MATERIAL SAFETY DATA SHEET UV INTERKAL BROWN HM PP

Version Number 1.1 Revision Date 03/13/2014

Product Use

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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	:	UV INTERKAL BROWN HM PP
Product code	:	CC10128875
Chemical Name	:	Mixture
CAS-No.	:	Mixture

- : Mixture
 - **Industrial Applications** :

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Phenol, 2-(2H-benzotriazol-2-yl)-4,6-	25973-55-1	1 - 5
bis(1,1-dimethylpropyl)-		
1,6-Hexanediamine, N,N'-bis(2,2,6,6- tetramethyl-4-piperidinyl)-,polymer with	70624-18-9	5 - 10
2,4,6-trichloro-1,3,5-triazine, reaction		
products		
Chrome yellow (Lead chromate pigment)	1344-37-2	1 - 5
Titanium dioxide	13463-67-7	1 - 5
Iron oxide	1309-37-1	5 - 10
Molybdate orange (Lead chromate pigment)	12656-85-8	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 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

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Inhalation	: Resin particles, like other inert materials, can be mechanically
Ingestion	irritating. : 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
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
Initiation	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	: Fullface self-contained breathing apparatus (SCBA) used in positive
Procedures	pressure mode should be worn to prevent inhalation of airborne
	contaminants.
Unusual Fire/Explosion Hazards	: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen
Hazards	(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

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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.			
		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	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:
Chrome yellow (Lead	0.005	Time Weighted Average		OSHA
chromate pigment)	mg/m3	(TWA):		
	0.0025	OSHA Action level:		OSHA
	mg/m3			
	0.05	Time Weighted Average	as Pb	ACGIH
	mg/m3	(TWA):		
	0.05	Time Weighted Average		OSHA
	mg/m3	(TWA):		
	0.03	OSHA Action level:		OSHA
	mg/m3		DI	0.0114 714
	0.05	Time Weighted Average	as Pb	OSHA Z1A
	mg/m3	(TWA):		MV OFI
	0.15	Time Weighted Average	Dust and fume. as Pb	MX OEL
T	mg/m3	(TWA): PEL:	Europ	OSUA 71
Iron oxide	10 mg/m3		Fume.	OSHA Z1
	5 mg/m3	Time Weighted Average (TWA):	as Fe	MX OEL
	10 mg/m3	Short Term Exposure Limit (STEL):	as Fe	MX OEL
	5 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
Molybdate orange (Lead chromate pigment)	0.5 mg/m3	Recommended exposure limit (REL):	as Cr	NIOSH
<u>P-8</u>	0.5 mg/m3	PEL:	as Cr	OSHA Z1
	0.005	Time Weighted Average		OSHA
	mg/m3	(TWA):		
	0.0025	OSHA Action level:		OSHA
	mg/m3			
	0.05	Time Weighted Average	as Pb	ACGIH
	mg/m3	(TWA):		
	0.05	Time Weighted Average		OSHA
	mg/m3	(TWA):		
	0.03 mg/m3	OSHA Action level:		OSHA
	0.05	Time Weighted Average	as Pb	OSHA Z1A
	mg/m3	(TWA):		
	0.15	Time Weighted Average	Dust and fume. as Pb	MX OEL
	mg/m3	(TWA):		
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 ZIA
	10 mg/m3	Time Weighted Average	as Ti	MX OEL
	20 mg/m3	(TWA): Short Term Exposure Limit (STEL):	as Ti	MX OEL

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Form	: solid	Evapouration rate	: Not applicable
Appearance	: pellets	Specific Gravity	: Not determined
Colour	: BROWN	Bulk density	: Not established
Odour	: very faint	Vapour pressure	: not applicable
Melting point/range	: Not determined	Vapour density	: not applicable
Boiling Point:	: not applicable	pН	: not applicable
Water solubility	: insoluble		
Stability	. The product is stab	le if stored and handled as	presentoed.
Hazardous Polymerization	: Will not occur.		
2			
Conditions to avoid : Keep away from oxidizing agents and open flame. To avoid thermal decomposition, do not overheat.			
Incompatible Materials	atible Materials : Incompatible with strong acids and oxidizing agents.		
Incompatible Materials	Is : Incompatible with strong acids and oxidizing agents.		
Hazardous decomposition	: 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.

<u>Toxicity Overview</u> This product contains the following components which in their pure form have the following characteristics:

CAS-No.	Chemical Name	Effect	Target Organ
25973-55-1	Phenol, 2-(2H-	Systemic effects	Kidney, Liver, reproductive
	benzotriazol-2-yl)-4,6-		system.
	bis(1,1-dimethylpropyl)-		
70624-18-9	1,6-Hexanediamine, N,N'-	Irritant	Eyes, Skin, Respiratory
	bis(2,2,6,6-tetramethyl-4-		system.
	piperidinyl)-,polymer with		
	2,4,6-trichloro-1,3,5-		
	triazine, reaction products		
1344-37-2	Chrome yellow (Lead	Systemic effects	central nervous system (CNS),
	chromate pigment)		reproductive system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
1309-37-1	Iron oxide	Systemic effects	Respiratory system.
12656-85-8	Molybdate orange (Lead	Irritant	Eyes, Skin.
	chromate pigment)		
		Systemic effects	central nervous system (CNS),
		-	reproductive system.

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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
70624-18-9	1,6-Hexanediamine, N,N'-	Oral LD50	> 2,000 mg/kg	rat
	bis(2,2,6,6-tetramethyl-4-	Dermal LD50	> 3,000 mg/kg	rat
	piperidinyl)-,polymer with			
	2,4,6-trichloro-1,3,5-			
	triazine, reaction products			
12656-85-8	Molybdate orange (Lead	Oral LD50	5,000 mg/kg	rat
	chromate pigment)			

Carcinogenicity

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

CAS-No.	Chemical Name	OSHA	IARC	NTP
1344-37-2	Chrome yellow (Lead	yes	1	no
	chromate pigment)			
13463-67-7	Titanium dioxide	no	2B	no
12656-85-8	Molybdate orange (Lead	yes	1	no
	chromate pigment)			

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:

Chrome yellow (Lead chromate pigment) 1344-37-2 Systemic effects include neurotoxic, teratogenic, fetotoxic and reproductive with abdominal pain, anemia, pallor, decreased hand grip strength with characteristic "wrist drop".

Additional Health Hazard Information:

Molybdate orange (Lead chromate pigment) 12656-85-8 Systemic effects include neurotoxic, teratogenic, fetotoxic and reproductive with abdominal pain, anemia, pallor, decreased hand grip strength with characteristic "wrist drop".

12. ECOLOGICAL INFORMATION		
Persistence and degradability	: Not readily biodegradable.	
Environmental Toxicity	: Chemicals are not readily available as they are bound within the polymer matrix.	

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Additional addition	no data available	
Additional advice	no data avallable	
	13. DISPOSAL CONSIDERATIONS	
Product	Like most thermoplastic plastics the produ possible recycling is preferred to disposal generator of waste material has the respon classification, transportation and disposal applicable federal, state/provincial and loc	or incineration. The sibility for proper waste in accordance with
Contaminated packaging	Recycling is preferred when possible. The material has the responsibility for proper v transportation and disposal in accordance state/provincial and local regulations.	waste classification,
	14. TRANSPORT INFORMATION	
U.S. DOT Classification	Not regulated for transportation.	
ICAO/IATA	Refer to specific regulation.	
IMO/IMDG (maritime)	Refer to specific regulation.	
	5. REGULATORY INFORMATION	
US Regulations:		
OSHA Status	Classified as hazardous based on compone	ents.
TSCA Status	All components of this product are listed TSCA Inventory.	on or exempt from the
US. EPA CERCLA Hazardou	bstances (40 CFR 302)	
not applicable		
California Proposition 65	WARNING! This product contains a cher California to cause cancer., WARNING! chemical known to the State of California other reproductive harm.	This product contains a
SARA Title III Section 302 E	naly Hozardova Substance	

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

SARA Title III Section 313 Toxic Chemicals:

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

Cher	mical Name	CAS-No.	Weight percent
CHF	ROMIUM VI COMPOUNDSCHROMIUM VI	1344-37-2	1.00 - 5.00
CON	MPOUNDSCHROMIUM COMPOUNDSLEAD		
CON	MPOUNDSLEAD COMPOUNDS, INORGANIC		
CHF	ROMIUM III COMPOUNDSCHROMIUM III	12656-85-8	5.00 - 10.00
CON	MPOUNDSLEAD COMPOUNDS		

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight	NPRI ID#
		percent	
Chrome yellow (Lead chromate pigment)	1344-37-2	1.00 - 5.00	
Molybdate orange (Lead chromate pigment)	12656-85-8	5.00 - 10.00	

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.
1344-37-2
1309-37-1
12656-85-8

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	:	Not determined
Philippines PICCS	:	Not determined

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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.