PolvOne.

MATERIAL SAFETY DATA SHEET X ST-16249-01-01 Black

Version Number 1.1 Revision Date 03/13/2014

Page 1 of 7 Print Date 3/27/2014

1. PRODUCT AND COMPANY IDENTIFICATION

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 ST-16249-01-01 Black
Product code	:	EM10022785
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Carbon	7440-44-0	10 - 30
Graphite	7782-42-5	1 - 5
Nickel	7440-02-0	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.		

PolyOne.

MATERIAL SAFETY DATA SHEET X ST-16249-01-01 Black

Version Number 1.1 Revision Date 03/13/2014 Page 2 of 7 Print Date 3/27/2014

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 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 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.

PolyOne

MATERIAL SAFETY DATA SHEET X ST-16249-01-01 Black

Version Number 1.1 Revision Date 03/13/2014 Page 3 of 7 Print Date 3/27/2014

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:
Graphite	2 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
	2.5 mg/m3	Recommended exposure limit (REL):	Respirable.	NIOSH
	2.5 mg/m3	Time Weighted Average (TWA):	Respirable dust.	OSHA Z1A
	2 mg/m3	Time Weighted Average (TWA):		MX OEL
	10 mg/m3	Time Weighted Average (TWA):		MX OEL
	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
Nickel	1.5 mg/m3	Time Weighted Average (TWA):	Inhalable fraction.	ACGIH
	1 mg/m3	PEL:	as Ni	OSHA Z1
	1 mg/m3	Time Weighted Average (TWA):		MX OEL

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Colour : solid: pellets, Slabs: BLACK

Evapouration rate Specific Gravity Bulk density

Not applicableNot determinedNot established

MATERIAL SAFETY DATA SHEET X ST-16249-01-01 Black

Version Number 1.1 Revision Date 03/13/2014

Odour

Boiling Point:	nc	ot determined ot applicable soluble	Vapour density pH	:	not applicable not applicable	
	1(). STABILITY AND RE	EACTIVITY			
Stability	:	The product is stable if	stored and handled as pr	resc	ribed.	
Hazardous Polymerization	:	Will not occur.				
Conditions to avoid	:	To avoid thermal decom	nposition, do not overhe	at.		
Incompatible Materials	:	Strong acids, oxidizing	and reducing agents			
Hazardous decomposition products	:	Carbon dioxide (CO2), (NOx), other hazardous			U	

Vapour pressure

: very faint

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
7440-44-0	Carbon	Systemic effects	Respiratory system, heart or
			circulatory system.
7782-42-5	Graphite	Systemic effects	Respiratory system, heart or
			circulatory system.
7440-02-0	Nickel	Systemic effects	Skin, Respiratory system.

LC50 / LD50

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

7440-44-0 Carbon Oral LD50 $10000\mathrm{mg/kg}$ rat	CAS-No.	Chemical Name	Route	Value	Species
	7440-44-0	Carbon	Oral LD50	10,000 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
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.



: not applicable

Print Date 3/27/2014

Page 4 of 7

PolyOne

MATERIAL SAFETY DATA SHEET X ST-16249-01-01 Black

Version Number 1.1 Revision Date 03/13/2014 Page 5 of 7 Print Date 3/27/2014

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:

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

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

PolvOne

MATERIAL SAFETY DATA SHEET X ST-16249-01-01 Black

Version Number 1.1 Revision Date 03/13/2014

Page 6 of 7 Print Date 3/27/2014

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Chemical Name	CAS-No.	RQ for component	RQ for
			Mixture/Product
Nickel	7440-02-0	100 lbs	533 LB

California Proposition 65

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

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
NICKEL	7440-02-0	10.00 - 30.00

Canadian Regulations:

National Pollutant Release Inventory (NPRI)			
Chemical Name	CAS-No.	Weight	NPRI ID#
		percent	
Nickel	7440-02-0	10.00 - 30.00	

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.	1
7440-02-0	1

:

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

PolyOne

MATERIAL SAFETY DATA SHEET X ST-16249-01-01 Black

Version Number 1.1 Revision Date 03/13/2014 Page 7 of 7 Print Date 3/27/2014

Europe EINECS:ListedJapan ENCS:Not determinedKorea KECI:ListedPhilippines 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.