

MATERIAL SAFETY DATA SHEET

V319 RED

Version Number 1.2 Page 1 of 8 Revision Date 08/03/2009 Print Date 1/8/2012

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION

8155 Cobb Center Drive, Kennesaw, GA 30152

Telephone : Product Stewardship (770) 590-3500 x.3563

Emergency telephone : CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure

or accident).

Product name : V319 RED
Product code : FO20004656
Chemical Name : Mixture
CAS-No. : Mixture

Product Use : Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

| Components | CAS-No. | Weight percent |
|-------------------------------------|------------|----------------|
| 1,2-Benzenedicarboxylic acid, butyl | 85-68-7 | 1 - 5 |
| phenylmethylester | | |
| Lead chromate | 7758-97-6 | 0.1 - 1 |
| Titanium dioxide | 13463-67-7 | 0.1 - 1 |

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.



MATERIAL SAFETY DATA SHEET

V319 RED

 Version Number 1.2
 Page 2 of 8

 Revision Date 08/03/2009
 Print Date 1/8/2012

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 : not applicable
Lower explosion limit : not applicable
Autoignition 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 (NOx), 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. Refer to Section

13 of this MSDS for proper disposal methods.

7. HANDLING AND STORAGE



MATERIAL SAFETY DATA SHEET

V319 RED

 Version Number 1.2
 Page 3 of 8

 Revision Date 08/03/2009
 Print Date 1/8/2012

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. 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)



MATERIAL SAFETY DATA SHEET

V319 RED

Version Number 1.2 Revision Date 08/03/2009 Page 4 of 8 Print Date 1/8/2012

| Components | | | Exposure type | List: |
|------------------|--|---------------------------|----------------------|----------|
| Lead chromate | ead chromate 0.012 Time Weighted Average | | as Cr | ACGIH |
| | mg/m3 | (TWA): | | |
| | 0.05 | Time Weighted Average | as Pb | ACGIH |
| | mg/m3 | (TWA): | | |
| | 0.005 | Time Weighted Average | | OSHA |
| | mg/m3 | (TWA): | | |
| | 0.0025 | OSHA Action level: | | OSHA |
| | mg/m3 | | | |
| | 0.001 | Recommended exposure | as Cr(VI) | NIOSH |
| | mg/m3 | limit (REL): | | |
| | 0.1 mg/m3 | Ceiling Limit Value: | | OSHA Z2 |
| | 0.1 mg/m3 | Ceiling Limit Value: | as CrO3 | OSHA Z1A |
| | 0.01 | Time Weighted Average | | MX OEL |
| | mg/m3 | (TWA): | | |
| | 1 mg/m3 | PEL: | as Cr | OSHA Z1 |
| 1 mg/m3 | | Time Weighted Average | | OSHA Z1A |
| | | (TWA): | | |
| | 0.05 | Time Weighted Average | | OSHA |
| | mg/m3 | (TWA): | | |
| | 0.03 | OSHA Action level: | | OSHA |
| | mg/m3 | | | |
| | 0.05 | Time Weighted Average | as Pb | OSHA Z1A |
| | mg/m3 | (TWA): | | |
| | 0.15 | Time Weighted Average | Dust and fume. as Pb | MX OEL |
| | mg/m3 | (TWA): | | |
| Titanium dioxide | 10 mg/m3 | Time Weighted Average | | ACGIH |
| | | (TWA): | | |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 |
| | 10 mg/m3 | Time Weighted Average | Total dust. | OSHA Z1A |
| | | (TWA): | | |
| | 10 mg/m3 | Time Weighted Average | as Ti | MX OEL |
| | | (TWA): | | |
| | 20 mg/m3 | Short Term Exposure Limit | as Ti | MX OEL |
| | | (STEL): | | |

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : solid Evaporation rate : Not applicable Appearance : powder, granular Specific Gravity Not determined Colour : RED Bulk density Not determined Odour Vapour pressure : not applicable : very faint Melting point/range : Not determined Vapour density : not applicable Boiling Point: : not applicable pН : not applicable

Water solubility : insoluble

10. STABILITY AND REACTIVITY

Stability : Stable



MATERIAL SAFETY DATA SHEET

V319 RED

Version Number 1.2 Page 5 of 8 Revision Date 08/03/2009 Print Date 1/8/2012

Hazardous Polymerization : Will not occur.

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

oxidizing agents and open flame.

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 (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 |
|------------|---|------------------|--|
| 85-68-7 | 1,2-Benzenedicarboxylic acid, butyl phenylmethylester | Irritant | Eyes, Skin. |
| | | Systemic effects | Liver, reproductive system. |
| 7758-97-6 | Lead chromate | Systemic effects | central nervous system (CNS), reproductive 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 |
|-----------|---|--------------------------|---------------------------|---------------|
| 85-68-7 | 1,2-Benzenedicarboxylic acid, butyl phenylmethylester | Oral LD50 Dermal LD50 | 2,330 mg/kg > 10 gm/kg | rat rabbit |
| 7758-97-6 | Lead chromate | Oral LD50 | > 12 gm/kg | mouse |

Carcinogenicity

This product contains the following components which, in their pure form, have the following carcinogenicity data:

| CAS-No. | Chemical Name | OSHA | IARC | NTP |
|------------|------------------|------|------|-----|
| 7758-97-6 | Lead chromate | yes | 1 | no |
| 13463-67-7 | Titanium dioxide | no | 2B | no |



MATERIAL SAFETY DATA SHEET

V319 RED

 Version Number 1.2
 Page 6 of 8

 Revision Date 08/03/2009
 Print Date 1/8/2012

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:

Lead chromate 7758-97-6 Systemic effects include neurotoxic, teratogenic, fetotoxic and reproductive with abdominal pain, anemia, pallor, decreased hand grip strength with characteristic "wrist drop".

| 12 | ECOL | OCICAL | INFORMA | TION |
|-----|------|------------|---------|------|
| 14. | | A ALTIC AL | | |

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

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.



MATERIAL SAFETY DATA SHEET

V319 RED

 Version Number 1.2
 Page 7 of 8

 Revision Date 08/03/2009
 Print Date 1/8/2012

TSCA Status : All components of this product are listed on or exempt from the

TSCA Inventory.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

| Chemical Name | CAS-No. | RQ for component | RQ for |
|-------------------|---------|------------------|-----------------|
| | | | Mixture/Product |
| 1,2- | 85-68-7 | 100 lbs | 4,326 LB |
| Benzenedicarboxyl | | | |
| ic acid, butyl | | | |
| phenylmethylester | | | |

California Proposition

65

: WARNING! This product contains a chemical known to the State of California to cause cancer., WARNING! This product contains a chemical known to the State of California to cause birth defects or

other reproductive harm.

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 |
|-------------------------------|-----------|----------------|
| CHROMIUM VI COMPOUNDSCHROMIUM | 7758-97-6 | 0.10 - 1.00 |
| COMPOUNDSLEAD COMPOUNDSLEAD | | |
| COMPOUNDS, INORGANIC | | |

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

| Chemical Name | CAS-No. | Weight | NPRI ID# |
|-------------------------------------|-----------|-------------|----------|
| | | percent | |
| Lead chromate | 7758-97-6 | 0.10 - 1.00 | |
| Miscellaneous Zinc Compounds | 0-05-5 | 0.10 - 1.00 | 241 |
| 1,2-Benzenedicarboxylic acid, butyl | 85-68-7 | 1.00 - 5.00 | |
| phenylmethylester | | | |

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List



MATERIAL SAFETY DATA SHEET

V319 RED

 Version Number 1.2
 Page 8 of 8

 Revision Date 08/03/2009
 Print Date 1/8/2012

CAS-No. 7758-97-6 85-68-7

DSL : All components of this product are on the Canadian Domestic

Substances List (DSL) or are exempt.

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.