MATERIAL SAFETY DATA SHEET EMPIRE RED 966221/451UV

Version Number 1.0 Revision Date 01/25/2012 Page 1 of 6 Print Date 1/30/2012

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	:	EMPIRE RED 966221/451UV
Product code	:	CC10157204
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight percent
Formamide, N,N'-1,6-hexanediylbis[N-	124172-53-8	1 - 5
(2,2,6,6-tetramethyl-4-piperidinyl)-		

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

: Inhalation, Ingestion, Skin contact		
: 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.		
: Experience shows no unusual dermatitis hazard from routine handling.		
: Refer to Section 11 for Toxicological Information.		

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MATERIAL SAFETY DATA SHEET EMPIRE RED 966221/451UV

Version Number 1.0 Revision Date 01/25/2012 Page 2 of 6 Print Date 1/30/2012

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.
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. FIRE-FIGHTING MEASURES
Flash point	: not applicable
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	 not applicable not applicable not applicable Carbon dioxide blanket, Water spray, Dry powder, Foam. Fullface self-contained breathing apparatus (SCBA) used in positiv 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.
	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 n 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 13 of this MSDS for proper disposal methods.
	7. HANDLING AND STORAGE
Handling	: Take measures to prevent the build up of electrostatic charge. Heat

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MATERIAL SAFETY DATA SHEET EMPIRE RED 966221/451UV

Version Number 1.0 Revision Date 01/25/2012

Page 3 of 6 Print Date 1/30/2012

Storage	:	only in areas with appropriate exhaust ventilation.Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.	
8. EX	POSUI	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.	
Exposure limit(s)			

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility
- : pellets
 : RED
 : very faint
 : Not determined
 : not applicable
 : insoluble

: solid

Evaporation 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	
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	: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen

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MATERIAL SAFETY DATA SHEET EMPIRE RED 966221/451UV

Version Number 1.0 Revision Date 01/25/2012

Page 4 of 6 Print Date 1/30/2012

products

(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
124172-53-8	Formamide, N,N'-1,6- hexanediylbis[N-(2,2,6,6- tetramethyl-4-piperidinyl)-	Irritant	Eyes.

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
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)-			

Persistence and degradability	: Not readily biodegradable.
Environmental Toxicity	: Chemicals are not readily available as they are bound within the polymer matrix.
Bioaccumulation Potential	: Chemicals are not readily available as they are bound within the polymer matrix.
Additional advice	: no data available
	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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MATERIAL SAFETY DATA SHEET EMPIRE RED 966221/451UV

Version Number 1.0 Revision Date 01/25/2012

Page 5 of 6 Print Date 1/30/2012

U.S. DOT Classification	:	Not regulated for transportation.
ICAO/IATA	:	Refer to specific regulation.
IMO/IMDG (maritime)	:	Refer to specific regulation.
	15.	REGULATORY INFORMATION
US Regulations:		
OSHA Status	: (Classified as hazardous based on components.
TSCA Status		All components of this product are listed on or exempt from the TSCA Inventory.
US. EPA CERCLA Hazardous	Subst	ances (40 CFR 302)
not applicable		
California Duora aritian	_	Net evel; eshie
California Proposition 65	:	Not applicable
SARA Title III Section 302 Ext	remel	ly Hazardous Substance
		ied under this section, this product is Not Applicable under this regulatio
Unless specific chemicals are re	ientin	ed under uns section, uns product is toot Appreable under uns regulatio
SARA Title III Section 313 To	xic Cł	nemicals:
Unless specific chemicals are ic	lentifi	ied under this section, this product is Not Applicable under this regulatio
Canadian Regulations:		
National Pollutant Relea	.se Inv	ventory (NPRI)
not applicable		• • •
	:	D2B
WHMIS Classification		
WHMIS Classification	:	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.

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MATERIAL SAFETY DATA SHEET EMPIRE RED 966221/451UV

Version Number 1.0 Revision Date 01/25/2012 Page 6 of 6 Print Date 1/30/2012

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.