

## **GREEN V3**

Version Number 1.0 Revision Date 12/05/2018 Page 1 of 16 Print Date 12/10/2018

# SAFETY DATA SHEET

#### **GREEN V3**

## **Section 1. Identification**

GHS product identifier : GREEN V3
Chemical name : Mixture
CAS number : Mixture
Other means of identification : CC10295079

**Product type** : solid

Relevant identified uses of the substance or mixture and uses advised against

**Product use** : Industrial applications. Plastics.

Supplier's details : POLYONE CORPORATION

33587 Walker Road, Avon Lake, OH 44012

1 (440) 930-1000 or 1 (866) POLYONE

Emergency telephone number

(with hours of operation)

CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or

accident).

## Section 2. Hazards identification

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. After handling, always wash hands thoroughly with soap and water.

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard

Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and

other users of this product.

Classification of the substance or

mixture

Not classified.

**GHS** label elements

Signal word : No signal word.

1/16



## **GREEN V3**

Version Number 1.0 Page 2 of 16 Revision Date 12/05/2018 Print Date 12/10/2018

**Hazard statements** : No known significant effects or critical hazards.

#### **Precautionary statements**

General : Not applicable.
Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.
Supplemental label elements : None known.
Hazards not otherwise classified : None known.

## Section 3. Composition/information on ingredients

Substance/mixture: MixtureChemical name: MixtureOther means of identification: CC10295079

#### **CAS number/other identifiers**

Ingredient name	%	CAS number
Silica, amorphous	10 - 25	7631-86-9
-		
Boric acid (H3BO3)	0 - 0.3	10043-35-3
, , ,		

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

#### Description of necessary first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the

upper and lower eyelids. Check for and remove any contact lenses.



## **GREEN V3**

Version Number 1.0 Page 3 of 16 Revision Date 12/05/2018 Print Date 12/10/2018

Get medical attention if irritation occurs.

**Inhalation**: Remove victim to fresh air and keep at rest in a position comfortable

for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical

surveillance for 48 hours.

**Skin contact**: Flush contaminated skin with plenty of water. Remove contaminated

clothing and shoes. Get medical attention if symptoms occur.

**Ingestion**: Wash out mouth with water. Remove victim to fresh air and keep at

rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by

medical personnel. Get medical attention if symptoms occur.

#### Most important symptoms/effects, acute and delayed

#### **Potential acute health effects**

Eye contact: No known significant effects or critical hazards.Inhalation: No known significant effects or critical hazards.Skin contact: No known significant effects or critical hazards.Ingestion: No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

Eye contact: No specific data.Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

#### Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms

may be delayed. The exposed person may need to be kept under

medical surveillance for 48 hours.

**Specific treatments** : No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without

suitable training.

See toxicological information (Section 11)

## **Section 5. Firefighting measures**



#### **GREEN V3**

Version Number 1.0 Page 4 of 16 Revision Date 12/05/2018 Print Date 12/10/2018

#### **Extinguishing media**

Suitable extinguishing media Unsuitable extinguishing media In case of fire, use water spray (fog), foam, dry chemical or  $CO_2$ .

: None known.

Specific hazards arising from the chemical

No specific fire or explosion hazard.

Hazardous thermal decomposition products

Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides sulfur oxides

halogenated compounds metal oxide/oxides

Special protective actions for firefighters Promptly isolate the scene by removing all persons from the vicinity

of the incident if there is a fire. No action shall be taken involving any

personal risk or without suitable training.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and selfcontained breathing apparatus (SCBA) with a full face-piece operated

in positive pressure mode.

## Section 6. Accidental release measures

## Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without

suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note

of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions**: Avoid dispersal of spilled material and runoff and contact with soil,

waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil

or air).

#### Methods and materials for containment and cleaning up

Small spill : Move containers from spill area. Vacuum or sweep up material and

place in a designated, labeled waste container. Dispose of via a

licensed waste disposal contractor.

Large spill : Move containers from spill area. Prevent entry into sewers, water



## **GREEN V3**

Version Number 1.0 Revision Date 12/05/2018 Page 5 of 16 Print Date 12/10/2018

courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

#### Precautions for safe handling

Protective measures Advice on general occupational hygiene Put on appropriate personal protective equipment (see Section 8).

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

# Section 8. Exposure controls/personal protection

#### **Control parameters**

#### Occupational exposure limits

Ingredient name	Exposure limits
Boric acid (H3BO3)	ACGIH TLV (2005-01-01) TWA 2 mg/m3 Form: Inhalable fraction STEL 6 mg/m3 Form: Inhalable fraction
Silica, amorphous	NIOSH REL (1994-06-01) TWA 6 mg/m3

**Appropriate engineering controls** 

: Good general ventilation should be sufficient to control worker

exposure to airborne contaminants.

**Environmental exposure controls** 

Emissions from ventilation or work process equipment should be

checked to ensure they comply with the requirements of



## **GREEN V3**

Version Number 1.0 Revision Date 12/05/2018

Page 6 of 16 Print Date 12/10/2018

environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

#### **Individual protection measures**

**Hygiene measures**: Wash hands, forearms and face thoroughly after handling chemical

products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety

showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used

when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a

higher degree of protection: safety glasses with side-shields.

## **Skin protection**

**Hand protection**: Chemical-resistant, impervious gloves complying with an approved

standard should be worn at all times when handling chemical products

if a risk assessment indicates this is necessary.

**Body protection**: Personal protective equipment for the body should be selected based

on the task being performed and the risks involved and should be

approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures

should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this

product.

**Respiratory protection**: Based on the hazard and potential for exposure, select a respirator that

meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper

fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

#### **Appearance**

Physical state: solid [Pellets.]Color: GREENOdor: Faint odor.Odor threshold: Not available.PH: Not available.Melting point: Not available.



## **GREEN V3**

Version Number 1.0 Page 7 of 16 Revision Date 12/05/2018 Print Date 12/10/2018

Boiling pointNot available.Flash pointNot available.Burning timeNot available.Burning rateNot available.Evaporation rateNot available.Flammability (solid, gas)Not available.

Lower and upper explosive : Lower: Not available. (flammable) limits : Upper: Not available.

Vapor pressure: Not available.Vapor density: Not available.Relative density: Not available.Solubility: Not available.Solubility in water: insoluble in water.

Partition coefficient: n-

octanol/water

Auto-ignition temperature: Not available.Decomposition temperature: Not available.SADT: Not available.

Viscosity : Dynamic: Not available.

Kinematic: Not available.

## Section 10. Stability and reactivity

**Reactivity**: No specific test data related to reactivity available for this product or

its ingredients.

Not available.

Chemical stability : Stable under recommended storage and handling conditions (see

Section 7).

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will

not occur.

**Conditions to avoid** : Keep away from extreme heat and oxidizing agents.

**Incompatible materials** : Keep away from strong acids.

Oxidizer.

**Hazardous decomposition** 

products

Under normal conditions of storage and use, hazardous decomposition

products should not be produced.

# Section 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.

#### Information on toxicological effects

#### **Acute toxicity**



## **GREEN V3**

Version Number 1.0 Revision Date 12/05/2018 Page 8 of 16 Print Date 12/10/2018

Product/ingredient name	Result	Species	Dose	Exposure		
Boric acid (H3BO3)						
	LD50 Oral	Rat	2,500 mg/kg	-		
Remarks - Inhalation:	No applicable to	No applicable toxicity data				
Remarks - Dermal:	No applicable toxicity data					
Silica, amorphous						
Remarks - Oral:	No applicable to	No applicable toxicity data				
Remarks - Inhalation:	No applicable toxicity data					
Remarks - Dermal:	No applicable to	oxicity data				

Conclusion/Summary : Mixture. Not fully tested.

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Boric acid (H3BO3)	Skin - Mild	Human		72 hrs	-
	irritant				
Silica, amorphous	Eyes - Mild	Rabbit		24 hrs	=
	irritant				

Conclusion/Summary

Skin:Mixture.Not fully tested.Eyes:Mixture.Not fully tested.Respiratory:Mixture.Not fully tested.

## **Sensitization**

Conclusion/Summary

Skin: Mixture.Not fully tested.Respiratory: Mixture.Not fully tested.

**Mutagenicity** 

**Conclusion/Summary**: Mixture.Not fully tested.

Carcinogenicity

Conclusion/Summary : Mixture.Not fully tested.

Classification

Ciubbilicuvoii					
Product/ingredient	OSHA	IARC	NTP		
name					
Silica, amorphous		3			

#### **Reproductive toxicity**

**Conclusion/Summary** : Mixture.Not fully tested.



## **GREEN V3**

Version Number 1.0 Page 9 of 16 Revision Date 12/05/2018 Print Date 12/10/2018

#### **Teratogenicity**

**Conclusion/Summary** : Mixture. Not fully tested.

#### **Specific target organ toxicity (single exposure)**

Not available.

## Specific target organ toxicity (repeated exposure)

Not available.

#### **Aspiration hazard**

Not available.

Information on likely routes of

exposure

Not available.

#### Potential acute health effects

Eye contact: No known significant effects or critical hazards.Inhalation: No known significant effects or critical hazards.Skin contact: No known significant effects or critical hazards.Ingestion: No known significant effects or critical hazards.

#### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: No specific data.Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

## **Short term exposure**

Potential immediate effects : Not available.
Potential delayed effects : Not available.

#### **Long term exposure**

Potential immediate effects : Not available.

Potential delayed effects : Not available.

#### **Potential chronic health effects**

**Conclusion/Summary** : Mixture.Not fully tested.



## **GREEN V3**

Version Number 1.0 Page 10 of 16 Revision Date 12/05/2018 Print Date 12/10/2018

General:No known significant effects or critical hazards.Carcinogenicity:No known significant effects or critical hazards.Mutagenicity:No known significant effects or critical hazards.Teratogenicity:No known significant effects or critical hazards.Developmental effects:No known significant effects or critical hazards.Fertility effects:No known significant effects or critical hazards.

#### Numerical measures of toxicity

#### **Acute toxicity estimates**

Not available.

## Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
Boric acid (H3BO3)			
	Acute LC50 75 Mg/l Marine water	Fish - Fish	96 h
Remarks - Acute - Fish:	Acute		
	Acute LC50 45.5 Mg/l Fresh water	Aquatic invertebrates.	48 h
		Crustaceans	
Remarks - Acute - Aquatic invertebrates.:	Acute		
	Acute LC50 0.133 Mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
Remarks - Acute - Aquatic invertebrates.:	Acute		
Remarks - Acute - Aquatic plants:	No applicable toxicity data		
	Chronic NOEC 2.1 Mg/l Fresh water	Fish - Fish	87 d
Remarks - Chronic - Fish:	Chronic		
	Chronic NOEC 6 Mg/l Fresh water	Aquatic invertebrates. Daphnia	21 d
Remarks - Chronic -	Chronic		
Aquatic invertebrates.:			
Silica, amorphous			
Remarks - Acute - Fish:	No applicable toxicity data		
Remarks - Acute - Aquatic	No applicable toxicity data		



## **GREEN V3**

Version Number 1.0 Revision Date 12/05/2018 Page 11 of 16 Print Date 12/10/2018

invertebrates.:	
Remarks - Acute - Aquatic	No applicable toxicity data
plants:	
Remarks - Chronic - Fish:	No applicable toxicity data
Remarks - Chronic -	No applicable toxicity data
Aquatic invertebrates.:	
GREEN V3	
Remarks - Acute - Aquatic	Chemicals are not readily available as they are bound within the polymer matrix.
invertebrates.:	

**Conclusion/Summary** 

: Chemicals are not readily available as they are bound within the

polymer matrix.

#### Persistence and degradability

**Conclusion/Summary** 

: Chemicals are not readily available as they are bound within the

polymer matrix.

**Conclusion/Summary** 

: Chemicals are not readily available as they are bound within the

polymer matrix.

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
Boric acid (H3BO3)	-1.09	_	low

#### **Mobility in soil**

Soil/water partition coefficient

(KOC)

Not available.

Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations

## Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered



## **GREEN V3**

Version Number 1.0 Revision Date 12/05/2018 Page 12 of 16 Print Date 12/10/2018

when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Acute hazardous waste "P" List: Not listed

United States - RCRA Toxic hazardous waste "U" List: Not listed

## Section 14. Transport information

U.S.DOT 49CFR Ground/Air/Water : Not regulated for transportation.

International Air

: Not classified as dangerous goods under transport regulations.

International Water

IMO/IMDG

ICAO/IATA

: Not classified as dangerous goods under transport regulations.

# Section 15. Regulatory information

U.S. Federal regulations : United States - TSCA 12(b) - Chemical export notification: None

of the components are listed.

United States - TSCA 4(a) - Final Test Rules: Not listed United States - TSCA 4(a) - ITC Priority list: Not listed United States - TSCA 4(a) - Proposed test rules: Not listed United States - TSCA 4(f) - Priority risk review: Not listed United States - TSCA 5(a) 2 Final significant reviews and a state of the state of

United States - TSCA 5(a)2 - Final significant new use rules: Not

listed

United States - TSCA 5(a)2 - Proposed significant new use rules:

Not listed

United States - TSCA 5(e) - Substances consent order: Not listed United States - TSCA 6 - Final risk management: Not listed United States - TSCA 6 - Proposed risk management: Not listed United States - TSCA 8(a) - Chemical risk rules: Not listed United States - TSCA 8(a) - Dioxin/Furane precusor: Not listed United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not

determined

United States - TSCA 8(a) - Preliminary assessment report

(PAIR): Listed Bismuth vanadium oxide (BiVO4)



**GREEN V3** 

Version Number 1.0 Revision Date 12/05/2018

Page 13 of 16 Print Date 12/10/2018

United States - TSCA 8(c) - Significant adverse reaction (SAR):

Not listed

United States - TSCA 8(d) - Health and safety studies: Not listed United States - EPA Clean water act (CWA) section 307 - Priority

pollutants: Listed Phosphoric acid, zinc salt (2:3)

Acrylonitrile

Phthalocyanine green

United States - EPA Clean water act (CWA) section 311 -

Hazardous substances: Listed

United States - EPA Clean air act (CAA) section 112 - Accidental

release prevention - Flammable substances: Not listed

United States - EPA Clean air act (CAA) section 112 - Accidental

release prevention - Toxic substances: Not listed

**United States - Department of commerce - Precursor chemical:** 

Not listed

Clean Air Act Section 112(b)

Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 Class I

**Substances** 

Clean Air Act Section 602 Class II

**Substances** 

**DEA List I Chemicals (Precursor** 

Chemicals)

**DEA List II Chemicals (Essential** 

Chemicals)

Listed

Not listed

Not listed

Not listed

Not listed

#### US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

**SARA 311/312** 

Classification Not applicable.

## Composition/information on ingredients

No products were found.

Name	<b>%</b>	Classification
Silica, amorphous	>= 10 - <= 25	Immediate (acute) health hazard
Boric acid (H3BO3)	> 0 - <= 0.3	Delayed (chronic) health hazard

#### **SARA 313**



## **GREEN V3**

Version Number 1.0 Page 14 of 16 Revision Date 12/05/2018 Print Date 12/10/2018

	Product name	CAS number	%
Form R - Reporting	Bismuth vanadium oxide	14059-33-7	1 - 3
requirements	(BiVO4)		
Supplier notification	Bismuth vanadium oxide	14059-33-7	1 - 3
	(BiVO4)		

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

**State regulations** 

Massachusetts: None of the components are listed.New York: None of the components are listed.New Jersey: None of the components are listed.Pennsylvania: The following components are listed:

Silica, amorphous

#### California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65. **United States inventory (TSCA 8b)** : All components are listed or exempted.

Canada inventory : At least one component is not listed in DSL but all such components

are listed in NDSL.

#### **International regulations**

#### **Inventory list**

Australia : Not determined.

Canada : At least one component is not listed in DSL but all such components

are listed in NDSL.

**China** : All components are listed or exempted.

**Europe inventory** : At least one component is not listed in EINECS but all such

components are listed in ELINCS.

Please contact your supplier for information on the inventory status of

this material.

Japan : Not determined.

New Zealand: All components are listed or exempted.Philippines: All components are listed or exempted.Republic of Korea: All components are listed or exempted.

Taiwan : Not determined.
Turkey : Not determined.

**United States** : All components are listed or exempted.



## **GREEN V3**

Version Number 1.0 Page 15 of 16 Revision Date 12/05/2018 Print Date 12/10/2018

## **Section 16. Other information**

#### **Hazardous Material Information System (U.S.A.)**

Health	/	0
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

**History** 

Date of printing: 12/10/2018Date of issue/Date of revision: 12/05/2018Date of previous issue: 00/00/0000

Version : 1.0

**Key to abbreviations** : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of

Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine

pollution)

UN = United Nations

**References** : Not available.

#### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Particularly this information may not be valid for such material used in conjunction with any other materials or in any process, unless specified in the text.



# **GREEN V3**

 Version Number 1.0
 Page 16 of 16

 Revision Date 12/05/2018
 Print Date 12/10/2018