

MATERIAL SAFETY DATA SHEET

RT5190 NATURAL - DNU

Version Number 1.0
Revision Date 10/28/2002

Page 1 of 7
Print Date 11/6/2011

1. PRODUCT AND COMPANY IDENTIFICATION
--

POLYONE CORPORATION
33587 Walker Road, Avon Lake, OH 44012

NON-EMERGENCY TELEPHONE : Product Stewardship (440)-930-1395
Emergency telephone number : **CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).**

Product name : RT5190 NATURAL - DNU
 Product code : J519000A0000
 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
Antimony trioxide	1309-64-4	5 - 10

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. See Sections 3 and 11 for additional details. This product may contain residual vinyl chloride monomer (VCM) (CAS number 75-01-4) below 8.5 ppm (0.00085%). OSHA considers VCM a suspect carcinogen and regulates it under 29 CFR 1910.1017. It is unlikely, under normal working conditions with adequate ventilation, that the OSHA action level and the OSHA exposure limits will be exceeded for residual VCM. However, the user should take the necessary precautions (e.g. mechanical ventilation, local exhaust ventilation, air-monitoring, respiratory protection, etc.) to ensure airborne levels of any vapors including VCM or dusts that may be released during heating or processing are below regulated levels.

POTENTIAL HEALTH EFFECTS

Routes of Exposure: : Inhalation, Ingestion, 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 : Experience shows no unusual dermatitis hazard from routine handling.

MATERIAL SAFETY DATA SHEET

RT5190 NATURAL - DNU

Version Number 1.0
Revision Date 10/28/2002

Page 2 of 7
Print Date 11/6/2011

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. FIRE-FIGHTING MEASURES

- Flash point** : Not applicable
- Flammable Limits**
- Upper explosion limit : Not applicable
 - Lower explosion limit : Not applicable
- Autoignition temperature** : Not applicable.
- Suitable extinguishing media** : water, dry powder, foam, carbon dioxide (CO₂).
- 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.

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

MATERIAL SAFETY DATA SHEET

RT5190 NATURAL - DNU

Version Number 1.0

Page 3 of 7

Revision Date 10/28/2002

Print Date 11/6/2011

- Handling : Take measures to prevent the build up of electrostatic charge. 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. 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)

Components	Value	Exposure time	Exposure type	List:
Antimony trioxide	0.5 mg/m ³	PEL:	as Sb	OSHA Z1

9. PHYSICAL AND CHEMICAL PROPERTIES

- | | | | |
|---------------------|-------------------|------------------|-------------------|
| Form | : Solid | Evaporation rate | : Not applicable. |
| Appearance | : Pellets, powder | Specific Gravity | : Not determined |
| Color | : NO PIGMENT | Bulk density | : Not established |
| Odor | : Very faint | Vapor pressure | : Not applicable |
| Melting point/range | : Not determined | Vapor density | : Not applicable |
| Boiling Point: | : Not applicable | pH | : Not applicable |
| Water solubility | : Insoluble | | |

10. STABILITY AND REACTIVITY

- Stability : Stable.
- Hazardous Polymerization : Will not occur.

MATERIAL SAFETY DATA SHEET

RT5190 NATURAL - DNU

Version Number 1.0

Page 4 of 7

Revision Date 10/28/2002

Print Date 11/6/2011

- 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 (NO_x), 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
1163-19-5	Decabromodiphenyl oxide	Systemic effects	Liver, Kidney.
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
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.

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:

MATERIAL SAFETY DATA SHEET

RT5190 NATURAL - DNU

Version Number 1.0

Page 5 of 7

Revision Date 10/28/2002

Print Date 11/6/2011

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).

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	:	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 Classification	:	Not regulated for transportation.
ICAO/IATA	:	Not regulated for transportation.
IMO / IMDG	:	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 the TSCA inventory or are exempt.

MATERIAL SAFETY DATA SHEET

RT5190 NATURAL - DNU

Version Number 1.0

Page 6 of 7

Revision Date 10/28/2002

Print Date 11/6/2011

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	7.4928	1,000 lbs	13,346 LB

California Proposition 65 : WARNING! This product contains a chemical known to the State of California to cause cancer.

SARA Title III Section 313 Toxic Chemicals:

Chemical Name	CAS-No.	Weight %
ANTIMONY COMPOUNDS	1309-64-4	07.49
DECABROMODIPHENYL OXIDE	1163-19-5	22.50

Canadian Regulations:

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.
1309-64-4

DSL : Listed.

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

POLYONE CORPORATION



MATERIAL SAFETY DATA SHEET

RT5190 NATURAL - DNU

Version Number 1.0

Revision Date 10/28/2002

Page 7 of 7

Print Date 11/6/2011

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.