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SAFETY DATA SHEET

HFDA-9217 BK EXP1

Section 1. Identification				
GHS product identifier Chemical name CAS number Other means of identification Product type	: : : :	HFDA-9217 BK EXP1 Mixture Mixture CC10061562 solid		
Relevant identified uses of the substance or mixture and uses advised against Product use Industrial applications. Plastics.				
Supplier's details	:	GEON Performance Solutions LLC 33587 Walker Road, Avon Lake, OH 44012		
Emergency telephone number (with hours of operation)	:	1 (440) 930-1000 or 1 (866) POLYONE 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 Hazard statements	:	No signal word. No known significant effects or critical hazards.	

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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.
		Not available.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	CC10061562

CAS number/other identifiers

Ingredient name	%	CAS number
Carbon black	0.3 - 1	1333-86-4
4,4'-Thiobis(6-tert-butyl-m-cresol)	0 - 0.3	96-69-5

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.

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.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable
	for breathing. Get medical attention if symptoms occur.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated
	clothing and shoes. Get medical attention if symptoms occur.



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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 Specific treatments	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. 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

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	:	No specific fire or explosion hazard.
Hazardous thermal decomposition products:Decomposition products may include the followin carbon dioxide carbon monoxide		
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Special protective actions for fire- fighters	:	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 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

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 :	
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 :	

Section 7. Handling and storage

Precautions for safe handling

Protective measures	:	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational	:	Eating, drinking and smoking should be prohibited in areas where this
hygiene		material is handled, stored and processed. Workers should wash hands
		and face before eating, drinking and smoking, Remove contaminated



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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
Carbon black	OSHA PEL 1989 (1989-03-01)
	TWA 3.5 mg/m3
	OSHA PEL (1993-06-30)
	TWA 3.5 mg/m3
	NIOSH REL (1994-06-01)
	TWA 3.5 mg/m3
	NIOSH REL (1994-06-01)
	TWA 0.1 mgPAH/m ³
	ACGIH TLV (2010-12-06)
	TWA 3 mg/m3 Form: Inhalable fraction
4,4'-Thiobis(6-tert-butyl-m-cresol)	ACGIH TLV (2010-12-06)
· · · · · · · · · · · · · · · · · · ·	TWA 1 mg/m3 Form: Inhalable fraction
	NIOSH REL (1994-06-01)
	TWA 10 mg/m3 Form: Total
	TWA 5 mg/m3 Form: Respirable fraction
	OSHA PEL 1989 (1989-03-01)
	TWA 10 mg/m3 Form: Total dust
	TWA 5 mg/m3 Form: Respirable fraction
	OSHA PEL (1993-06-30)
	TWA 15 mg/m3 Form: Total dust
	TWA 5 mg/m3 Form: Respirable fraction



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Appropriate engineering controls	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls : Emissions from ventilation checked to ensure they correnvironmental protection I filters or engineering modi		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.
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	: BLACK

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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.
Aerosol product		
Heat of combustion	:	Not available.
Ignition distance	:	Not available.
Enclosed space ignition - Time	:	Not available.
equivalent		
Enclosed space ignition -	:	Not available.
Deflagration density		
Flame height	:	Not available.
Flame duration	:	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.



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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

Product/ingredient name	Result	Species	Dose	Exposure				
Carbon black								
	LD50 Oral	Rat	15,400 mg/kg	-				
Remarks - Inhalation:	No applicable toxi	No applicable toxicity data						
Remarks - Dermal:	No applicable toxicity data							
4,4'-Thiobis(6-tert-butyl-m-cre	bbis(6-tert-butyl-m-cresol)							
	LD50 Oral Rat 2,345 mg/kg -							
Remarks - Inhalation:	No applicable toxicity data							
	LD50 Dermal Rabbit 5,010 mg/kg -							
Conclusion/Summary : Mixture.Not fully tested.								
Irritation/Corrosion								

Conclusion/Summary		
Skin	:	Mixture.Not fully tested.
Eyes	:	Mixture.Not fully tested.
Respiratory	:	Mixture.Not fully tested.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
4,4'-Thiobis(6-tert-butyl-m-	Skin	Guinea pig	Sensitizing
cresol)			
Conclusion/Summary			
Skin	: Mixture.Not fully tes	ted.	
Respiratory	: Mixture.Not fully tes	ted.	
Mutagenicity			
Conclusion/Summary	: Mixture.Not fully test	ted.	
Conclusion/Summary	: Mixture.Not fully test	ted.	



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Carcinogenicity					
Conclusion/Summary	:	Μ	ixture.Not fully t	ested.	
Classification					
Product/ingredient name	OSHA		IARC	NTP	
Carbon black	-		2B	-	
Reproductive toxicity					
Conclusion/Summary	:	Μ	ixture.Not fully t	ested.	
<u>Teratogenicity</u>					
Conclusion/Summary	:	Μ	ixture.Not fully t	ested.	
Specific target organ toxicity (Not available.	single exp	osur	<u>e)</u>		
Specific target organ toxicity (Not available.	repeated e	<u>xpo</u>	<u>sure)</u>		
Aspiration hazard Not available.					
Information on likely routes of exposure	f :	No	ot available.		
Potential acute health effects					
Eye contact Inhalation Skin contact Ingestion	:	No No	o known significa o known significa	ant effects or critical hazards. ant effects or critical hazards. ant effects or critical hazards. ant effects or critical hazards.	
Symptoms related to the physi	cal, chemi	cal a	and toxicologica	l characteristics	
Eye contact	:	No	o specific data.		
Inhalation	:	No	specific data.		
Skin contact	:		specific data.		
Ingestion	:	No	specific data.		

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

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Short term exposure

Potential immediate effects Potential delayed effects	:	Not available. Not available.
Long term exposure		
Potential immediate effects Potential delayed effects	:	Not available. Not available.
Potential chronic health effects		
Conclusion/Summary	:	Mixture.Not fully tested.
General Carcinogenicity	:	No known significant effects or critical hazards. No known significant effects or critical hazards.
Mutagenicity Teratogenicity Developmental effects Fertility effects	:	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Fertinty circus	•	No known significant cifects of cifical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Carbon black			
Remarks - Acute - Fish:	No applicable toxicity data		
	Acute EC50 37.563 Mg/l Fresh	Aquatic invertebrates.	48 h
	water	Daphnia	
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.:			



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4,4'-Thiobis(6-tert-butyl-m-cre	esol)
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.:	
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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	<u>Y</u>
~	
Conclusion/Summary	: Chemicals are not readily available as they are bound within the polymer matrix.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
4,4'-Thiobis(6-tert-butyl-m-cresol)	5.24	-	high

Mobility in soil

Soil/water partition coefficient	:	Not available.
(KOC)		
Other adverse effects	:	No known significant effects or critical hazards.

Section 13. Disposal considerations

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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(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): Not listed
		United States - TSCA 8(c) - Significant adverse reaction (SAR):
		Not listed
		United States - TSCA 8(d) - Health and safety studies: Not listed
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		United States - TSCA 4(a) - Proposed test rules: 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)	:	Listed		
Hazardous Air Pollutants (HAPs)				
Clean Air Act Section 602 Class I	:	Not listed		
Substances				
Clean Air Act Section 602 Class II	:	Not listed		
Substances				
DEA List I Chemicals (Precursor	:	Not listed		
Chemicals)				
DEA List II Chemicals (Essential	:	Not listed		

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Chemicals)

Classification

: Not applicable.

Composition/information on ingredients

No products were found.

Name	%	Classification
Carbon black	>= 0.3 - <= 1	CARCINOGENICITY - Category 2
4,4'-Thiobis(6-tert-butyl-m-	> 0 - <= 0.3	COMBUSTIBLE DUSTS
cresol)		SKIN SENSITIZATION - Category 1

Not applicable.

State regulations		
Massachusetts	:	None of the components are listed.

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

California Prop. 65

WARNING: This product can expose you to Carbon black, 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
Carbon black	-	-

United States inventory (TSCA 8b)	:	All components are active or exempted.
Canada inventory	:	All components are listed or exempted.
International regulations		
Inventory list		
Australia	:	All components are listed or exempted.
Canada	:	All components are listed or exempted.
China	:	All components are listed or exempted.
Europe inventory	:	All components are listed or exempted.
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	:	All components are listed or exempted.
Turkey	:	All components are listed or exempted.
United States	:	All components are active 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



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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	:	12/19/2024
Date of issue/Date of revision	:	12/16/2019
Date of previous issue	:	09/13/2018
Version	:	1.8
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.