

SAFETY DATA SHEET

Product: HDPE Fire Retardant Additive

Revision Date 1st June 2020

Acc to OSHA & ANSI

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY:

Product Name:	HDPE Fire Retardant Additive
Synonyms:	NA
Manufacturer:	Pipedream Industries 6050 Peachtree Parkway Suite 240-312 Norcross, Georgia, USA, 30092.
Telephone:	+1 (470) 231-5943
Email:	info@pipedreamindustries.com

2. COMPOSITION DATA ON COMPONENTS:

COMPONENT	%	OSHA/PEL
Modified Carbon Nanotubes	Proprietary	DHHS (NIOSH) Publication No. 009-125
Modified Organic Montmorillonite Clay	Proprietary	Proprietary

3. HAZARDS IDENTIFICATION

Precautionary Statements - Prevention:	Obtain special instructions before use
	Do not handle until all safety precautions have been read and understood
	Use personal protective equipment as required. An N95 mask is recommended
	Wash face, hands and any exposed skin thoroughly after handling
	Wear eye/face protection
	Avoid breathing dust/fume/gas/mist/vapors/spray
	Use only outdoors or in a well-ventilated area
	Keep container tightly closed

4. FIRST AID MEASURES - General Advice:

If exposed or concerned, get medical advice/attention.

If Inhaled:	Remove victim to fresh air and keep at rest in a position comfortable for breathing
In Case Of Skin Contact:	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
In Case Of Eye Contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention
If Swallowed:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES:

Flash Point:	NA
Explosion Limits:	None
Extinguisher Medium:	None
Special Procedures:	NA
Decomposition Products:	Carbon Monoxide, Carbon Dioxide
Unusual Hazards:	Thermal decomposition or combustion may produce dense smoke.
Protective equipment:	Wear a filtering n95 mask or respirator

6. ACCIDENTAL RELEASE MEASURES:

Person-related safety precautions:	Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation
Measures for environmental protection:	No environmental hazards seen
Measures for cleaning/collecting:	Ensure adequate ventilation.
Additional information:	See Section 7 for information on safe handling See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7. HANDLING & STORAGE:

Handling:	Use PERSONAL PROTECTIVE EQUIPMENT and exposure controls given in Section 8. Detailed information on handling carbon nanotubes may be found at the ASTM Standard E 2535 - 07, Standard Guide for Handling Unbound
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	Engineered Nanoscale Particles in Occupational Settings, ASTM International, West Conshohocken, PA, www.astm.org .
Storage:	Keep in closed container for storage
Information for Safe Handling:	Keep the container tightly sealed. Store in a cool, dry place in tightly closed containers. Ensure good ventilation at the workplace.
Information about protection against explosions and fires:	No Special Requirements.
Requirements to be met by storerooms and receptacles:	No Special Requirements.
Information about storage in one common storage facility:	Store away from oxidizing agents. Store away from halogens. Do not store together with acids.
Further information about storage Conditions:	Keep container tightly sealed. Store in cool, dry conditions in well sealed containers.

8. PHYSICAL & CHEMICAL PROPERTIES:

Form:	Powder
Color:	NA
Odor:	Odorless
Melting Point/Melting Range:	Not Determined
Boiling Range:	Not Determined
Sublimation Temperature / Start:	Not Determined
Flash Point:	Not Applicable

Ignition Temperature:	Not Determined
Decomposition Temperature:	Not Determined
Danger of Explosion:	Product does not present an explosion hazard.
Lower Explosion Limit:	Not Determined
Upper Explosion Limit:	Not Determined
Vapor Pressure:	Not Determined
Solubility in / Miscibility with Water:	Soluble

9. STABILITY & REACTIVITY:

Thermal decomposition / conditions to be avoided:	Decomposition will not occur if used and stored according to specifications.
Dangerous Reactions	No dangerous reactions known
Dangerous Products of Decomposition:	Carbon monoxide and carbon dioxide

10. TOXICOLOGICAL INFORMATION:

On Skin:	Irritant to skin and mucous membranes.
On The Eye:	Irritating effect.
Sensitization:	No sensitizing effects known.

Subacute To Chronic Toxicity:	NA
Additional Toxicological Information:	<p>To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.</p> <p>No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.</p> <p>Toxicological information on carbon nanotubes may be found at the website of the International Council on Nanotechnology at http://icon.rice.edu/</p>

11. DISPOSAL CONSIDERATIONS:

Recommendation:	Consult state, local or national regulations to ensure proper disposal. Specific care should be taken to ensure that no carbon nanotubes or carbon nanotube packaging is released into the environment.
Uncleaned packagings:	Consult all state, local or national regulations to ensure proper disposal. Specific care should be taken to ensure that no carbon nanotubes or carbon nanotube packaging is released into the environment.
Recommendation:	Disposal must be made according to official regulations. Contact a hazardous materials removal company. Keep all carbon nanotube waste, packaging, and contaminated items segregated from other waste and dispose of with a materials removal company such as Safety Kleen or others.

12. REGULATIONS:

Hazard Symbols:	Eye Irritant
Safety Phrases:	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
National Regulations:	All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory.
Information About Limitation Of Use:	For use only by technically qualified individuals.

13. OTHER INFORMATION:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

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