

#### MATERIAL SAFETY DATA SHEET

#### X ST878-001-01

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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 ST878-001-01
Product code : EM10026487
Chemical Name : Mixture
CAS-No. : Mixture

Product Use : Industrial Applications

#### 2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight percent
Vinyl acetate	108-05-4	0.1 - 1
Chromium	7440-47-3	1 - 5
Molybdenum	7439-98-7	1 - 5
Nickel	7440-02-0	1 - 5
Triphenyl phosphate	115-86-6	1 - 5
Calcium carbonate	1317-65-3	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 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.



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**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 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

pressure mode should be worn to prevent initiatation of an borne

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.



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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

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:
Calcium carbonate	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):		MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
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
Molybdenum	10 mg/m3	Time Weighted Average (TWA):	Inhalable fraction. as Mo	ACGIH
	3 mg/m3	Time Weighted Average (TWA):	Respirable fraction. as Mo	ACGIH
	15 mg/m3	PEL:	Total dust. as Mo	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):	as Mo	MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):	as Mo	MX OEL
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
Triphenyl phosphate	3 mg/m3	Time Weighted Average (TWA):		ACGIH
	3 mg/m3	PEL:		OSHA Z1
	3 mg/m3	Time Weighted Average (TWA):		MX OEL
	6 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
Vinyl acetate	10 ppm	Time Weighted Average (TWA):		ACGIH
	15 ppm	Short Term Exposure Limit (STEL):		ACGIH
	10 ppm 30 mg/m3	Time Weighted Average (TWA):		MX OEL
	20 ppm 60 mg/m3	Short Term Exposure Limit (STEL):		MX OEL

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : solid Evaporation rate : Not applicable



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: pellets, Slabs Specific Gravity Not determined Appearance Colour : NO PIGMENT Bulk density Not established : not applicable Odour : very faint Vapour pressure : not applicable Melting point/range : Not determined Vapour density Boiling Point: : not applicable : not applicable pН

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
108-05-4	Vinyl acetate	Irritant	Eyes, Respiratory system.
		Systemic effects	Eyes, Skin, Respiratory
			system.
7440-47-3	Chromium	Systemic effects	Eyes, Skin, Respiratory
			system.
7439-98-7	Molybdenum	Systemic effects	Eyes, Respiratory system,
			Liver, Kidney.
7440-02-0	Nickel	Systemic effects	Skin, Respiratory system.
115-86-6	Triphenyl phosphate	Systemic effects	Respiratory system, blood and
			blood forming system, central
			nervous system (CNS).
1317-65-3	Calcium carbonate	Irritant	Eyes, Skin.
		Systemic effects	Eyes, 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
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108-05-4	Vinyl acetate	LC50	11400 mg/m3	rat
		Oral LD50	2,920 mg/kg	rat
		Dermal LD50	2,335 mg/kg	rabbit
115-86-6	Triphenyl phosphate	Oral LD50	3,500 mg/kg	rat
		Dermal LD50	> 7,900 mg/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
108-05-4	Vinyl acetate	no	2B	no
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:**

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.

#### Additional Health Hazard Information:

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

12. ECOLOGICAL INFORMATION
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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



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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

TSCA Inventory.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

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

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

Chemical Name	CAS-No.	% in Product	RQ for	
			component	
Vinyl acetate	108-05-4	0.10 - 1.00	5,000 lbs	

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
CHROMIUM	7440-47-3	1.00 - 5.00



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Chemical Name	CAS-No.	Weight percent
NICKEL	7440-02-0	1.00 - 5.00
VINYL ACETATE MONOMERVINYL ACETATE	108-05-4	0.10 - 1.00

#### Canadian Regulations:

National Pollutant Release Inventory (NPRI)

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Chemical Name	CAS-No.	Weight	NPRI ID#
		_	
		percent	
Chromium	7440-47-3	1.00 - 5.00	
	,		
Nickel	7440-02-0	1.00 - 5.00	
Vinyl acetate	108-05-4	0.10 - 1.00	
Manganese	7439-96-5	0.10 - 1.00	

WHMIS Classification : D1B

WHMIS Ingredient Disclosure List

CAS-No.	
7440-47-3	
7439-98-7	
7440-02-0	
115-86-6	

DSL : DSL status has not been determined. Quantity use in Canada may be

restricted by regulations.

National Inventories:

Australia AICS : Not determined

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.



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