

MATERIAL SAFETY DATA SHEET

## **BLUEBERRY FROST**

Version Number 1.0 Revision Date 08/22/2002 Page 1 of 6 Print Date 11/5/2011

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

NON-EMERGENCY TELEPHONE	:	Product Stewardship (770) 271-5902
Emergency telephone number	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	BLUEBERRY FROST
Product code	:	CC10021659
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

#### 2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Components	CAS-No.	Weight %
Titanium dioxide	13463-67-7	1 - 5
Aluminum	7429-90-5	5 - 10

#### **3. HAZARDS IDENTIFICATION**

#### **EMERGENCY OVERVIEW**

This mixture has not been evaluated as a whole. 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

<b>Routes of Exposure:</b>	: Inhalation, Ingestion, Skin contact			
Acute exposure				
Inhalation Ingestion Eyes	<ul> <li>Resin particles, like other inert materials, can be mechanically irritating.</li> <li>May be harmful if swallowed.</li> <li>Resin particles, like other inert materials, are mechanically irritating to eyes.</li> </ul>			
Skin	: Experience shows no unusual dermatitis hazard from routine handling.			
Chronic exposure	: Refer to Section 11 for Toxicological Information.			
Medical Conditions Aggravated by Exposure:	: None known.			



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	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 case doubt, seek medical advice.	es of
Ingestion	: Do not induce vomiting without medical advice. When symptoms persist, or in all cases of doubt, seek medical advice.	5
Eyes	: Rinse immediately with plenty of water, also under the eyelids, fo least 15 minutes. If eye irritation persists, seek medical attention.	r at
Skin	: Wash off with soap and plenty of water. If skin irritation persists medical attention.	seek
	5. FIRE-FIGHTING MEASURES	
Flash point	: Not applicable	
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media	<ul> <li>Not applicable</li> <li>Not applicable</li> <li>Not relevant</li> <li>Carbon dioxide blanket, Water spray, dry powder, foam.</li> </ul>	
Special Fire Fighting Procedures	: Fullface self-contained breathing apparatus (SCBA) used in positi pressure mode should be worn to prevent inhalation of airborne contaminants.	ve
Unusual Fire/Explosion Hazards	: None	
	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 be allowed to enter drains, water courses or the soil.	not
Methods for cleaning up	: Clean up promptly by sweeping or vacuum. Package all material plastic, cardboard or metal containers for disposal. Refer to Sectio of this MSDS for proper disposal methods.	
	7. HANDLING AND STORAGE	
Handling	: Take measures to prevent the build up of electrostatic charge. He only in areas with appropriate exhaust ventilation.	at
Storage	: Keep containers dry and tightly closed to avoid moisture absorption	on



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8. F	XPOSURE	nd contamination. Keep in a c CONTROLS / PERSONAL	• •	
Respiratory protection		Vo personal respiratory protect		equired.
Eye/Face Protection		afety glasses with side-shields		•
		Protective gloves.	-	
Hand protection		-		
Skin and body protection	: 1	long sleeved clothing.		
Additional Protective Measures	: S	afety shoes.		
General Hygiene Considerations		Handle in accordance with good Vash hands before breaks and		afety practice
Engineering measures		Heat only in areas with appropr ppropriate exhaust ventilation		Provide
Exposure limit(s) Components	Value	Exposure time	Exposure type	List:
Aluminum	10 mg/m3	Time Weighted Average (TWA):	Dust.	ACGIH
	5 mg/m3	Time Weighted Average (TWA):	Welding fume. as Al	ACGIH
		PEL:	Total dust. as Al	OSHA Z1
Aluminum	15 mg/m3			
	15 mg/m3 5 mg/m3	PEL:	Respirable dust. as Al	OSHA Z1
Titanium dioxide			Respirable dust. as Al Total dust.	OSHA Z1 ACGIH
	5 mg/m3	PEL: Time Weighted Average		
Titanium dioxide	5 mg/m3 10 mg/m3 15 mg/m3	PEL: Time Weighted Average (TWA):	Total dust. Total dust.	ACGIH
Titanium dioxide	5 mg/m3 10 mg/m3 15 mg/m3 9. PHYSI : Solid : Pella : BLU : Very : Not	PEL:         Time Weighted Average (TWA):         PEL:         CAL AND CHEMICAL PRO         d       Evapo         ets       Specif         JE       Bulk or         v faint       Vapor         determined       Vapor         applicable       pH	Total dust.         Total dust.         OPERTIES         oration rate       : Not         fic Gravity       : Not         lensity       : Not         oressure       : Not         othensity       : Not         othensity       : Not	ACGIH
Titanium dioxide Titanium dioxide Form Appearance Color Odor Melting point/range Boiling Point:	5 mg/m3 10 mg/m3 15 mg/m3 9. PHYSIO : Solid : Pelle : BLU : Very : Not : Not : Inso	PEL:         Time Weighted Average (TWA):         PEL:         CAL AND CHEMICAL PRO         d       Evapo         ets       Specif         JE       Bulk or         v faint       Vapor         determined       Vapor         applicable       pH	Total dust.         Total dust.         OPERTIES         oration rate       : Not         fic Gravity       : Not         or pressure       : Not         · pressure       : Not         · density       : Not         · density       : Not	ACGIH OSHA Z1 applicable. determined established applicable applicable



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decomposition, do not overheat.         Incompatible Materials       :         Intervention       :         Intervention       :         Intervention       :         Intervention       :         Interventing Materind Materials       :	sion Number 1.0 ision Date 08/22/200	2			Page 4 Print Date 11/5/2
Hazardous decomposition products       : Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.         IL TOXICOLOGICAL INFORMATION         This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on exhealth data for the individual components which comprise the mixture.         Toxicity Overview         This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on exhealth data for the individual components which in their pure form have the following characteristic         CAS-No.         Chemical Name         Effect         Titanium dioxide         Systemic effects         Respiratory system.         7429-90-5         Aluminum         Initiating dioxide         Systemic effects         Respiratory system.         7429-90-5         Aluminum         Initiation dioxide         Systemic effects         Respiratory system.         7429-90-5         Aluminum         Initiation dioxide         Systemic effects	Conditions to avoid				d open flame. To avoid thermal
products       (NOx), other hazardous materials, and smoke are all possible.         II. TOXICOLOGICAL INFORMATION         This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on exhealth data for the individual components which comprise the mixture.         Toxicity Overview         Toxicity Overview         Toxicity Overview         This product contains the following components which in their pure form have the following characteristic         CAS-No.         Chemical Name       Effect       Target Organ         13463-67-7         Titanium dioxide       Systemic effects       Respiratory system.         7429-90-5         Aluminum       Irritant       Skin, Respiratory system.         7429-90-5         Aluminum       Irritant       Skin, Respiratory system.         7429-90-5         IL ECOLOGICAL INFORMATION         Persistence and degradability       :       Not readily biodegradable.         Environmental Toxicity       :       Chemicals are not readily available as they are bound within the matri of the polymer.         Bioaccumulation Potential       :       Chemicals are not readily ava	Incompatible Materials	s : In	compatible w	with strong acids and c	oxidizing agents.
This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on ex 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 characteristi         CAS-No.       Chemical Name       Effect       Target Organ         13463-67-7       Titanium dioxide       Systemic effects       Respiratory system.         7429-90-5       Aluminum       Irritant       Skin, Respiratory system.         7429-90-5       Aluminum       Irritant       Skin, Respiratory system.         9       Systemic effects       Eyes, Skin, Respiratory system.         9       Social are not readily available as they are bound within the matri of the polymer.         8       Social are	Hazardous decomposit products				
Indicate the individual components which comprise the mixture.         Toxicity Overview         This product contains the following components which in their pure form have the following characteristic         CAS-No.       Chemical Name       Effect       Target Organ         13463-67-7       Titanium dioxide       Systemic effects       Respiratory system.         7429-90-5       Aluminum       Irritant       Skin, Respiratory system.         Systemic effects       Eyes, Skin, Respiratory system.         Product contains the following components which in their pure form have the following characteristic         12. ECOLOGICAL INFORMATION         Presistence and degradability       I. Not readily biodegradable.         Environmental Toxicity       :       Chemicals are not readily available as they are bound within the matri of the polymer.         Bioaccumulation Potential       :       Chemicals are not readily available as they are bound within the matri of the polymer.         Additional advice       :       No data available.         III DISPOSAL CONSIDERATIONS         Product       :       Like most thermoplastics the product can be recycled. Where possible, recycling is preferred to dispo		11. TO	XICOLOGI	CAL INFORMATIC	DN
CAS-No.         Chemical Name         Effect         Target Organ           13463-67-7         Titanium dioxide         Systemic effects         Respiratory system.           7429-90-5         Aluminum         Irritant         Skin, Respiratory system.           Systemic effects         Eyes, Skin, Respiratory system.           Persistence and degradability         :         Not readily biodegradable.           Environmental Toxicity         :         Chemicals are not readily available as they are bound within the matri of the polymer.           Bioaccumulation Potential         :         Chemicals are not readily available as they are bound within the matri of the polymer.           Additional advice         :         No data available.           Image: State available.         Image: State available.	health data for the indi Toxicity Overview	vidual componer	nts which con	nprise the mixture.	
13463-67-7       Titanium dioxide       Systemic effects       Respiratory system.         7429-90-5       Aluminum       Irritant       Skin, Respiratory system.         Systemic effects       Eyes, Skin, Respiratory system.         Systemic effects       Eyes, Skin, Respiratory system.         Persistence and degradability       : Not readily biodegradable.         Environmental Toxicity       : Chemicals are not readily available as they are bound within the matri of the polymer.         Bioaccumulation Potential       : Chemicals are not readily available as they are bound within the matri of the polymer.         Additional advice       : No data available.         Isomother the polymer.         Product       : Like most thermoplastics 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 materi has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.		-			
7429-90-5       Aluminum       Irritant       Skin, Respiratory system.         Systemic effects       Eyes, Skin, Respiratory system         I2. ECOLOGICAL INFORMATION         Persistence and degradability       : Not readily biodegradable.         Environmental Toxicity         : Chemicals are not readily available as they are bound within the matri of the polymer.         Bioaccumulation Potential       : Chemicals are not readily available as they are bound within the matri of the polymer.         Additional advice       : No data available.         I3. DISPOSAL CONSIDERATIONS         Product       : Like most thermoplastics 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 materi has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.					
Systemic effects         Eyes, Skin, Respiratory systemic systemic           12. ECOLOGICAL INFORMATION           Persistence and degradability           ECOLOGICAL INFORMATION           Persistence and degradability           Environmental Toxicity           Chemicals are not readily available as they are bound within the matrix of the polymer.           Bioaccumulation Potential         :         Chemicals are not readily available as they are bound within the matrix of the polymer.           Additional advice         :         No data available.           ISPOSAL CONSIDERATIONS           Product         :         Like most thermoplastics 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 materi has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.			ue		
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Environmental Toxicity       : Chemicals are not readily available as they are bound within the matri of the polymer.         Bioaccumulation Potential       : Chemicals are not readily available as they are bound within the matri of the polymer.         Additional advice       : No data available. <b>13. DISPOSAL CONSIDERATIONS</b> Product       : Like most thermoplastics 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.		12. E	COLOGICA	AL INFORMATION	[
of the polymer.         Bioaccumulation Potential       : Chemicals are not readily available as they are bound within the matri of the polymer.         Additional advice       : No data available.         13. DISPOSAL CONSIDERATIONS         Product       : Like most thermoplastics 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 materi has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.	Persistence and degrad	ability : No	ot readily bio	degradable.	
of the polymer.         Additional advice       : No data available.         13. DISPOSAL CONSIDERATIONS         Product       : Like most thermoplastics 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 materia has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.	Environmental Toxicit				s they are bound within the matri
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has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.	Product	po ge cla	ssible, recycl nerator of wa assification, t	ling is preferred to dis aste material has the r ransportation and disp	sposal or incineration. The esponsibility for proper waste posal in accordance with
14. TRANSPORT INFORMATION	Contaminated packagi	ha	s the respons d disposal in	ibility for proper was accordance with appl	te classification, transportation
		14. 7	RANSPOR	T INFORMATION	



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U.S. DOT / CA TDG Classification	:	Not regulated for	or transportation.		
ICAO/IATA	:	Not regulated for	or transportation.		
IMO / IMDG	:	Not regulated for	or transportation.		
	15	. REGULATOF	RY INFORMATIC	DN	
US Regulations:					
OSHA Status	:	Classified as ha	zardous based on c	omponents.	
TSCA Status	:	All components exempt.	s of this product are	listed on the TSCA inventory	or are
US. EPA CERCLA Hazardous	s Subs	stances (40 CFR	302)		
Not applicable					
SARA Title III Section 313 To	oxic C	Themicals:			
		Chemicals:	CAS No	Waight %	
SARA Title III Section 313 To Chemical Name ALUMINUM (	e		CAS-No. 7429-90-5	Weight % 05.87	
Chemical Name ALUMINUM (	e				
Chemical Name	e (FUM				
Chemical Name ALUMINUM ( Canadian Regulations:	e (FUM	E OR DUST) D2B			
Chemical Name ALUMINUM ( Canadian Regulations: WHMIS Classification	e (FUM	E OR DUST) D2B			
Chemical Name ALUMINUM ( Canadian Regulations: WHMIS Classification WHMIS Ingredient Dis CAS-No.	e (FUM	E OR DUST) D2B			
Chemical Name ALUMINUM ( Canadian Regulations: WHMIS Classification WHMIS Ingredient Dis CAS-No. 7429-90-5	e (FUM n : sclosu	E OR DUST) D2B re List			
Chemical Nam ALUMINUM ( Canadian Regulations: WHMIS Classification WHMIS Ingredient Dis CAS-No. 7429-90-5 DSL	e (FUM n : sclosu	E OR DUST) D2B re List			



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 Europe EINECS
 :
 Not determined.

 Japan ENCS
 :
 Not determined.

 Korea KECI
 :
 Listed.

 Philippines PICCS
 :
 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 used in combination with any other materials or in any process, unless specified in the text.