### MATERIAL SAFETY DATA SHEET Geon™ DB5030 Neutral F-41 Non-Phthalate

### Version Number 1.0 Revision Date 02/19/2014

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### 1. PRODUCT AND COMPANY IDENTIFICATION

### POLYONE CORPORATION 8155 Cobb Center Drive, Kennesaw, GA 30152

Telephone Emergency telephone number	:	1 (440) 930-1000 or 1 (866) POLYONE CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	Geon <sup>™</sup> DB5030 Neutral F-41 Non-Phthalate
Product code	:	FO20032630
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Zinc borate	1332-07-6	5 - 10
Antimony trioxide	1309-64-4	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

<b>Routes of Exposure:</b>	: Inhalation, Skin contact, Ingestion
Acute exposure	
Inhalation	: Inhalation of airborne droplets may cause irritation of the respiratory tract.
Ingestion	: May be harmful if swallowed.
Eyes	: May cause eye and skin irritation.
Skin	: Experience shows no unusual dermatitis hazard from routine handling.
Chronic exposure	: Refer to Section 11 for Toxicological Information.



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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 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	: no data available
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	<ul> <li>no data available</li> <li>no data available</li> <li>Not applicable</li> <li>Carbon dioxide blanket, Water spray, Dry powder, Foam.</li> <li>Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.</li> <li>May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.</li> </ul>
	6. ACCIDENTAL RELEASE MEASURES
Personal precautions	: Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls.
Environmental precautions	: The product should not be allowed to enter drains, water courses or the soil. Should not be released into the environment.
Methods for cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Package all material in appropriate container for disposal.
	7. HANDLING AND STORAGE





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Handling	Heat 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. Store in a cool dry place.
8. EXPOS	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.
Exposure limit(s)	

Components	Value	Exposure time Exposure type		List:
Antimony trioxide	0.5 mg/m3	Time Weighted Average	as Sb	MX OEL
	0.5 mg/m3	(TWA): Time Weighted Average (TWA):	as Sb	ACGIH
	0.5 mg/m3 Recommended expo limit (REL):		as Sb	NIOSH
0.5 mg/m3 P		PEL:	as Sb	OSHA Z1
e		Time Weighted Average (TWA):	as Sb	OSHA Z1A

### 9. PHYSICAL AND CHEMICAL PROPERTIES

- Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility
- : liquid
  : viscous, liquid
  : NO PIGMENT
  : very faint
  : not applicable
  : not applicable
  : immiscible
- Evapouration rate Specific Gravity Bulk density Vapour pressure Vapour density pH
- Not established
  Not determined
  Not applicable
  Not determined
  Not determined
  Not applicable



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	10	O. 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	:	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 (NOx), hydrogen chloride (HCl), other hazardous materials, and smoke are all possible. Prolonged heating may result in product degradation. As a general rule of thumb, degradation begins to occur after one hour at 177 °C (350 °F), after 10 minutes at 204 °C (400 °F), and within 5 minutes at 232 °C (450 °F).

#### **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
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
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.

2A - The component is probably carcinogenic to humans.

2B - The component is possibly carcinogenic to humans.

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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:

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).

Environmental Toxicity       : Environmental toxicity has not been established for this mixture as a whole.         Bioaccumulation Potential       : no data available         Additional advice       : no data available <b>13. DISPOSAL CONSIDERATIONS</b> 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 material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.         Local Environmental Data available       : 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.         U.S. DOT Classification       : Refer to specific regulation.		12. ECOLOGICAL INFORMATION
whole.       whole.         Bioaccumulation Potential       : no data available         Additional advice       : no data available         Image: Product       Image: Imag	Persistence and degradability	: Not readily biodegradable.
Additional advice       : no data available         IIII 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 material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.         Lotter       14. TRANSPORT INFORMATION         U.S. DOT Classification       : Refer to specific regulation.         ICAO/IATA       : Refer to specific regulation.         IMO/IMDG (maritime)       : Refer to specific regulation.         US Regulations:       : Classified as hazardous based on components.         OSHA Status       : Classified as hazardous based on components.         TSCA Status       : All components of this product are listed on or exempt from the TSCA Inventory.	Environmental Toxicity	•
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TSCA Inventory.	OSHA Status	: Classified as hazardous based on components.
US. EPA CERCLA Hazardous Substances (40 CFR 302)	TSCA Status	
	US. EPA CERCLA Hazardous	Substances (40 CFR 302)

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not applicable

California Proposition:WARNING! This product contains a chemical known to the State of<br/>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	1.00 - 5.00
ZINC COMPOUNDSZINC COMPOUNDS	1332-07-6	5.00 - 10.00
ZINC COMPOUNDS	1314-13-2	0.10 - 1.00
ZINC COMPOUNDS	136-53-8	0.10 - 1.00
ZINC COMPOUNDS	7779-90-0	0.10 - 1.00

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight	NPRI ID#
		percent	
Antimony trioxide	1309-64-4	1.00 - 5.00	
Zinc borate	1332-07-6	5.00 - 10.00	
Zinc oxide	1314-13-2	0.10 - 1.00	
2-Ethylhexanoic acid zinc salt	136-53-8	0.10 - 1.00	
Phosphoric acid, zinc salt (2:3)	7779-90-0	0.10 - 1.00	

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

:

CAS-No.	
1309-64-4	

DSL

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

National Inventories:

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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.