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MATERIAL SAFETY DATA SHEET **15976-01 EXPWJJP604 NAT**

Version Number 1.1 Revision Date 03/23/2014

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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	:	15976-01 EXPWJJP604 NAT
Product code	:	VC10007441
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Molybdenum zinc oxide (Mo2Zn3O9)	22914-58-5	1 - 5
Tin zinc oxide (SnZnO3)	12036-37-2	1 - 5
Antimony trioxide	1309-64-4	0.1 - 1

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating or processing. The end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure. See sections 8 and 11 for special precautions. May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions.

POTENTIAL HEALTH EFFECTS

Routes of Exposure:	: Inhalation, Ingestion, Skin contact
Acute exposure	
Inhalation	: Resin particles, like other inert materials, can be mechanically irritating.
Ingestion	: May be harmful if swallowed.
Eyes	: Resin particles, like other inert materials, are mechanically irritating to eyes.
Skin	: Experience shows no unusual dermatitis hazard from routine handling.

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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 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 a 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	 not applicable not applicable Not applicable Carbon dioxide blanket, Water spray, Dry powder, Foam. Fullface self-contained breathing apparatus (SCBA) used in positive 		
Procedures Unusual Fire/Explosion Hazards	 pressure mode should be worn to prevent inhalation of airborne contaminants. May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) unde fire conditions. 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 no 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.		

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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. Processing fume condensates may contain combustible or toxic residue. Periodically clean hoods, ducts, and other surfaces to minimize accumulation of these materials.
Storage	:	Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.
8. EX	POSU	RE CONTROLS/PERSONAL PROTECTION
Respiratory protection	:	No personal respiratory protective equipment normally required. If dusty conditions occur wear appropriate respiratory protection.
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. This product may contain residual vinyl chloride monomer (VCM) (CAS number 75-01-4) below 8.5 ppm (0.00085%). It is unlikely, under normal working conditions with adequate ventilation, that the exposure limits will be exceeded for residual VCM. However, the user should take the necessary precautions (e.g. mechanical ventilation, local exhaust ventilation, air-monitoring, respiratory protection, etc.) to ensure airborne levels of any vapors including VCM or dusts that may be released during heating or processing are below regulated levels.
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:
Antimony trioxide	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	MX OEL
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
	0.5 mg/m3	Recommended exposure limit (REL):	as Sb	NIOSH
	0.5 mg/m3	PEL:	as Sb	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	OSHA Z1A

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility	 solid pellets, powder NO PIGMENT very faint Not determined not applicable insoluble 	Evapouration rate Specific Gravity Bulk density Vapour pressure Vapour density pH	: not applicable
	10. STABILITY AN	D REACTIVITY	
Stability	: The product is stab	le if stored and handled as	prescribed.
Hazardous Polymerization	: Will not occur.		
Conditions to avoid	: Keep away from or decomposition, do	xidizing agents and open fland overheat.	ame. To avoid thermal
Incompatible Materials	-	strong acids and oxidizing olymers and acetal copolyn	•
Hazardous decomposition products	(NOx), other hazar Prolonged heating (200 °C) or short to	O2), carbon monoxide (CO dous materials, and smoke (approximately 30 minutes erm heating at 482 °F (250 ition and evolution of carbo	are all possible. or more) above 392 °F °C) may result in

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

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22914-58-5	Molybdenum zinc oxide (Mo2Zn3O9)	Irritant	Eyes, Skin.
1309-64-4	Antimony trioxide	Systemic effects	Eyes, Respiratory system.
		sensitizer	Skin.

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
1309-64-4	Antimony trioxide	Oral LD50	> 34,600 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
1309-64-4	Antimony trioxide	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:

Antimony trioxide 1309-64-4 Can cause eye irritation. Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Additional symptoms of skin contact may include: antimony measles (a red, pimply rash).

Persistence and degradability	: Not readily biodegradable.
Environmental Toxicity	: Adverse ecological impact is not known or expected under normal use.
Bioaccumulation Potential	: no data available
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.

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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	: Not regulated for transportation.							
IMO/IMDG (maritime)	: Not regulated for transportation.							
	15. REGULATORY I	NFORMATION						
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 Hazardou	is Substances (40 CFR 302)						
not applicable								
California Proposition 65	a : WARNING! This California to cause	•	mical known to the State of					
SARA Title III Section 302 E	Extremely Hazardous Subst	ance						
Unless specific chemicals are	identified under this section	n, this product is Not .	Applicable under this regulation					
SARA Title III Section 313 T								
Chemical Name	identified under this section	CAS-No.	Applicable under this regulation Weight percent					
ZINC COMPOUNDS		22914-58-5	1.00 - 5.00					
ZINC COMPOUNDS		12036-37-2	1.00 - 5.00					
Canadian Regulations:								
National Pollutant Rel	ease Inventory (NPRI)							

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Chemical Name			CAS-No.	Weight percent	NPRI ID#
Antimony trioxide			1309-64-4	0.10 - 1.00	
Molybdenum zinc oxide (Mo2Zn3O9)			22914-58-5	1.00 - 5.00	
Zinc			7440-66-6	0.10 - 1.00	
Tin zinc oxide (SnZnO3)			12036-37-2	1.00 - 5.00	
WHMIS Classification DSL ational Inventories:	:	restricted by r	-	ned. Quantity use	in Canada ma
Australia AICS	:	Not determine	ed		
China IECS	:	Not determine	ed		
Europe EINECS	:	Not determine	ed		
Japan ENCS	:	Not determine	ed		
Korea KECI	:	Not determine	ed		
Philippines PICCS	:	Not determine	ed		

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.