MATERIAL SAFETY DATA SHEET **13644-01 EXPWJAC37L GRAY 2648**

Version Number 1.3 Revision Date 03/29/2014

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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	:	13644-01 EXPWJAC37L GRAY 2648
Product code	:	VC10007059
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Aluminate (Al(OH)63-), (OC-6-11)-, magnesium carbonate hydroxide (2:6:1:4)	11097-59-9	1 - 5
Zinc borate	1332-07-6	1 - 5
Quartz	14808-60-7	0.1 - 1
Titanium dioxide	13463-67-7	0.1 - 1
Antimony trioxide	1309-64-4	1 - 5
Calcium carbonate	1317-65-3	10 - 30

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.

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Eyes	: Resin particles, like other inert materials, are mechanically irritating to eyes.
Skin	: Experience shows no unusual dermatitis hazard from routine handling
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 or 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	: not applicable
Lower explosion limit	: not applicable
Auto-ignition 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 contaminants.
Unusual Fire/Explosion Hazards	 May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under 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 not be allowed to enter drains, water courses or the soil.

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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)		
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
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
Quartz	0.025 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
	0.05 mg/m3	Recommended exposure limit (REL):	Respirable dust.	NIOSH
	0.1 mg/m3	Time Weighted Average (TWA):	Respirable dust.	OSHA Z1A
	0.1 mg/m3	Time Weighted Average (TWA):	Respirable.	Z3
	0.3 mg/m3	Time Weighted Average (TWA):	Total dust.	Z3
	0.1 mg/m3	Time Weighted Average (TWA):		MX OEL
Titanium dioxide	10 mg/m3	Time Weighted Average (TWA):		ACGIH
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):	Total dust.	OSHA Z1A
	10 mg/m3	Time Weighted Average (TWA):	as Ti	MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):	as Ti	MX OEL

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility
- solid
 pellets, powder
 GREY
 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

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Stability	:	The product is stable if stored and handled as prescribed.
Hazardous Polymerization	:	Will not occur.
Conditions to avoid	:	Keep away from oxidizing agents and open flame. To avoid thermal decomposition, do not overheat.
Incompatible Materials	:	Incompatible with strong acids and oxidizing agents., Avoid contact with acetal homopolymers and acetal copolymers during processing.
Hazardous decomposition products	:	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. Prolonged heating (approximately 30 minutes or more) above 392 °F (200 °C) or short term heating at 482 °F (250 °C) may result in product decomposition and evolution of carbon monoxide and hydrogen chloride.

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
11097-59-9	Aluminate (Al(OH)63-),	Irritant	Eyes, Skin.
	(OC-6-11)-, magnesium		
	carbonate hydroxide		
	(2:6:1:4)		
14808-60-7	Quartz	Systemic effects	Eyes, Respiratory system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
1309-64-4	Antimony trioxide	Systemic effects	Eyes, Respiratory system.
		sensitizer	Skin.
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
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

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14808-60-7	Quartz	no	1	no
13463-67-7	Titanium dioxide	no	2B	no
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:

Quartz 14808-60-7 This material in its free releasable form may cause respiratory tract irritation. Long-term exposure may cause coughing, chest pain, diminished chest expansion and possibly silicosis, which is a scarring of the lungs.

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).

	12. ECOLOGICAL INFORMATION
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.
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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ICAO/IATA	:	Not regulated for t	transporta	tion.			
IMO/IMDG (maritime)	:	Not regulated for t	ransporta	tion.			
	15	. REGULATORY	INFORM	IATION			
US Regulations:							
OSHA Status	:	Classified as hazar	rdous base	ed on compo	nents.		
TSCA Status	:	: All components of this product are listed on or exempt from the TSCA Inventory.					
US. EPA CERCLA Hazardo	us Sub	stances (40 CFR 30	2)				
not applicable							
California Propositio 65		WARNING! This California to cause chemical known to other reproductive	e cancer., o the State harm.	WARNING!	This prod	uct contains a	
SARA Title III Section 302	Extrem			1			
Unless specific chemicals are	e identi		on, this pi	oduct is Not	Applicable	e under this regul	
	Foxic C	Chemicals:	on, this p		Applicable	-	
Unless specific chemicals are SARA Title III Section 313 ⁷ Unless specific chemicals are <u>Chemical Name</u> ANTIMONY COMPOUN	Foxic C e identi IDS	Chemicals: fied under this secti	on, this pr	oduct is Not CAS-No. 609-64-4	Applicable Weigh 1.00 -	e under this regul t percent 5.00	
Unless specific chemicals are SARA Title III Section 313 ' Unless specific chemicals are Chemical Name ANTIMONY COMPOUN ZINC COMPOUNDSZIN	Foxic C e identi IDS	Chemicals: fied under this secti	on, this pr C	roduct is Not CAS-No. 309-64-4 32-07-6	Applicable Weigh 1.00 - 1.00 -	e under this regul t percent 5.00 5.00	
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Unless specific chemicals are SARA Title III Section 313 ' Unless specific chemicals are Chemical Name ANTIMONY COMPOUN ZINC COMPOUNDSZIN ZINC COMPOUNDS Canadian Regulations: National Pollutant Re Chemical Name Antimony trioxide	Foxic C e identi IDS C COM	Chemicals: fied under this secti MPOUNDS	on, this pr 13 13 55 CAS-No. 1309-64-4	oduct is Not CAS-No. 009-64-4 32-07-6 37-05-1	Applicable Weigh 1.00 - 0.10 - 0.10 -	e under this regul t percent 5.00 5.00 1.00	
Unless specific chemicals are SARA Title III Section 313 ' Unless specific chemicals are Chemical Name ANTIMONY COMPOUN ZINC COMPOUNDSZIN ZINC COMPOUNDS Canadian Regulations: National Pollutant Re Chemical Name	Foxic C e identi IDS C COM	Chemicals: fied under this secti MPOUNDS	on, this pr 13 13 55 CAS-No.	oduct is Not CAS-No. 009-64-4 32-07-6 37-05-1	Applicable Weigh 1.00 - 1.00 - 0.10 -	e under this regul t percent 5.00 5.00 1.00	

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WHMIS Classification : D2A WHMIS Ingredient Disclosure List CAS-No. 1309-64-4 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** : 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.