TONNER PS

Version Number 1.0 Revision Date 01/09/2018

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Page 1 of 15 Print Date 01/10/2018

SAFETY DATA SHEET

TONNER PS

Section 1. Identification		
GHS product identifier Chemical name CAS number	:	TONNER PS Mixture Mixture
Other means of identification Product type	:	CC10276050 liquid
<u>Relevant identified uses of the subs</u> Product use	tance :	e or mixture and uses advised against 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

TONNER PS

Version Number 1.0 Revision Date 01/09/2018 <u>PolyOne</u>

Page 2 of 15

Print Date 01/10/2018

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.

Supplemental label elements : None known. Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	CC10276050

CAS number/other identifiers

Ingredient name	%	CAS number
Titanium dioxide	25 - 50	13463-67-7

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. Get medical attention if irritation occurs.

TONNER PS



Version Number 1.0 Revision Date 01/09/2018	Page 3 of 15 Print Date 01/10/2018
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
Skii contact	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, acu	te and delayed
Potential acute health effects	
- overheir acture rearent enrects	
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact Ingestion	No known significant effects or critical hazards.No known significant effects or critical hazards.
Ingestion	. No known significant cricets of entited 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 atten	ntion 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

Extinguishing media

TONNER PS



Version Number 1.0	Page 4 of 15
Revision Date 01/09/2018	Print Date 01/10/2018

Suitable extinguishing media Unsuitable extinguishing media	:	In case of fire, use water spray (fog), foam, dry chemical or $\rm CO_2$. 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 fire- fighters Special protective equipment for	:	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. Fire-fighters should wear appropriate protective equipment and self-
fire-fighters		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

For non-emergency personnel For emergency responders	:	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. 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 Large 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 waste disposal container. Dispose of via a licensed waste disposal contractor. Stop leak if without risk. Move containers from spill area. Prevent
Large spin	•	entry into sewers, water courses, basements or confined areas. Wash
4/15		

TONNER PS

Version Number 1.0 Revision Date 01/09/2018

<u>PolyOne</u>

Page 5 of 15 Print Date 01/10/2018

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 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
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:
	Permissible Exposure Level 10 mg/m3

TONNER PS

Version Number 1.0 Revision Date 01/09/2018



Page 6 of 15 Print Date 01/10/2018

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 season indicates this is processory to sucid exposure to
		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

TONNER PS

Version Number 1.0 Revision Date 01/09/2018

<u>PolyOne</u>

Page 7 of 15 Print Date 01/10/2018

Appearance

Physical state	:	liquid
Color	:	BLUE
Odor	:	Faint odor.
Odor threshold	:	Not available.
рН	:	Not available.
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-	:	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 products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.



TONNER PS

Version Number 1.0 Revision Date 01/09/2018 Page 8 of 15 Print Date 01/10/2018

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	-
Conclusion/Summery	• Mixtu	re Not fully tested		•

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	: N	lixture.Not fu	lly tested.		
Eyes	: N	lixture.Not fu	lly tested.		
Respiratory	: N	lixture.Not fu	lly tested.		
<u>Sensitization</u>					
Conclusion/Summary					
Skin		lixture.Not fu	•		
Respiratory	: N	lixture.Not fu	lly tested.		
Mutagenicity					
Conclusion/Summary	: N	lixture.Not fu	lly tested.		
Carcinogenicity					
Conclusion/Summary	: N	lixture.Not fu	lly tested.		
Classification					
Product/ingredient	OSHA	IARC	NTP		
name					
Titanium dioxide		2B			



TONNER PS		
Version Number 1.0 Revision Date 01/09/2018		Page 9 of 15 Print Date 01/10/2018
<u>Reproductive toxicity</u>		
Conclusion/Summary	:	Mixture.Not fully tested.
Teratogenicity		
Conclusion/Summary	:	Mixture.Not fully tested.
Specific target organ toxicity (sing Not available.	le exp	posure)
Specific target organ toxicity (rependent) Not available.	ated	exposure)
<u>Aspiration hazard</u> 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 Ingestion	:	No known significant effects or critical hazards. No known significant effects or critical hazards.
Symptoms related to the physical, o	<u>chemi</u>	ical 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 w	vell as	s chronic effects from short and long-term exposure
Short term exposure		
Potential immediate effects Potential delayed effects	:	Not available. Not available.
Long term exposure		

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

TONNER PS

Version Number 1.0 Revision Date 01/09/2018



Page 10 of 15 Print Date 01/10/2018

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

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result Species Exposur				
Titanium dioxide					
	Acute LC50 > 1,000 Mg/l Marine water	Fish - Fish	96 h		
Remarks - Acute - Fish:	Acute				
	Acute LC50 3 Mg/l Fresh water	Aquatic invertebrates. Crustaceans	48 h		
Remarks - Acute - Aquatic invertebrates.:	Acute				
	Acute LC50 6.5 Mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h		
Remarks - Acute - Aquatic invertebrates.:	Acute				
Remarks - Acute - Aquatic plants:	No applicable toxicity data				
Remarks - Chronic - Fish:	No applicable toxicity data				
Remarks - Chronic - Aquatic invertebrates.:	No applicable toxicity data				
Conclusion/Summary	: Not available.				

Persistence and degradability

TONNER PS

PolyOne

Version Number 1.0			Page 11 of 15
Revision Date 01/09/2018			Print Date 01/10/2018
Conclusion/Summary	:	Not available.	
Bioaccumulative potential			
Not available.			
Mability in soil			
<u>Mobility in soil</u>			

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 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.

TONNER PS

Version Number 1.0 Revision Date 01/09/2018

<u>PolyOne</u>

Page 12 of 15 Print Date 01/10/2018

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(a)2 - Proposed 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) - 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 - 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 - Flammable substances: Not listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable 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	:	Not listed Not listed Not listed
Substances	•	

TONNER PS

vOne.

Version Number 1.0 Revision Date 01/09/2018

Page 13 of 15 Print Date 01/10/2018

DEA List I Chemicals (Precursor Not listed : **Chemicals**) DEA List II Chemicals (Essential Not listed : **Chemicals**)

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Classification

Not applicable.

:

Composition/information on ingredients

Name	%	Classification
Titanium dioxide	25 - 50	СН

SARA 313 Not applicable.

Europe inventory	:	All components are listed or exempted.		
China	:	All components are listed or exempted.		
Canada	:	All components are listed or exempted.		
Australia	:	All components are listed or exempted.		
Inventory list				
International regulations				
Canada inventory	:	All components are listed or exempted.		
United States inventory (TSCA 8b)	:	All components are listed or exempted.		
<u>California Prop. 65</u> WARNING: This product contains a chemical known to the State of California to cause cancer.				
		Aluminum hydroxide		
i omisji vana	•	Titanium dioxide		
Pennsylvania	:	Titanium dioxide The following components are listed:		
New Jersey	-	The following components are listed:		
New York	-	None of the components are listed.		
<u>State regulations</u> Massachusetts	:	None of the components are listed.		



TONNER PS

Version Number 1.0 Revision Date 01/09/2018 Page 14 of 15 Print Date 01/10/2018

Japan	:	All components are listed or exempted.
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.

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

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Date of printing	:	01/10/2018
Date of issue/Date of revision	:	01/09/2018
Date 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 = International Air Transport Association IBC = 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)
References	:	UN = United Nations Not available.
Notice to reader		



TONNER PS

Version Number 1.0 Revision Date 01/09/2018 Page 15 of 15 Print Date 01/10/2018

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.