

**POLYONE CORPORATION****MATERIAL SAFETY DATA SHEET****X600 A ZIP 23 NAT 1**Version Number 1.2  
Revision Date 09/18/2012Page 1 of 7  
Print Date 9/18/2012**1. PRODUCT AND COMPANY IDENTIFICATION****POLYONE CORPORATION**  
33587 Walker Road, Avon Lake, OH 44012

Telephone : 1 (440) 930-1000 or 1 (866) POLYONE  
Emergency telephone : **CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).**  
number

Product name : X600 A ZIP 23 NAT 1  
Product code : EM10017664  
Chemical Name : Mixture  
CAS-No. : Mixture  
Product Use : Industrial Applications

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Components	CAS-No.	Weight percent
Talc	14807-96-6	0.1 - 1
Caprolactam	105-60-2	1 - 5

**3. HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW**

This mixture has not been evaluated as a whole. Information provided on the health effects of this product is based on individual components. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors 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.

**POTENTIAL HEALTH EFFECTS****Routes of Exposure:** : Inhalation, Ingestion, Skin contact**Acute exposure**

Inhalation : Particulates, 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**

**X600 A ZIP 23 NAT 1**

Version Number 1.2  
Revision Date 09/18/2012

Page 2 of 7  
Print Date 9/18/2012

**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 applicable  
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** : Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), 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 only in areas with appropriate exhaust ventilation.



# POLYONE CORPORATION

## MATERIAL SAFETY DATA SHEET

### X600 A ZIP 23 NAT 1

Version Number 1.2

Page 3 of 7

Revision Date 09/18/2012

Print Date 9/18/2012

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:
Caprolactam	5 mg/m <sup>3</sup>	Time Weighted Average (TWA):	Inhalable fraction and vapor	ACGIH
	1 mg/m <sup>3</sup>	Time Weighted Average (TWA):	Dust.	MX OEL
	5 ppm 20 mg/m <sup>3</sup>	Time Weighted Average (TWA):	Vapor.	MX OEL
	3 mg/m <sup>3</sup>	Short Term Exposure Limit (STEL):	Dust.	MX OEL
Talc	10 ppm 40 mg/m <sup>3</sup>	Short Term Exposure Limit (STEL):	Vapor.	MX OEL
	2 mg/m <sup>3</sup>	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
	2 mg/m <sup>3</sup>	Recommended exposure limit (REL):	Respirable.	NIOSH
	2 mg/m <sup>3</sup>	Time Weighted Average (TWA):	Respirable dust.	OSHA Z1A
	0.1 mg/m <sup>3</sup>	Time Weighted Average (TWA):	Respirable.	Z3
	0.3 mg/m <sup>3</sup>	Time Weighted Average (TWA):	Total dust.	Z3

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : solid Evaporation rate : Not applicable

**POLYONE CORPORATION**

**MATERIAL SAFETY DATA SHEET**

**X600 A ZIP 23 NAT 1**

Version Number 1.2

Page 4 of 7

Revision Date 09/18/2012

Print Date 9/18/2012

Appearance	: pellets, Slabs	Specific Gravity	: Not determined
Colour	: NO PIGMENT	Bulk density	: Not established
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.
Incompatible Materials	: Strong acids, oxidizing and reducing agents
Hazardous decomposition products	: Carbon dioxide (CO <sub>2</sub> ), carbon monoxide (CO), oxides of nitrogen (NO <sub>x</sub> ), other hazardous materials, and smoke are all possible.

**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
14807-96-6	Talc	Systemic effects	Eyes, Respiratory system, Skin.
105-60-2	Caprolactam	Irritant	Skin, Respiratory system.
		Systemic effects	Eyes, Skin, Respiratory system, Liver, Kidney, central nervous system (CNS), heart or circulatory 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
105-60-2	Caprolactam	LC50	300 mg/m <sup>3</sup>	rat
		Oral LD50	1,210 mg/kg	rat
		Dermal LD50	1410 ul/kg	rabbit

**Carcinogenicity**

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

CAS-No.	Chemical Name	OSHA	IARC	NTP

**POLYONE CORPORATION**

**MATERIAL SAFETY DATA SHEET**

**X600 A ZIP 23 NAT 1**

Version Number 1.2  
Revision Date 09/18/2012

Page 5 of 7  
Print Date 9/18/2012

14807-96-6	Talc	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.

**12. ECOLOGICAL INFORMATION**

- Persistence and degradability : Not readily biodegradable.
- Environmental Toxicity : Chemicals are not readily available as they are bound within the polymer matrix.
- Bioaccumulation Potential : Chemicals are not readily available as they are bound within the polymer matrix.
- 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 : Refer to specific regulation.
- IMO/IMDG (maritime) : Refer to specific regulation.

**15. REGULATORY INFORMATION**

**US Regulations:**

- OSHA Status : Classified as hazardous based on components.

**POLYONE CORPORATION**

**MATERIAL SAFETY DATA SHEET**

**X600 A ZIP 23 NAT 1**

Version Number 1.2  
Revision Date 09/18/2012

Page 6 of 7  
Print Date 9/18/2012

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

US. EPA CERCLA Hazardous Substances (40 CFR 302)

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

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

not applicable

WHMIS Classification : D1A

WHMIS Ingredient Disclosure List

CAS-No.
105-60-2

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 : Listed

Europe EINECS : Listed

Japan ENCS : Not determined

Korea KECI : Listed



**POLYONE CORPORATION**

**MATERIAL SAFETY DATA SHEET**

**X600 A ZIP 23 NAT 1**

Version Number 1.2  
Revision Date 09/18/2012

Page 7 of 7  
Print Date 9/18/2012

Philippines PICCS : Listed

**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.