



POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

PGT-02-51-041-LTS Gray

Version Number 1.1
Revision Date 09/24/2003

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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 : PGT-02-51-041-LTS Gray
Product code : EM10004495
Chemical Name : Mixture
CAS-No. : Mixture
Product Use : Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Molybdenum	7439-98-7	1 - 5
Rutile, antimony chromium buff	68186-90-3	1 - 5
Chromium	7440-47-3	5 - 10
Nickel	7440-02-0	5 - 10
Titanium dioxide	13463-67-7	10 - 30
Tungsten	7440-33-7	10 - 30

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating or processing. 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, 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.

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Print Date 11/12/2011**Chronic exposure** : Refer to Section 11 for Toxicological Information.**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** : water, dry powder, foam, carbon dioxide (CO2)none.
- 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** : None

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.



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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. Refer to equipment supplier to ensure protection.
- 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)

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Components	Value	Exposure time	Exposure type	List:
Chromium	0.5 mg/m ³	Time Weighted Average (TWA):	as Cr	ACGIH
	1 mg/m ³	PEL:		OSHA Z1
Molybdenum	15 mg/m ³	PEL:	Total dust. as Mo	OSHA Z1
	3 mg/m ³	Time Weighted Average (TWA):	Respirable fraction. as Mo	ACGIH
	10 mg/m ³	Time Weighted Average (TWA):	Inhalable fraction. as Mo	ACGIH
Nickel	1 mg/m ³	PEL:	as Ni	OSHA Z1
	1.5 mg/m ³	Time Weighted Average (TWA):	Inhalable fraction. as Ni	ACGIH
Rutile, antimony chromium buff	1 mg/m ³	PEL:		OSHA Z1
	0.5 mg/m ³	PEL:	as Sb	OSHA Z1
	0.5 mg/m ³	Time Weighted Average (TWA):	as Cr	ACGIH
	0.5 mg/m ³	Time Weighted Average (TWA):	as Sb	ACGIH
Titanium dioxide	10 mg/m ³	Time Weighted Average (TWA):		ACGIH
	15 mg/m ³	PEL:	Total dust.	OSHA Z1
Tungsten	5 mg/m ³	Time Weighted Average (TWA):	as W	ACGIH
	10 mg/m ³	Short Term Exposure Limit (STEL):	as W	ACGIH

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: Solid	Evaporation rate	: Not applicable.
Appearance	: Pellets, slabs	Specific Gravity	: Not determined
Color	: GREY	Bulk density	: Not established
Odor	: Very faint	Vapor 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	: Stable.
Hazardous Polymerization	: Will not occur.
Conditions to avoid	: To avoid thermal decomposition, do not overheat.
Incompatible Materials	: Strong acids, oxidizing and reducing agents.
Hazardous decomposition products	: Carbon dioxide (CO ₂), carbon monoxide (CO), oxides of nitrogen (NO _x), other hazardous materials, and smoke are all possible.

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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
7439-98-7	Molybdenum	Systemic effects	Eyes, Respiratory system, Liver, Kidney.
68186-90-3	Rutile, antimony chromium buff	Irritant	Eyes, Skin, Respiratory system.
7440-47-3	Chromium	Systemic effects	Eyes, Skin, Respiratory system.
7440-02-0	Nickel	Systemic effects	Skin, Respiratory system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
7440-33-7	Tungsten	Systemic effects	Eyes, Skin, Respiratory system, blood and blood forming system.

Carcinogenicity

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

CAS-No.	Chemical Name	OSHA	IARC	NTP
7440-02-0	Nickel	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:

Rutile, antimony chromium buff 68186-90-3 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).

Additional Health Hazard Information:

Chromium 7440-47-3 The bi and trivalent forms of chrome have a low order of acute toxicity but may cause dermatitis, pulmonary sensitization and corrosive effect on eyes.

Additional Health Hazard Information:

Nickel 7440-02-0 Skin sensitizer "nickel itch", with pulmonary, brain, liver, kidney and muscle effects.

Additional Health Hazard Information:



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Tungsten 7440-33-7 Prolonged or repeated breathing of this material may result in chronic bronchitis. Exposure to freshly formed fumes from heated metal may cause "metal fume fever".

12. ECOLOGICAL INFORMATION

- Persistence and degradability : Not readily biodegradable.
- Environmental Toxicity : Chemicals are not readily available as they are bound within the matrix of the polymer.
- Bioaccumulation Potential : Chemicals are not readily available as they are bound within the matrix of the polymer.
- Additional advice : Not applicable

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 (air) : Refer to specific regulation.
- IMO / IMDG (maritime) : Refer to specific regulation.

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)

Chemical Name	CAS-No.	% in Product	RQ for component	RQ for Mixture/Product



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Nickel	7440-02-0	5.2188	100 lbs	1,916 LB
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California Proposition : WARNING! This product contains a chemical known to the State of 65 California to cause cancer.

SARA Title III Section 302 Extremely Hazardous Substance

Not applicable

SARA Title III Section 313 Toxic Chemicals:

Chemical Name	CAS-No.	Weight %
CHROMIUM	7440-47-3	7.61
NICKEL	7440-02-0	5.21
CHROMIUM III COMPOUNDSANTIMONY COMPOUNDS	68186-90-3	2.26

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight %	NPRI ID#
Chromium	7440-47-3	7.61	68
Nickel	7440-02-0	5.21	168
Rutile, antimony chromium buff	68186-90-3	2.26	68
Rutile, antimony chromium buff	68186-90-3	2.26	17

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.
7440-47-3
7439-98-7
7440-02-0
68186-90-3
7440-33-7

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

National Inventories:

Australia AICS : Not determined

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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.