241

WHMIS Classification : D1A

WHMIS Ingredient Disclosure List

CAS-No.
13463-41-7

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 : 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.