

SIGNAL BLUE

Version Number 1.3 Revision Date 02/25/2019 Page 1 of 15 Print Date 06/01/2019

SAFETY DATA SHEET

SIGNAL BLUE

Section 1. Identification

GHS product identifier : SIGNAL BLUE

Chemical name: MixtureCAS number: MixtureOther means of identification: CC10203842Product type: liquid

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

Product use : Industrial applications. Plastics.

Supplier's details : POLYONE CORPORATION

ColorMatrix Group Inc.

680 North Rocky River Drive, Berea, Ohio, 44017-1628, USA

+1 216 622 0100

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 for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants 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. See sections 8 and 11 for special precautions. 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 BLUE

Version Number 1.3 Page 2 of 15 Revision Date 02/25/2019 Print Date 06/01/2019

Signal word : No signal word.

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: CC10203842

CAS number/other identifiers

Ingredient name	%	CAS number
Titanium dioxide	10 - 25	13463-67-7
Miscellaneous Compounds Distillates, petroleum, hydrotreated middle	1 - 3	Not available.

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



SIGNAL BLUE

Version Number 1.3 Page 3 of 15 Revision Date 02/25/2019 Print Date 06/01/2019

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

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

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)



SIGNAL BLUE

Version Number 1.3 Revision Date 02/25/2019 Page 4 of 15 Print Date 06/01/2019

Section 5. Firefighting measures

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

Hazardous thermal decomposition products

: In a fire or if heated, a pressure increase will occur and the container

may burst.

Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides 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 invo

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 : Stop leak if without risk. Move containers from spill area. Dilute with

water and mop up if water-soluble. Alternatively, or if water-

insoluble, absorb with an inert dry material and place in an appropriate



SIGNAL BLUE

Large spill

Version Number 1.3 Revision Date 02/25/2019

Page 5 of 15 Print Date 06/01/2019

waste disposal container. Dispose of via a licensed waste disposal

contractor.

Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash

spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section

1 for emergency contact information and Section 13 for waste

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
Titanium dioxide	OSHA PEL 1989 (1989-03-01) TWA 10 mg/m3 Form: Total dust OSHA PEL (1993-06-30)



SIGNAL BLUE

Version Number 1.3 Revision Date 02/25/2019 Page 6 of 15 Print Date 06/01/2019

		TWA 15 mg/m3 Form: Total dust ACGIH TLV (1996-05-18) TWA 10 mg/m3
Miscellaneous Compounds Distillates, petroleum, hydrotreated middle		None.
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 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 Eye/face protection	:	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. 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
Skin protection		higher degree of protection: safety glasses with side-shields.
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products
Body protection	:	if a risk assessment indicates this is necessary. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be
Other skin protection	:	approved by a specialist before handling this product. 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	:	product. 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.



SIGNAL BLUE

Version Number 1.3 Page 7 of 15 Revision Date 02/25/2019 Print Date 06/01/2019

Section 9. Physical and chemical properties

Appearance

Physical state liquid [liquid] Color **BLUE** Faint odor. Odor **Odor threshold** Not available. Not available. рH Not available. **Melting point Boiling point** Not available. Flash point Not available. **Burning time** Not available. **Burning rate** Not available. Not available. **Evaporation rate** 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- Not available.

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.

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: Under normal conditions of storage and use, hazardous decomposition



SIGNAL BLUE

Version Number 1.3 Page 8 of 15 Revision Date 02/25/2019 Print Date 06/01/2019

products 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

Product/ingredient name	Result	Species	Dose	Exposure	
Titanium dioxide					
Remarks - Oral:	No applicable toxic	city data			
	LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h	
	LD50 Dermal	Rabbit	> 5,000 mg/kg	-	
Miscellaneous Compounds Distillates, petroleum, hydrotreated middle					
Remarks - Oral:	No applicable toxicity data				
Remarks - Inhalation:	No applicable toxicity data				
Remarks - Dermal:	No applicable toxicity data				

Conclusion/Summary : Mixture.Not fully tested.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Titanium dioxide	Skin - Mild	Human		72 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



SIGNAL BLUE

Version Number 1.3 Page 9 of 15 Revision Date 02/25/2019 Print Date 06/01/2019

Conclusion/Summary : Mixture.Not fully tested.

Classification

Ī	Product/ingredient	OSHA	IARC	NTP
	name			
	Titanium dioxide		2B	

Reproductive toxicity

Conclusion/Summary : Mixture. Not fully tested.

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

Product/ingredient name	Result
Miscellaneous Compounds Distillates, petroleum,	ASPIRATION HAZARD - Category 1
hydrotreated middle	

Information on likely routes of : Not available.

exposure

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



SIGNAL BLUE

 Version Number 1.3
 Page 10 of 15

 Revision Date 02/25/2019
 Print Date 06/01/2019

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.

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

Route	ATE value
Inhalation (dusts and mists)	78.39 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium dioxide			
	Acute LC50 > 1,000 Mg/l Marine	Fish - Fish	96 h
	water		
Remarks - Acute - Fish:	Acute		
	Acute LC50 3 Mg/l Fresh water	Aquatic invertebrates.	48 h
		Crustaceans	
Remarks - Acute - Aquatic	Acute		
invertebrates.:			
	Acute LC50 6.5 Mg/l Fresh water	Aquatic invertebrates.	48 h
		Daphnia	



SIGNAL BLUE

Version Number 1.3 Revision Date 02/25/2019 Page 11 of 15 Print Date 06/01/2019

Remarks - Acute - Aquatic	Acute	
invertebrates.:		
Remarks - Acute - Aquatic	No applicable toxicity data	
plants:		
Remarks - Chronic - Fish:	No applicable toxicity data	
Remarks - Chronic -	No applicable toxicity data	
Aquatic invertebrates.:		
Miscellaneous Compounds Dis	stillates, petroleum, hydrotreated middle	
Remarks - Acute - Fish:	No applicable toxicity data	
Remarks - Acute - Aquatic	No applicable toxicity data	
invertebrates.:		
Remarks - Acute - Aquatic	No applicable toxicity data	
plants:		
Remarks - Chronic - Fish:	No applicable toxicity data	
Remarks - Chronic -	No applicable toxicity data	
Aquatic invertebrates.:		

Conclusion/Summary : Not available.

Persistence and degradability

Conclusion/Summary : Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient

Not available.

(KOC)

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



SIGNAL BLUE

Version Number 1.3 Revision Date 02/25/2019 Page 12 of 15 Print Date 06/01/2019

should be recycled. Incineration or landfill should only be considered 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 ICAO/IATA

: Not classified as dangerous goods under transport regulations.

International Water

IMO/IMDG

: 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 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 Quinacridone (C.I. Pigment Violet 19)



SIGNAL BLUE

Version Number 1.3 Revision Date 02/25/2019 Page 13 of 15 Print Date 06/01/2019

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 Phthalocyanine Blue

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

Hazardous substances: Not 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)

Not 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	%	Classification
Titanium dioxide	>= 10 - <= 25	CARCINOGENICITY - Category 2
Miscellaneous Compounds	>= 1 - <= 3	Immediate (acute) health hazard
Distillates, petroleum,		
hydrotreated middle		

SARA 313



SIGNAL BLUE

Version Number 1.3 Page 14 of 15
Revision Date 02/25/2019 Print Date 06/01/2019

Not applicable.

State regulations

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

Phthalocyanine Blue Titanium dioxide

Pennsylvania : The following components are listed:

Phthalocyanine Blue

Titanium dioxide

California Prop. 65

WARNING: This product can expose you to Titanium dioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
Titanium dioxide	No.	No.

United States inventory (TSCA 8b) : All components are listed or exempted.

Canada inventory : All components are listed or exempted.

International regulations

Inventory list

Australia All components are listed or exempted. All components are listed or exempted. Canada All components are listed or exempted. China **Europe inventory** All components are listed or exempted. All components are listed or exempted. Japan All components are listed or exempted. **New Zealand 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.

Section 16. Other information



SIGNAL BLUE

 Version Number 1.3
 Page 15 of 15

 Revision Date 02/25/2019
 Print Date 06/01/2019

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: 06/01/2019Date of issue/Date of revision: 02/25/2019Date of previous issue: 05/20/2016

Version : 1.3

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 above-named 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.