

82V TITAN SCHWARZ/NOVADUR HH112

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SAFETY DATA SHEET

82V TITAN SCHWARZ/NOVADUR HH112

Section 1. Identification

GHS product identifier 82V TITAN SCHWARZ/NOVADUR HH112

Chemical name Mixture CAS number Mixture Other means of identification CC10208755

Product type solid

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

Product use Industrial applications. Plastics.

POLYONE CORPORATION Supplier's details

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. This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or

mixture

Not classified.

GHS label elements



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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: CC10208755

CAS number/other identifiers

Ingredient name	%	CAS number
2-Propenenitrile, polymer with Ethenylbenzene	10 - 25	9003-54-7
Carbon black	3 - 5	1333-86-4
Titanium dioxide	3 - 5	13463-67-7
Styrene	0.1 - 0.3	100-42-5

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.



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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.

Get medical attention if irritation occurs. Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get

medical attention immediately.

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. Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical

attention immediately.

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

clothing and shoes. Get medical attention if symptoms occur. In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get

medical attention immediately.

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. Wash out mouth with water. Do not induce vomiting unless directed to do so

by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact: No known significant effects or critical hazards. No known significant

effects or critical hazards.

Inhalation : No known significant effects or critical hazards. Exposure to

decomposition products may cause a health hazard. Serious effects

may be delayed following exposure.

Skin contact: No known significant effects or critical hazards. No known significant

effects or critical hazards.



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Ingestion : No known significant effects or critical hazards. 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. 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. No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing

thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media: In case of fire, use water spray (fog), foam, dry chemical or CO₂.In

case of fire, use water spray (fog), foam, dry chemical or CO₂.

Unsuitable extinguishing media : None known. None known.

Specific hazards arising from the

chemical

: No specific fire or explosion hazard. No specific fire or explosion

Decomposition products may include the following materials:

hazard.

Hazardous thermal decomposition products

carbon dioxide

carbon dioxide carbon monoxide nitrogen oxides



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metal oxide/oxidesDecomposition 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. 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. Fire-fighters should wear appropriate protective equipment and self-contained 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

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

> 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.

If specialised clothing is required to deal with the spillage, take note of For emergency responders 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). 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. Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with

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Large spill

equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Move containers from spill area. Prevent entry into sewers, water 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.Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, 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. 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



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Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Styrene	OSHA PEL 1989 (1989-03-01)
	PEL: Permissible Exposure Level 215 mg/m3 50 ppm
	Short Term Exposure Limit value for a 15-minute reference
	period expressed in parts per million or in mg/m3. 425 mg/m3 100
	ppm
	OSHA PEL Z2 (1993-06-30)
	PEL: Permissible Exposure Level 100 ppm
	Ceiling,is a a limit indicating the maximum concentration of a chemical substances in the breathing zone that should not be
	exceeded. 200 ppm
	Acceptable Maximum Peak (AMP) 600 ppm
	NIOSH REL (1994-06-01)
	Time Weighted Average (TWA) 215 mg/m3 50 ppm
	Short Term Exposure Limit value for a 15-minute reference period expressed in parts per million or in mg/m3. 425 mg/m3 100
	ppm
	ACGIH TLV (1997-05-21)
	TLV-TWA: Threshold Limit Value - Time weighted average PEL:
	Permissible Exposure Level 85 mg/m3 20 ppm
	TLV-STEL: Threshold Limit Value - Short Time Exposure Level
	170 mg/m3 40 ppm
Carbon black	OSHA PEL 1989 (1989-03-01)
Cur bon black	PEL: Permissible Exposure Level 3.5 mg/m3
	OSHA PEL (1993-06-30)
	PEL: Permissible Exposure Level 3.5 mg/m3
	NIOSH REL (1994-06-01)
	Time Weighted Average (TWA) 3.5 mg/m3
	Time Weighted Average (TWA)
	ACGIH TLV (2010-12-06)
	TLV-TWA: Threshold Limit Value - Time weighted average PEL:
	Permissible Exposure Level 3 mg/m3 Form: Inhalable fraction
	Termissione Exposure Dever 5 mg/ms 1 srm. madder ratedon
Titanium dioxide	OSHA PEL 1989 (1989-03-01)
	PEL: Permissible Exposure Level 10 mg/m3 Form: Total dust
	OSHA PEL (1993-06-30)
	PEL: Permissible Exposure Level 15 mg/m3 Form: Total dust
	NIOSH REL (1994-06-01)
	ACGIH TLV (1996-05-18)
	TLV-TWA: Threshold Limit Value - Time weighted average PEL:
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		Permissible Exposure Level 10 mg/m3
2-Propenenitrile, polymer with Ethenylbenzene		
Appropriate engineering controls	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
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. 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	:	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. 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. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid



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splashes, mists 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. 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

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. 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

Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : solid [Pellets.]
Color : BLACK
Odor : Faint odor.



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Not available. **Odor threshold** Not available. Ηα **Melting point** Not available. **Boiling point** Not available. Flash point Not available. **Burning time** Not available. **Burning rate** Not available. **Evaporation rate** Not 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

: Not available.

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). 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. Under normal conditions of storage and use, hazardous

reactions will not occur.

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

extreme heat and oxidizing agents.

Incompatible materials : Keep away from strong acids.

Oxidizer.Keep away from strong acids.

Oxidizer.

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition

products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.



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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		
Styrene						
	LD50 Oral	Rat	2,650 mg/kg	-		
	LD50 Oral	Rat	5,000 mg/kg	-		
	LC50 Inhalation	Rat	2,770 ppm	4 h		
	LC50 Inhalation	Rat	11.8 mg/l	4 h		
Carbon black						
	LD50 Oral	Rat	15,400 mg/kg	-		
Titanium dioxide						
	LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h		
	LD50 Dermal	Rabbit	> 5,000 mg/kg	-		
2-Propenenitrile, polymer with Ethenylbenzene						
	LD50 Oral	Rat	1,800 mg/kg	-		

Conclusion/Summary: Mixture. Not fully tested.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Styrene	Eyes - Mild	Human			-
	irritant				
	Skin - Mild	Rabbit			-
	irritant				
	Skin -	Rabbit			-
	Moderate				
	irritant				
	Eyes - Severe	Rabbit			-
	irritant				
	Eyes -	Rabbit		24 hrs	-
	Moderate				
	irritant				
Titanium dioxide	Skin - Mild	Human		72 hrs	-
	irritant				

Conclusion/Summary

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



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Respiratory: Mixture.Not fully tested.

Sensitization

Conclusion/Summary

SkinMixture.Not fully tested.RespiratoryMixture.Not fully tested.

Mutagenicity

Conclusion/Summary : Mixture.Not fully tested.

Carcinogenicity

Conclusion/Summary : Mixture.Not fully tested.

Classification

Classification			
Product/ingredient	OSHA	IARC	NTP
name			
Styrene		2B	Reasonably anticipated to be a human carcinogen.
Carbon black		2B	
Titanium dioxide		2B	
2-Propenenitrile, polymer		3	
with Ethenylbenzene			

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

Not available.

Information on the likely routes of :

Not available.

exposure

Potential acute health effects



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Eye contact: No known significant effects or critical hazards. No known significant

effects or critical hazards.

Inhalation : No known significant effects or critical hazards. Exposure to

decomposition products may cause a health hazard. Serious effects

may be delayed following exposure.

Skin contact: No known significant effects or critical hazards. No known significant

effects or critical hazards.

Ingestion: No known significant effects or critical hazards. 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 and also 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.

General : No known significant effects or critical hazards. Contains material that

can cause target organ damage.

Carcinogenicity : No known significant effects or critical hazards. Contains material

which may cause cancer. Risk of cancer depends on duration and level

of exposure.

Mutagenicity : No known significant effects or critical hazards. No known significant

effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards. No known significant

effects or critical hazards.

Developmental effects: No known significant effects or critical hazards. No known significant

effects or critical hazards.

Fertility effects : No known significant effects or critical hazards. No known significant

effects or critical hazards.



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Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Result	Species	Exposure
Acute LC50 9,900 µg/l Fresh water	Fish - Fish	96 h
Acute LC50 9.1 mg/l Marine water	Fish - Fish	96 h
Acute LC50 4,020 μg/l Fresh water	Fish - Fish	96 h
Acute LC50 4.7 mg/l Fresh water	Fish - Fish	96 h
Acute LC50 4,080 µg/l Fresh water	Fish - Fish	96 h
Acute LC50 23,000 μg/l Fresh	Aquatic invertebrates.	48 h
water	Daphnia	
Acute EC50 4,700 μg/l Fresh water	Aquatic invertebrates.	48 h
	Daphnia	
Acute LC50 59,000 µg/l Fresh	Aquatic invertebrates.	48 h
water	Daphnia	
Acute LC50 52,000 µg/l Marine	Aquatic invertebrates.	48 h
water	Crustaceans	
Acute EC50 33 mg/l Fresh water	Aquatic plants - Algae	96 h
Acute EC50 720 µg/l Fresh water	Aquatic plants - Algae	96 h
Acute EC50 1,400 µg/l Fresh water	Aquatic plants - Algae	72 h
Acute EC50 78,000 μg/l Marine water	Aquatic plants - Algae	96 h
Acute NOEC 63 µg/l Fresh water	Aquatic plants - Algae	4 d
, ,		
Acute EC50 37.563 mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
Acute LC50 61.547 mg/l Fresh		48 h
water	_	
Acute LC50 > 1,000,000 μg/l	Fish - Fish	96 h
Marine water		
Acute LC50 > 1,000 mg/l Fresh	Fish - Fish	96 h
water		
	Acute LC50 9,900 μg/l Fresh water Acute LC50 9.1 mg/l Marine water Acute LC50 4,020 μg/l Fresh water Acute LC50 4,7 mg/l Fresh water Acute LC50 4,080 μg/l Fresh water Acute LC50 23,000 μg/l Fresh water Acute EC50 4,700 μg/l Fresh water Acute EC50 59,000 μg/l Fresh water Acute LC50 59,000 μg/l Marine water Acute EC50 33 mg/l Fresh water Acute EC50 720 μg/l Fresh water Acute EC50 1,400 μg/l Fresh water Acute EC50 78,000 μg/l Marine water Acute EC50 37.563 mg/l Fresh water Acute EC50 37.563 mg/l Fresh water Acute LC50 61.547 mg/l Fresh water Acute LC50 > 1,000,000 μg/l Marine water Acute LC50 > 1,000,000 μg/l Marine water Acute LC50 > 1,000,000 μg/l Fresh	Acute LC50 9,900 μg/l Fresh water Acute LC50 9.1 mg/l Marine water Fish - Fish Acute LC50 4,020 μg/l Fresh water Acute LC50 4.7 mg/l Fresh water Fish - Fish Acute LC50 4,080 μg/l Fresh water Acute LC50 23,000 μg/l Fresh Water Acute EC50 4,700 μg/l Fresh water Acute EC50 4,700 μg/l Fresh water Acute LC50 59,000 μg/l Fresh Water Acute LC50 52,000 μg/l Marine Water Acute EC50 33 mg/l Fresh water Acute EC50 720 μg/l Fresh water Acute EC50 74,000 μg/l Fresh water Acute EC50 78,000 μg/l Marine Water Acute EC50 78,000 μg/l Fresh water Acute EC50 37.563 mg/l Fresh Water Acute LC50 61.547 mg/l Fresh Water Acute LC50 > 1,000,000 μg/l Marine water Acute LC50 > 1,000,000 μg/l Fish - Fish Fish - Fish



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	Acute LC50 13 mg/l Fresh water	Aquatic invertebrates.	48 h	
	-	Daphnia		
	Acute LC50 6.5 mg/l Fresh water	Aquatic invertebrates.	48 h	
		Daphnia		
	Acute LC50 3 mg/l Fresh water	Aquatic invertebrates.	48 h	
		Crustaceans	10.1	
	Acute LC50 15.9 mg/l Fresh water	Aquatic invertebrates.	48 h	
		Crustaceans		
	Acute LC50 3.6 mg/l Fresh water	Aquatic invertebrates.	48 h	
		Crustaceans		
	Acute LC50 11 mg/l Fresh water	Aquatic invertebrates.	48 h	
		Crustaceans		
	Acute LC50 13.4 mg/l Fresh water	Aquatic invertebrates.	48 h	
		Crustaceans		
	Acute EC50 27.8 mg/l Fresh water	Aquatic invertebrates.	48 h	
	_	Daphnia		
	Acute EC50 19.3 mg/l Fresh water	Aquatic invertebrates.	48 h	
		Daphnia		
	Acute EC50 35.306 mg/l Fresh	Aquatic invertebrates.	48 h	
	water	Daphnia		
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Remarks - Acute - Aquatic	Remarks - Acute - Aquatic Chemicals are not readily available as they are bound within the polymer matrix.			
invertebrates.:	invertebrates.:			
C 1 ' /C	C1 1 1 1 111		1 111 1	

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		
Styrene	2.96	13.49	low		
Titanium dioxide		352.00	low		

Mobility in soil

Soil/water partition coefficient

(KOC)

Not available.

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



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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 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. 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 when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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 Classification : Not regulated for transportation.

ICAO/IATA : Not classified as dangerous good under transport regulations.

IMO/IMDG (maritime) : Not classified as dangerous good under transport regulations.



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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(c) - 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 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): Not listed

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

Not listed

United States - TSCA 8(d) - Health and safety studies: Not listed United States - TSCA 6 - Proposed risk management: Not listed United States - EPA Clean water act (CWA) section 307 - Priority

pollutants: Not listed

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)

Not listed

Not listed

Not listed

Not listed

Not listed



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US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

Name	%	Classification
Styrene	0.1 - 0.3	F, AH, CH
Carbon black	3 - 5	СН
2-Propenenitrile, polymer with Ethenylbenzene	10 - 25	АН

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Rutile, antimony chromium buff	68186-90-3	1 - 3
	Styrene	100-42-5	0.1 - 0.3
Supplier notification	Rutile, antimony chromium buff	68186-90-3	1 - 3
	Styrene	100-42-5	0.1 - 0.3

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 : The following components are listed:

Carbon black Titanium dioxide

New York : The following components are listed:

Styrene

New Jersey : The following components are listed:

Styrene

2-Propenenitrile, polymer with Ethenylbenzene

Titanium dioxide Carbon black

Pennsylvania : The following components are listed:



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Styrene

Carbon black

Titanium dioxide

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

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

Canada inventory All components are listed or exempted.

International regulations

International lists Australia inventory (AICS): All components are listed or exempted.

Taiwan inventory (CSNN): All components are listed or exempted.

Malaysia Inventory (EHS Register): Not determined. **EINECS:** All components are listed or exempted.

Japan inventory: Not determined.

China inventory (IECSC): All components are listed or exempted.

Korea inventory: All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC): All components

are listed or exempted.

Philippines inventory (PICCS): All components are listed or

exempted.

Chemical Weapons Convention

List Schedule I Chemicals

Chemical Weapons Convention

List Schedule II Chemicals

Chemical Weapons Convention

List Schedule III Chemicals

Not listed

Not listed

Not listed

Section 16. Other information

History

Date of printing 11/08/2016 Date of issue/Date of revision 10/20/2016 Date of previous issue 11/20/2014

Version 1.1

Key to abbreviations ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of

Chemicals



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IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = 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

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