MATERIAL SAFETY DATA SHEET RAPESEED YELLOW RAL 1021

Version Number 1.0 Revision Date 05/04/2005 Page 1 of 7 Print Date 11/17/2011

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone:Emergency telephone:number	Product Stewardship (770) 271-5902 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name :	RAPESEED YELLOW RAL 1021
Product code :	CC10069585
Chemical Name :	Mixture
CAS-No. :	Mixture
Product Use :	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Chrome yellow (Lead chromate pigment)	1344-37-2	5 - 10
Cadmium sulfide	1306-23-6	10 - 30
Titanium dioxide	13463-67-7	10 - 30

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 Ingestion Eyes	 Resin particles, like other inert materials, can be mechanically irritating. May be harmful if swallowed. 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.

PolyOne

MATERIAL SAFETY DATA SHEET RAPESEED YELLOW RAL 1021

Version Number 1.0 Revision Date 05/04/2005 Page 2 of 7 Print Date 11/17/2011

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 see medical attention.				
	5. FIRE-FIGHTING MEASURES				
Flash point	: Not applicable				
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media	 Not applicable Not applicable Not applicable Carbon dioxide blanket, water spray, dry powder, foamnone. 				
Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	 Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. 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.				
Methods for cleaning up	: Clean up promptly by sweeping or vacuum. Package all material in plastic, cardboard or metal containers for disposal. Refer to Section 1 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.				

PolyOne.

MATERIAL SAFETY DATA SHEET RAPESEED YELLOW RAL 1021

Version Number 1.0 Revision Date 05/04/2005 Page 3 of 7 Print Date 11/17/2011

Storage

: Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.

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)

Components	Value	Exposure time	Exposure type	List:
Cadmium sulfide	0.005	Time Weighted Average	as Cd	OSHA
	mg/m3	(TWA):		
	0.0025	OSHA Action level:	as Cd	OSHA
	mg/m3			
	0.002	Time Weighted Average	Respirable fraction. as	ACGIH
	mg/m3	(TWA):	Cd	
	0.01	Time Weighted Average	as Cd	ACGIH
	mg/m3	(TWA):		
Chrome yellow (Lead	0.05	Time Weighted Average		OSHA
chromate pigment)	mg/m3	(TWA):		
	0.03	OSHA Action level:		OSHA
	mg/m3			
	0.01	Time Weighted Average	as Cr	ACGIH
	mg/m3	(TWA):		
	0.05	Time Weighted Average	as Pb	ACGIH
	mg/m3	(TWA):		
	1 mg/m3	PEL:	as Cr	OSHA Z1
Titanium dioxide	10 mg/m3	Time Weighted Average		ACGIH
	_	(TWA):		
	15 mg/m3	PEL:	Total dust.	OSHA Z1

9. PHYSICAL AND CHEMICAL PROPERTIES

MATERIAL SAFETY DATA SHEET RAPESEED YELLOW RAL 1021

Version Number 1.0 Revision Date 05/04/2005 Page 4 of 7 Print Date 11/17/2011

Form	: Solid	Evaporation rate	: Not applicable
Appearance	: Pellets	Specific Gravity:	: Not determined
Color	: YELLOW	Bulk density	: Not established
Odor	: Very faint	Vapor pressure	: Not applicable
Melting point/range	: Not determined	Vapour density	: Not applicable
Boiling Point:	: Not applicable	pH	: Not applicable
Water solubility	: 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 thermal decomposition, do not overheat.
Incompatible Materials	:	Incompatible with strong acids and oxidizing agents.
Hazardous decomposition products	:	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.

Toxicity Overview

This product contains the following components which in their pure form have the following characteristics:

CAS-No.	Chemical Name	Effect	Target Organ
1344-37-2	Chrome yellow (Lead	Systemic effects	central nervous system (CNS),
	chromate pigment)		reproductive system.
1306-23-6	Cadmium sulfide	Highly Toxic	Refer to LC50 / LD50 Data on
			MSDS
13463-67-7	Titanium dioxide	Systemic effects	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
1306-23-6	Cadmium sulfide	Oral LD50	7,080 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
1344-37-2	Chrome yellow (Lead	no	1	no
	chromate pigment)			

PolyOne.

MATERIAL SAFETY DATA SHEET RAPESEED YELLOW RAL 1021

Version Number 1.0

Revision Date 05/04/2005

Page 5 of 7 Print Date 11/17/2011

1306-23-6 Ca	dmium sulfide	yes	1	no	
IARC Carcinogen Classific 1 - The component is carcin 2A - The component is pro 2B - The component is pos	nogenic to humans. bably carcinogenic to hu				
NTP Carcinogen Classifica 1 - The component is know 2 - The component is reaso	n to be a human carcinog				
Additional Health Hazard Chrome yellow (Lead chr fetotoxic and reproductiv characteristic ''wrist drop Additional Health Hazard	omate pigment) 1344 e with abdominal pain, y''.				
Cadmium sulfide 1306-2 absorption leads to liver a	23-6 Can produce rapiond kidney damage.	d and sometimes fatal	pulmonary ede	ma, chronic	
Paraistanaa and daaradahili					
Persistence and degradabili		-			
Environmental Toxicity		Chemicals are not readily available as they are bound within the polymer matrix.			
Bioaccumulation Potential	: Chemicals are polymer matrix	not readily available as x.	they are bound w	within the	
Additional advice	: No data availal	ble			
	13. DISPOSAL (CONSIDERATIONS			
Product	possible recycl generator of wa classification, t	moplastic plastics the p ing is preferred to disp aste material has the re- transportation and disp eral, state/provincial and	osal or incinerations of the second sponsibility for provident of the second seco	on. The roper waste e with	
Contaminated packaging	has the response	eferred when possible. sibility for proper waste accordance with appli- ations.	e classification, tr	ansportation	
	14. TRANSPOR	T INFORMATION			
U.S. DOT Classification	: Not regulated f	or transportation.			

PolyOne.

MATERIAL SAFETY DATA SHEET RAPESEED YELLOW RAL 1021

Version Number 1.0 Revision Date 05/04/2005

Page 6 of 7 Print Date 11/17/2011

15 DECHI ATADY NEADMATIAN						
15. REGULATORY INFORMATION						
US Regulations:						
OSHA Status	: Classified as haze	Classified as hazardous based on components.				
TSCA Status	: All components Inventory.	All components of this product are listed on or exempt from the TSCA Inventory.				
US. EPA CERCLA Hazardou	is Substances (40 CFR 30	02)				
Not applicable						
California Proposition : WARNING! This product contains a chemical known to the State of California to cause cancer., WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.						
65	chemical known other reproductiv	to the State of Califor e harm.				
65 SARA Title III Section 302 E Not applicable SARA Title III Section 313 T	chemical known other reproductiv Extremely Hazardous Sub	to the State of Califor e harm. stance	nia to cause bi	rth defects or		
65 SARA Title III Section 302 E Not applicable SARA Title III Section 313 T Chemical Name	chemical known other reproductiv Extremely Hazardous Sub Yoxic Chemicals:	to the State of Californe harm.	nia to cause bi	rth defects or		
65 SARA Title III Section 302 E Not applicable SARA Title III Section 313 T	chemical known other reproductiv Extremely Hazardous Sub Yoxic Chemicals:	to the State of Califor e harm. stance	nia to cause bi	rth defects or		
65 SARA Title III Section 302 E Not applicable SARA Title III Section 313 T Chemical Name CADMIUM COMPO CHROMIUM VI CO COMPOUNDS, INO	chemical known other reproductiv Extremely Hazardous Sub Yoxic Chemicals:	to the State of Californe harm.	weight 22.04	rth defects or		
65 SARA Title III Section 302 E Not applicable SARA Title III Section 313 T Chemical Name CADMIUM COMPO CHROMIUM VI CO COMPOUNDS, INO COMPOUNDS	chemical known other reproductiv Extremely Hazardous Sub Yoxic Chemicals: DUNDS MPOUNDSLEAD RGANICLEAD	to the State of Californe harm.	Weight 22.04	rth defects or		
65 SARA Title III Section 302 E Not applicable SARA Title III Section 313 T Chemical Name CADMIUM COMPO CHROMIUM VI CO COMPOUNDS, INO COMPOUNDS Canadian Regulations: National Pollutant Rele	chemical known other reproductiv Extremely Hazardous Sub Yoxic Chemicals:	to the State of Californe harm. Instance CAS-No. 1306-23-6 1344-37-2	Weight 22.04 6.83	%		
65 SARA Title III Section 302 E Not applicable SARA Title III Section 313 T Chemical Name CADMIUM COMPO CHROMIUM VI CO COMPOUNDS, INO COMPOUNDS	chemical known other reproductiv Extremely Hazardous Sub Yoxic Chemicals: DUNDS MPOUNDSLEAD RGANICLEAD	to the State of Californe harm.	Weight 22.04	rth defects or		
65 SARA Title III Section 302 E Not applicable SARA Title III Section 313 T Chemical Name CADMIUM COMPO CHROMIUM VI CO COMPOUNDS, INO COMPOUNDS Canadian Regulations: National Pollutant Rel Chemical Name	chemical known other reproductiv Extremely Hazardous Sub Yoxic Chemicals: DUNDS MPOUNDSLEAD RGANICLEAD	to the State of Califor e harm. stance CAS-No. 1306-23-6 1344-37-2 CAS-No.	Weight 22.04 6.83 Weight %	%		
65 SARA Title III Section 302 E Not applicable SARA Title III Section 313 T Chemical Name CADMIUM COMPO CHROMIUM VI CO COMPOUNDS, INO COMPOUNDS Canadian Regulations: National Pollutant Rel Chemical Name Aluminum oxide	chemical known other reproductiv Extremely Hazardous Sub 'oxic Chemicals: OUNDS MPOUNDSLEAD RGANICLEAD ease Inventory (NPRI)	to the State of Califor e harm. ostance CAS-No. 1306-23-6 1344-37-2 CAS-No. 1344-28-1	Weight 22.04 6.83 Weight % 0.22	% NPRI ID# 13		
65 SARA Title III Section 302 E Not applicable SARA Title III Section 313 T Chemical Name CADMIUM COMPO CHROMIUM VI CO COMPOUNDS, INO COMPOUNDS Canadian Regulations: National Pollutant Rel Chemical Name Aluminum oxide Cadmium sulfide	chemical known other reproductiv Extremely Hazardous Sub 'oxic Chemicals: OUNDS MPOUNDSLEAD RGANICLEAD ease Inventory (NPRI)	to the State of Califor e harm. ostance CAS-No. 1306-23-6 1344-37-2 CAS-No. 1344-28-1 1306-23-6	Weight 22.04 6.83 Weight % 0.22 22.04	% % NPRI ID# 13 233		
65 SARA Title III Section 302 E Not applicable SARA Title III Section 313 T Chemical Name CADMIUM COMPO CHROMIUM VI CO COMPOUNDS, INO COMPOUNDS, INO COMPOUNDS Canadian Regulations: National Pollutant Rele Chemical Name Aluminum oxide Cadmium sulfide Chrome yellow (Lead ch	chemical known other reproductiv Extremely Hazardous Sub 'oxic Chemicals: OUNDS MPOUNDSLEAD RGANICLEAD ease Inventory (NPRI)	to the State of Califor e harm. ostance CAS-No. 1306-23-6 1344-37-2 CAS-No. 1344-28-1 1306-23-6 1344-37-2	Weight 22.04 6.83 Weight % 0.22 22.04 6.83	% % NPRI ID# 13 233 235		

MATERIAL SAFETY DATA SHEET RAPESEED YELLOW RAL 1021

Version Number 1.0 Revision Date 05/04/2005 Page 7 of 7 Print Date 11/17/2011

CAS-No.
1306-23-6
1344-37-2

:

DSL

All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.

National Inventories:

T impplies Tiees	·	Listed
Philippines PICCS		Listed
Korea KECI	:	Listed
Japan ENCS	:	Listed
Europe EINECS	:	Listed
China IECS	:	Listed
Australia AICS	:	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 when used in combination with any other materials and/or in any particular process or processing conditions.