MATERIAL SAFETY DATA SHEET **BRUSHED ALUMINUM PK8**

Version Number 1.1 Revision Date 07/03/2012

Page 1 of 8 Print Date 8/27/2012

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone:Emergency telephone:		1 (440) 930-1000 or 1 (866) POLYONE CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	BRUSHED ALUMINUM PK8
Product code	:	CC10128205
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight percent
8-Oxa-3,5-dithia-4-stannatetradecanoic acid,	57583-35-4	1 - 5
10-ethyl-4,4-dimethyl-7-oxo-, 2-ethylhexyl		
ester		
Stannane, methyltris(2-	57583-34-3	1 - 5
ethylhexyloxycarbonylmethylthio)-		
Titanium dioxide	13463-67-7	1 - 5
Aluminum	7429-90-5	5 - 10
Mica	12001-26-2	5 - 10

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

: Particulates, like other inert materials can be mechanically irritating. Excessive inhalation of product vapors, especially during heating or

Page 2 of 8

Print Date 8/27/2012

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET BRUSHED ALUMINUM PK8

Version Number 1.1 Revision Date 07/03/2012 processing, may be irritating to respiratory system. Ingestion May be harmful if swallowed. Eyes Particulates, like other inert materials can be mechanically irritating. : : Experience shows no unusual dermatitis hazard from routine handling. Skin Chronic exposure : Refer to Section 11 for Toxicological Information. **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 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 Fullface self-contained breathing apparatus (SCBA) used in positive : pressure mode should be worn to prevent inhalation of airborne Procedures

contaminants. Unusual Fire/Explosion Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen : (NOx), other hazardous materials, and smoke are all possible. May Hazards emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions.

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 :

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MATERIAL SAFETY DATA SHEET **BRUSHED ALUMINUM PK8**

ion Number 1.1 sion Date 07/03/2012	Page Print Date 8/27/
Methods for cleaning up	 be allowed to enter drains, water courses or the soil. 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 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. EX	POSURE 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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MATERIAL SAFETY DATA SHEET **BRUSHED ALUMINUM PK8**

Version Number 1.1 Revision Date 07/03/2012 Page 4 of 8 Print Date 8/27/2012

Components	Value	Exposure time	Exposure type	List:
Aluminum	1 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
	10 mg/m3	Recommended exposure limit (REL):	Total	NIOSH
	5 mg/m3	Recommended exposure limit (REL):	Respirable.	NIOSH
	5 mg/m3	Recommended exposure limit (REL):	Welding fume or pyrophoric powder. as Al	NIOSH
	15 mg/m3	PEL:	Total dust. as Al	OSHA Z1
	5 mg/m3	PEL:	Respirable dust. as Al	OSHA Z1
	15 mg/m3	Time Weighted Average (TWA):	Total dust. as Al	OSHA Z1A
	5 mg/m3	Time Weighted Average (TWA):	Respirable dust. as Al	OSHA Z1A
	5 mg/m3	Time Weighted Average (TWA):	Pyrophoric powder. as Al	OSHA Z1A
	5 mg/m3	Time Weighted Average (TWA):	Fume. as Al	OSHA Z1A
	5 mg/m3	Time Weighted Average (TWA):	Welding fume.	MX OEL
	10 mg/m3	Time Weighted Average (TWA):	Dust.	MX OEL
	5 mg/m3	Time Weighted Average (TWA):	Pyrophoric powder.	MX OEL
Mica	3 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
	3 mg/m3	Recommended exposure limit (REL):	Respirable.	NIOSH
	3 mg/m3	Time Weighted Average (TWA):	Respirable dust.	OSHA Z1A
	3 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

: solid : pellets : GREY Evaporation rate : Not applicable Specific Gravity : Not determined Bulk density : Not established Bulk density

: Not established

5/8

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MATERIAL SAFETY DATA SHEET **BRUSHED ALUMINUM PK8**

: very faint

Version Number 1.1 Revision Date 07/03/2012

Odour

Melting point/range Boiling Point: Water solubility	: Not determined Vapour density : not applicable : not applicable pH : not applicable : insoluble					
	10. STABILITY AND REACTIVITY					
Stability	: Stable					
Hazardous Polymerization	: Will not occur.					
Conditions to avoid	: Keep away from oxidizing agents and open flame. To avoid therm decomposition, do not overheat.					
Incompatible Materials	 Avoid contact with strong oxidizers. Also, avoid contact with acet or acetal copolymers and with amine containing materials during processing. At processing conditions, these materials are mutually destructive and involve rapid degradation. Thoroughly purge and mechanically clean processing equipment to avoid even trace quantities of these materials from coming in contact with each othe Prevent cross contamination of feedstocks. 					
Hazardous decomposition products	 Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), hydrogen chloride (HCl), 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
57583-35-4	8-Oxa-3,5-dithia-4-	Irritant	Eyes, Skin.
	stannatetradecanoic acid,		
	10-ethyl-4,4-dimethyl-7-		
	oxo-, 2-ethylhexyl ester		
57583-34-3	Stannane, methyltris(2-	Irritant	Eyes, Skin.
	ethylhexyloxycarbonylmet		
	hylthio)-		
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
7429-90-5	Aluminum	Irritant	Skin, Respiratory system.
		Systemic effects	Eyes, Skin, Respiratory
			system.
12001-26-2	Mica	Systemic effects	Respiratory system.

Page 5 of 8 Print Date 8/27/2012

: not applicable

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Vapour pressure

MATERIAL SAFETY DATA SHEET **BRUSHED ALUMINUM PK8**

Version Number 1.1 Revision Date 07/03/2012 Page 6 of 8 Print Date 8/27/2012

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
57583-34-3	Stannane, methyltris(2- ethylhexyloxycarbonylmet hylthio)-	Oral LD50	920 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
13463-67-7	Titanium dioxide	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.

12. ECOLOGICAL INFORMATION

Persistence and degradabi	ty : Not readily biodegradable.	
Environmental Toxicity	: Chemicals are not readily available as they are bound within the polymer matrix.	
Bioaccumulation Potentia	: Chemicals are not readily available as they are bound within the polymer matrix.	
Additional advice	: no data available	
	13. DISPOSAL CONSIDERATIONS	T
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.	

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MATERIAL SAFETY DATA SHEET **BRUSHED ALUMINUM PK8**

Version Number 1.1 Revision Date 07/03/2012 Page 7 of 8 Print Date 8/27/2012

	14. TRANSPOR	T INFOR	RMATIO	N		
U.S. DOT Classification	: Not regulated for	or transpo	ortation.			
CAO/IATA	: Refer to specifi	c regulati	on.			
MO/IMDG (maritime)	: Refer to specifi	c regulati	on.			
	15. REGULATOR	RY INFO	RMATIO	ON		
JS Regulations:						
OSHA Status	Classified as he	ardous h	acad on a	omnonante		
	: Classified as ha			-		
TSCA Status	: All component TSCA Inventor		product ar	e listed on	or exen	npt from the
JS. EPA CERCLA Hazardo	us Substances (40 CFR	302)				
not applicable						
California Propositio 65	n : Not applicable					
65 SARA Title III Section 302 I	Extremely Hazardous Su		s product	is Not App	olicable	under this reş
65 SARA Title III Section 302 I Unless specific chemicals are	Extremely Hazardous Su		s product	is Not App	blicable	under this reį
65 SARA Title III Section 302 I Juless specific chemicals are SARA Title III Section 313 7	Extremely Hazardous Su e identified under this se Toxic Chemicals:	ection, this	-			
65 SARA Title III Section 302 I Juless specific chemicals are SARA Title III Section 313 T Juless specific chemicals are Chemical Name	Extremely Hazardous Su e identified under this se Foxic Chemicals: e identified under this se	ection, this ection, this	s product CAS-N	is Not Apr	olicable Weight	under this reg
65 SARA Title III Section 302 I Juless specific chemicals are SARA Title III Section 313 T Juless specific chemicals are	Extremely Hazardous Su e identified under this se Foxic Chemicals: e identified under this se	ection, this ection, this	s product	is Not Apr	blicable	under this reg
65 GARA Title III Section 302 I Juless specific chemicals are SARA Title III Section 313 T Juless specific chemicals are Chemical Name ALUMINUM (FUME OR OR DUST)	Extremely Hazardous Su e identified under this se Foxic Chemicals: e identified under this se	ection, this ection, this	s product CAS-N	is Not Apr	olicable Weight	under this reg
65 GARA Title III Section 302 I Juless specific chemicals are GARA Title III Section 313 T Juless specific chemicals are Chemical Name ALUMINUM (FUME OR OR DUST) Canadian Regulations:	Extremely Hazardous Su e identified under this se Foxic Chemicals: e identified under this se	ection, this ection, this FUME	s product CAS-N	is Not Apr	olicable Weight	under this reg
65 GARA Title III Section 302 I Juless specific chemicals are GARA Title III Section 313 T Juless specific chemicals are Chemical Name ALUMINUM (FUME OR OR DUST) Canadian Regulations:	Extremely Hazardous Su e identified under this se Toxic Chemicals: <u>e identified under this se</u> DUST)ALUMINUM (ection, this ection, this FUME	s product CAS-N 7429-90	is Not Apr o. -5 Weight	blicable Weight 5.00 -	under this reg
65 SARA Title III Section 302 I Juless specific chemicals are SARA Title III Section 313 T Juless specific chemicals are Chemical Name ALUMINUM (FUME OR OR DUST) Canadian Regulations: National Pollutant Re	Extremely Hazardous Su e identified under this se Toxic Chemicals: e identified under this se DUST)ALUMINUM (lease Inventory (NPRI)	ection, this ection, this FUME	s product CAS-N 7429-90	is Not Apr o. 0-5	blicable Weight 5.00 -	under this reg percent 10.00

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MATERIAL SAFETY DATA SHEET **BRUSHED ALUMINUM PK8**

Version Number 1.1 Revision Date 07/03/2012

Page 8 of 8 Print Date 8/27/2012

			0.10 - 1.00	
Rutile, antimony chromium	buff	68186-90-3	0.10 - 1.00	
WHMIS Classification WHMIS Ingredient Di				
CAS-No. 7429-90-5 12001-26-2 57583-34-3				
DSL		ponents of this product a es List (DSL) or are exe		Domestic
ational Inventories:				
Australia AICS	: Not deter	rmined		
China IECS	: Not deter	rmined		
Europe EINECS	: Not deter	rmined		
Japan ENCS	: Not deter	rmined		
Korea KECI	: Not deter	rmined		
Philippines PICCS	: Not deter	rmined		
	16. OTI	HER 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.