

MATERIAL SAFETY DATA SHEET

XN-418.G001-7000 Silver Calypso

 Version Number 1.1
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 Revision Date 06/11/2007
 Print Date 11/29/2011

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION

33587 Walker Road, Avon Lake, OH 44012

Telephone : Product Stewardship (440) 930-1395

Emergency telephone : CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure

or accident).

Product name : XN-418.G001-7000 Silver Calypso

Product code : EM10009184 Chemical Name : Mixture CAS-No. : Mixture

Product Use : Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Quartz	14808-60-7	0.1 - 1
Titanium dioxide	13463-67-7	1 - 5
Calcium carbonate	1317-65-3	30 - 60

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, Eyes, 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 : Avoid skin contact. Product contains unreacted organic peroxides

which may cause mild skin irritation.

Chronic exposure : Refer to Section 11 for Toxicological Information.



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Medical Conditions Aggravated by Exposure:

: Individuals with chronic respiratory disorders (i.e. asthma, chronic bronchitis, etc.) may be adversely affected by any airborne contaminant.

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 : Not applicable
Lower explosion limit : Not applicable
Autoignition temperature : Not relevant

Suitable extinguishing media : Carbon 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.

Unusual Fire/Explosion

Hazards

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 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.

7. HANDLING AND STORAGE

Handling : Take measures to prevent the build up of electrostatic charge. Heat



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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. Keep away from heat. Excessive storage temperature and humidity can degrade product performance. Store below 149 $^{\circ}$ F (65 $^{\circ}$ C). Rotate stock. Product shelf

life is normally 1 year maximum.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory protection : No personal respiratory protective equipment normally required when

handling the product itself. See "Engineering Measures" section below for precautions to be taken when heating or processing this

material.

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. During

processing and cross-linking, product can give off by-products such as alcohols, acetophenone, alpha-methylstyrene, acetone, methane, and ethane. By-product vapors may be flammable. User must provide necessary precautions such as adequate ventilation to prevent accumulation and ignition of vapors. Adequate ventilation and/or appropriate respiratory protection may also be necessary to minimize

employee exposure to processing vapors.

Exposure limit(s)



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Components	Value	Exposure time	Exposure type	List:
Calcium carbonate	5 mg/m3 PEL:		Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3 Time Weighted			MX OEL
		(TWA):		
	20 mg/m3	Short Term Exposure Limit		MX OEL
		(STEL):		
Quartz	0.025	Time Weighted Average	Respirable fraction.	ACGIH
	mg/m3	(TWA):		
	0.1 mg/m3	Time Weighted Average	Respirable.	Z3
		(TWA):		
	0.3 mg/m3	Time Weighted Average	Total dust.	Z3
		(TWA):		
	0.1 mg/m3	Time Weighted Average		MX OEL
		(TWA):		
Titanium dioxide 10 mg/m3		Time Weighted Average		ACGIH
		(TWA):		
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average	as Ti	MX OEL
		(TWA):		
	20 mg/m3	Short Term Exposure Limit	as Ti	MX OEL
		(STEL):		

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Solid Evaporation rate Not applicable Appearance : pellets Specific Gravity Not determined Color : GREY Bulk density Not established : characteristic Vapour pressure Not applicable Odour Melting point/range : Not determined Vapour density Not applicable Boiling Point: Not applicable Not applicable pН

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 : Strong acids, Oxidizing agents, Reducing agents

Hazardous decomposition

products

: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. Traces

of alcohols, acetophenone, alpha-methylstyrene, acetone, methane, ethane, or other byproducts may be liberated during processing or

decomposition.



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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
14808-60-7	Quartz	Systemic effects	Eyes, Respiratory system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
1317-65-3	Calcium carbonate	Irritant	Eyes, Skin.
		Systemic effects	Eyes, Skin, Respiratory system.

Carcinogenicity

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

CAS-No.	Chemical Name	OSHA	IARC	NTP
14808-60-7	Quartz	no	1	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.

Additional Health Hazard Information:

Quartz 14808-60-7 This material in its free releasable form may cause respiratory tract irritation. Long-term exposure may cause coughing, chest pain, diminished chest expansion and possibly silicosis, which is a scarring of the lungs.

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 : Not applicable

13. DISPOSAL CONSIDERATIONS



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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

U.S. DOT Classification : Not regulated for transportation.

ICAO/IATA (air) : 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 Substances (40 CFR 302)

Not applicable

California Proposition : WARNING! This product contains a chemical known to the State of

65 California to cause cancer.

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



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Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Not applicable

WHMIS Classification : D2A

DSL : All components of this product are on the Canadian Domestic

Substances List (DSL) or are exempt.

National Inventories:

Australia AICS : Not determined

China IECS : Not determined

Europe EINECS : Not determined

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.