

MATERIAL SAFETY DATA SHEET

X ST-16028-03-01 Natural

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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).

Product name : X ST-16028-03-01 Natural

Product code : EM10022456 Chemical Name : Mixture CAS-No. : Mixture

Product Use : Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight percent
Carbon	7440-44-0	10 - 30
Graphite	7782-42-5	5 - 10
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 enduser (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.



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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 of

doubt seek medical advice.

Do not induce vomiting without medical advice. When symptoms Ingestion

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 applicable :

Carbon dioxide blanket, Water spray, Dry powder, Foam. Suitable extinguishing media

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 (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

Handling Take measures to prevent the build up of electrostatic charge. Heat



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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

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 : solid Evaporation rate : Not applicable Appearance : pellets, Slabs Specific Gravity : Not determined



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: NO PIGMENT Colour Bulk density Not established Odour : very faint Vapour pressure not applicable Melting point/range : Not determined Vapour density : not applicable **Boiling Point:** pН : not applicable : 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 (CO2), carbon monoxide (CO), oxides of nitrogen

(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:

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:

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.



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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:

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

12	FCOL	OCICAL	INFORM	ATION

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.

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



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TSCA Inventory.

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	360 LB

California Proposition : 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.
7440-02-0

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 : 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.