MATERIAL SAFETY DATA SHEET 23453 GN STD PE UV Smartbatch

Version Number 1.0 Revision Date 01/04/2007

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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	:	23453 GN STD PE UV Smartbatch
Product code	:	CC10095187
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
1,6-Hexanediamine,	70624-18-9	5 - 10
N,N'-bis(2,2,6,6-tetramethyl-4-piperidinyl)-,		
polymer with 2,4,6-trichloro-1,3,5-triazine,		
reaction products		
Decanedioic acid,	52829-07-9	5 - 10
bis(2,2,6,6-tetramethyl-4-piperidinyl) ester		
Iron oxide	1309-37-1	1 - 5

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	: 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.

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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 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 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.
	6. A	CCIDENTAL 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 13 of this MSDS for proper disposal methods.

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	7.	HANDLING AND STORA	GE		
Handling	: Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation.				
Storage		Leep containers dry and tightly nd contamination. Keep in a c		absorption	
8. H	EXPOSURE	CONTROLS / PERSONAL	PROTECTION		
Respiratory protection	: N	to personal respiratory protect	ive equipment normally r	equired.	
Eye/Face Protection	: S	afety glasses with side-shields			
Hand protection	: P	rotective gloves.			
Skin and body protection	: L	ong sleeved clothing.			
Additional Protective Measures	: S	afety 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:	
Iron oxide	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	
	9. PHYSI	CAL AND CHEMICAL PRO	OPERTIES		
Form Appearance Color Odor Melting point/range Boiling Point: Water solubility	: Not	ets Specif EEN Bulk of traint Vapor determined Vapou applicable pH	ïc Gravity:: Notlensity: Notpressure: Notur density: Not	applicable determined established applicable applicable applicable	
	10.6	STABILITY AND REACTIV			

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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
70624-18-9	1,6-Hexanediamine,	Irritant	Eyes, Skin, Respiratory system.
	N,N'-bis(2,2,6,6-tetrameth		
	yl-4-piperidinyl)-,polymer		
	with		
	2,4,6-trichloro-1,3,5-triazi		
	ne, reaction products		
52829-07-9	Decanedioic acid,	Irritant	Eyes.
	bis(2,2,6,6-tetramethyl-4-p		
	iperidinyl) ester		
1309-37-1	Iron oxide	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
70624-18-9	1,6-Hexanediamine,	Oral LD50	> 2,000 mg/kg	rat
	N,N'-bis(2,2,6,6-tetrameth	Dermal LD50	> 3,000 mg/kg	rat
	yl-4-piperidinyl)-,polymer			
	with			
	2,4,6-trichloro-1,3,5-triazi			
	ne, reaction products			
52829-07-9	Decanedioic acid,	Oral LD50	3,700 mg/kg	rat
	bis(2,2,6,6-tetramethyl-4-p	Dermal LD50	> 3,100 mg/kg	rabbit
	iperidinyl) ester			

12. ECOLOGICAL INFORMATION

Persistence and degradability

: Not readily biodegradable.

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polymer matrix. Bioaccumulation Potential : Chemicals are not readily available as they are bound within polymer matrix. Additional advice : No data available 13. DISPOSAL CONSIDERATIONS Product : Like most thermoplastic plastics the product can be recycled. possible recycling is preferred to disposal or incineration. The generator of waste material has the responsibility for proper vclassification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations. Contaminated packaging : Recycling is preferred when possible. The generator of waste has the responsibility for proper waste classification, transport and disposal in accordance with applicable federal, state/provincial and local regulations. U.S. DOT Classification : Not regulated for transportation. ICAO/IATA (air) : Refer to specific regulation. IMO / IMDG (maritime) : Refer to specific regulation. US Regulations: OSHA Status : Classified as hazardous based on components.	n Number 1.0 n Date 01/04/2007	Page 5 Print Date 11/25/2
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California Proposition : Not applicable	S. EPA CERCLA Hazardous	Substances (40 CFR 302)
	Not applicable	
		: Not applicable

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SARA Title III Section 302 Extremely Hazardous Substance

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

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight %	NPRI ID#
Phthalocyanine green	1328-53-6	1.00 - 5.00	71

WHMIS Classification : D2B

WHMIS Ingredient Disclosure List

CAS-N	No.
1309-3	37-1
1328-5	53-6

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

:

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

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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.