MATERIAL SAFETY DATA SHEET CHROMIUM FROST IM 968370 ABS 633

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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	:	CHROMIUM FROST IM 968370 ABS 633
Product code	:	CC10187637
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Formamide, N,N'-1,6-hexanediylbis[N-	124172-53-8	5 - 10
(2,2,6,6-tetramethyl-4-piperidinyl)-		
Aluminum	7429-90-5	1 - 5
Rutile (TiO2)	1317-80-2	1 - 5
Titanium dioxide	13463-67-7	1 - 5
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	: Resin particles, like other inert materials, can be mechanically irritating.
Ingestion Eyes	May be harmful if swallowed.Resin particles, like other inert materials, are mechanically irritating to

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Skin	eyes.Experience shows no unusual dermatitis hazard from routine handli	ng.
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 doubt seek medical advice.	s of
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 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 Suitable extinguishing media	not applicableCarbon 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.	/e
Unusual Fire/Explosion Hazards	: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.	
	5. 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.	ıot
Methods for cleaning up	: Clean up promptly by sweeping or vacuum. Package all material i	n

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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	POSU	RE 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.

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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
Rutile (TiO2)	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
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



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	10 mg/m3	Time Weighted Avera (TWA):	age as T	i	MX OEI
	20 mg/m3	20 mg/m3 Short Term Exposure Limit (STEL):		as Ti	
	9. PHYSI(CAL AND CHEMICAI	PROPERTIES		
					NT . 11 1.1
Form	: solid		Evapouration rate	:	Not applicable
Appearance	: pelle		Specific Gravity	:	Not determined
Colour	: GRE		Bulk density	:	Not established
Odour	: very		Vapour pressure	:	not applicable
Melting point/range			Vapour density	:	not applicable
Boiling Point:		: not applicable pH		:	not applicable
Water solubility	: insol				
0.1.11		STABILITY AND REA			
Stability	: 1	The product is stable if sto	bred and handled as	presc	ribed.
Hazardous Polymerization	: V	: Will not occur.			
Conditions to avoid		: Keep away from oxidizing agents and open flame. To avoid thermal decomposition, do not overheat.			
		: Incompatible with strong acids and oxidizing agents.			
Incompatible Materials	: Iı	ncompatible with strong	acids and oxidizing a	agent	s.

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
124172-53-8	Formamide, N,N'-1,6-	Irritant	Eyes.
	hexanediylbis[N-(2,2,6,6-		
	tetramethyl-4-piperidinyl)-		
7429-90-5	Aluminum	Irritant	Skin, Respiratory system.
		Systemic effects	Eyes, Skin, Respiratory
			system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
12001-26-2	Mica	Systemic effects	Respiratory system.

LC50 / LD50

This product contains the following components which, in their pure form, have the following toxicity data:



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CAS-No.	Chemical Name	Route	Value	Species
124172-53-8	Formamide, N,N'-1,6-	LC50	> 5.0 mg/l	rat
	hexanediylbis[N-(2,2,6,6-	Oral LD50	> 2,000 mg/kg	rat
	tetramethyl-4-piperidinyl)-			

Carcinogenicity

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This product contains the following components which, in their pure form, have the following carcinogenicity data:

CAS-No.	Chemical Name	OSHA	IARC	NTP
1317-80-2	Rutile (TiO2)	no	2B	no
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 degradability : Not readily biodegradable.				
: Chemicals are not readily available as they are bound within the polymer matrix.				
: Chemicals are not readily available as they are bound within the polymer matrix.				
: no data available				
13. DISPOSAL CONSIDERATIONS				
: 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.				
: 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				
: Not regulated for transportation.				

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ICAO/IATA	: Refer to sp	pecific regulation.		
IMO/IMDG (maritime)	: Refer to sp	pecific regulation.		
	15. REGULA	TORY INFORMAT	ION	
US Regulations:				
OSHA Status	: Classified	as hazardous based on	components.	
TSCA Status	: All compo TSCA Inv	onents of this product a entory.	are listed on or ex	empt from the
US. EPA CERCLA Hazardo	us Substances (40	CFR 302)		
not applicable				
California Proposition 65		G! This product conta to cause cancer.	ins a chemical kn	own to the State of
SARA Title III Section 302 I	Extremely Hazardo	ous Substance		
Unless specific chemicals are	e identified under t	his section, this produc	et is Not Applicab	le under this regula
-		_		-
SARA Title III Section 313	Foxic Chemicals:			
Unless specific chemicals are	e identified under t	his section this produc	et is Not Applicab	le under this regula
Chemical Name		CAS-	No. Weig	ht percent
ALUMINUM (FUME OR OR DUST)	DUST)ALUMINU	UM (FUME 7429-9	1.00	- 5.00
Canadian Regulations:				
National Pollutant Re	lassa Invantory (N			
Chemical Name	icase inventory (iv	CAS-No.	Weight	NPRI ID#
Aluminum		7429-90-5	percent 1.00 - 5.00	
		· ·		
WHMIS Classification	on : D2A			

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CAS-No. 7429-90-5		
DSL	:	All of the components of this product are listed on the Canadian Inventories or are exempt. However, at least one component of this product is on the Canadian Non-Domestic Substances List (NDSL). Quantity use in Canada is restricted by regulations.
National Inventories:		
Australia AICS	:	Not determined
China IECS	:	Not determined
Europe EINECS	:	Listed
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.