MATERIAL SAFETY DATA SHEET X GT-5003-1CD

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POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012				
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	:	X GT-5003-1CD		
Product code	:	EM10031856		
Chemical Name	:	Mixture		
CAS-No.	:	Mixture		
Product Use	:	Industrial Applications		

ComponentsCAS-No.Weight percentManganese7439-96-51 - 5

Manganese	7439-96-5	1 - 5
Chromium	7440-47-3	10 - 30

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 Ingestion Eyes Skin	 Particulates, like other inert materials can be mechanically irritating. May be harmful if swallowed. Particulates, like other inert materials can be mechanically irritating. Experience shows no unusual dermatitis hazard from routine handling. 		
Chronic exposure	: Refer to Section 11 for Toxicological Information.		

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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 o 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 Lower explosion limit Auto-ignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	 not applicable not applicable not applicable Carbon dioxide blanket, Water spray, Dry powder, Foam. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. 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.			
	7. HANDLING AND STORAGE			
Handling	: Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation.			



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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)					

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Components	Value	Exposure time	Exposure type	List:
Chromium	0.5 mg/m3	Time Weighted Average (TWA):	as Cr	ACGIH
	0.5 mg/m3	Recommended exposure limit (REL):	as Cr	NIOSH
	1 mg/m3	PEL:	as Cr	OSHA Z1
	1 mg/m3	Time Weighted Average (TWA):		OSHA Z1A
	0.5 mg/m3	Time Weighted Average (TWA):		MX OEL
Manganese	0.2 mg/m3	Time Weighted Average (TWA):	as Mn	ACGIH
	1 mg/m3	Recommended exposure limit (REL):	Fume. as Mn	NIOSH
	3 mg/m3	Short Term Exposure Limit (STEL):	Fume. as Mn	NIOSH
	5 mg/m3	Ceiling Limit Value:	Fume. as Mn	OSHA Z1
	1 mg/m3	Time Weighted Average (TWA):	Fume. as Mn	OSHA Z1A
	3 mg/m3	Short Term Exposure Limit (STEL):	Fume. as Mn	OSHA Z1A
	1 mg/m3	Time Weighted Average (TWA):	Fume. as Mn	MX OEL
	0.2 mg/m3	Time Weighted Average (TWA):	as Mn	MX OEL
	3 mg/m3	Short Term Exposure Limit (STEL):	Fume. as Mn	MX OEL
	0.02	Time Weighted Average	Respirable fraction. as	ACGIH NIC
	mg/m3	(TWA):	Mn	
	0.1 mg/m3	Time Weighted Average (TWA):	Inhalable fraction. as Mn	ACGIH NIC

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility solid
pellets, Slabs
NO PIGMENT
very faint
Not determined
not applicable
insoluble

Evapouration rate Specific Gravity Bulk density Vapour pressure Vapour density pH : Not applicable : Not determined

- : Not established
- : not applicable
- : not applicable
- : not applicable

10. STABILITY AND REACTIVITY

Stability : The product is stable if stored and handled as prescribed.

Hazardous Polymerization : Will not occur.

:

Conditions to avoid

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To avoid thermal decomposition, do not overheat.

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Version Number 1.0 Page 5 of 7 Revision Date 02/26/2014 Print Date 2/26/2014 Incompatible Materials : Strong acids, oxidizing and reducing agents Hazardous decomposition Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen : products (NOx), 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: Effect Target Organ CAS-No. Chemical Name 7440-47-3 Chromium Systemic effects Eyes, Skin, Respiratory system. **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 skin sensitization and irritation to the eyes. No effects have been reported for chromium (III) oxide. Chromium (III) compounds are not considered carcinogenic in animals or humans. **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

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U.S. DOT Classification	:	Not regulated for transport	rtation.			
ICAO/IATA	:	Refer to specific regulation	on.			
IMO/IMDG (maritime)	:	Refer to specific regulation	on.			
	15	. REGULATORY INFO	RMATIO	N		
US Regulations:						
OSHA Status	:	Classified as hazardous b	ased on co	omponents		
TSCA Status : All components of this product are listed on or exempt from the TSCA Inventory.						
US. EPA CERCLA Hazardou	ıs Sub	stances (40 CFR 302)				
not applicable						
California Proposition 65	n :	Not applicable				
SARA Title III Section 302 E	xtrem	ely Hazardous Substance				
SARA Title III Section 302 E Unless specific chemicals are		-	s product i	s Not App	licable	under this regula
		-	s product i	s Not App	licable	under this regula
Unless specific chemicals are	identi	fied under this section, this	s product i	s Not App	licable	under this regula
Unless specific chemicals are	identi	fied under this section, this	s product i	s Not App	licable	under this regula
Unless specific chemicals are SARA Title III Section 313 T Unless specific chemicals are	identi Toxic (fied under this section, this Chemicals:	s product i	s Not App	licable	under this regula
Unless specific chemicals are SARA Title III Section 313 T Unless specific chemicals are Chemical Name	identi Toxic (fied under this section, this Chemicals:	s product i CAS-No	s Not App	<u>licable</u> Weight	under this regula
Unless specific chemicals are SARA Title III Section 313 T Unless specific chemicals are Chemical Name CHROMIUM	identi Toxic (fied under this section, this Chemicals:	s product i CAS-No 7440-47-	s Not App b. Y 3	licable Weight 10.00 -	under this regula percent 30.00
Unless specific chemicals are SARA Title III Section 313 T Unless specific chemicals are Chemical Name CHROMIUM MANGANESE	identi Toxic (fied under this section, this Chemicals:	s product i CAS-No	s Not App b. Y 3	<u>licable</u> Weight	under this regula percent 30.00
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Unless specific chemicals are SARA Title III Section 313 T Unless specific chemicals are Chemical Name CHROMIUM MANGANESE Canadian Regulations:	o identi Coxic C o identi	fied under this section, this Chemicals: fied under this section, this	s product i CAS-No 7440-47- 7439-96-	s Not App b. 3 5 Weight	licable Weight 10.00 -	under this regula percent 30.00
Unless specific chemicals are SARA Title III Section 313 T Unless specific chemicals are Chemical Name CHROMIUM MANGANESE Canadian Regulations: National Pollutant Rele	o identi Coxic C o identi	fied under this section, this Chemicals: fied under this section, this	s product i CAS-No 7440-47- 7439-96- 0.	s Not App b. Y 3 5	licable Weight 10.00 - 5	under this regula percent 30.00 5.00

WHMIS Classification : D2A

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WHMIS Ingredient Disclosure List

Γ	CAS-No.
Γ	7440-47-3
	7439-96-5

:

DSL

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

National Inventories:

Australia AICS	: Listed
China IECS	: Listed
Europe EINECS	: Listed
Japan ENCS	: Not determined
Korea KECI	: Listed
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.