# **MATERIAL SAFETY DATA SHEET -**

# SECTION 1 -CHEMICAL PRODUCT AND COMPANY



## **IDENTIFICATION**

Product Identifier NanoG	el					
Product Use Gel Admixture for concrete applications						
Manufacturer's Name NanoCrete Inc		Supplier's Name Nano(	Crete Inc.			
Street Address	1296 Coffman Dr	Street Address	1296 Coffman Dr			
City Berthoud	State CO	City Berthou	d State CO			
Postal Code	Emergency Telephone	Postal Code	Emergency Telephone			
80513	720-456-0473	80513				
Date MSDS Prepared	MSDS Prepared By		Phone Number			
12-27-23	Shaun Lane		720-456-0473			

## SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients (specific)	%	GAS Number	LO 50 of Ingredient (specify species and route	LC 50 of Ingredient (specify species)
Graphene nanoparticles	5-75%		N/A	N/A
CS nanoparticles	5-75%		N/A	N/A
Chloride Salt	5-75%		N/A	N/A
Inert Dispersing Agents	5-75%			

# SECTION 3 - HAZARDS IDENTIFICATION

Route of Entry:	0	Skin Contact	0	Skin Absorption	X	Eye Contact	0	Inhalation	X	Ingestion	
Potential Health Effe	cts:										Π
Unknown lor	ıg-te	erm health ef	fects	. Irritation of ey	es ar	nd skin are mos	t in	nmediate haz	ard	ls.	
											Ī

SECTION 4 - FIRST AID MEASURES
Skin Contact wash thoroughly with plenty of soap and water. If irritation persists, get medical attention.
Eye Contact In case of eye contact, flush immediately with plenty of water for at least 15 minutes and get prompt medical attention
Inhalation $N/A$
Ingestion In case of indegestion, do NOT induce vomiting, drink plenty of water for at least 15 minutes and contact Poison Control Center immediately

Please continue on reverse side

#### Product Identifier- 2-

#### SECTION 5 - FIRE FIGHTING MEASURES

Flammable	If yes, under which conditions?	
No		
Means of Extinction		
Flashpoint (° C) and Method	Upper Flammable Limit(% by volume)	Lower Flammable Limit(% by volume)
N/A	N/A	N/A
Autoignition Temperature ('C)	Explosion Data - Sensitivity to Impact	Explosion Data - Sensitivity to Static Discharge
N/A	N/A	N/A
Hazardous Combustion Products	,	

#### SECTION 6 - ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures

In case of a spill or leak of NanoGel, immediately contain the material to prevent environmental contamination. Use appropriate personal protective equipment (PPE) and clean up the spill using inert absorbent materials. Dispose of the collected material in accordance with local regulations. Avoid direct contact with skin or eyes and prevent the material from entering drains or waterways.

#### SECTION 7 - HANDLING AND STORAGE

Handling Procedures and Equipment

When handling NanoGel at the site or batch mixer, workers should wear standard personal protective equipment, including gloves and safety glasses, to ensure safe handling. The product should be carefully added to the mixer according to the prescribed ratios, ensuring that there's minimal spillage. Standard tools for concrete and shotcrete application can be used without the need for specialized equipment. It's important to handle the product with care to maintain its integrity and effectiveness.

Storage Requirements

NanoGel should be stored in a cool, dry place, away from direct sunlight and extreme temperatures, to maintain its efficacy. The product must be kept in its original packaging until ready for use. Ensure that the storage area is well-ventilated and away from any open flame or heat source.

#### SECTION 8 - EXPOSURE CONTROL/ PERSONAL PROTECTION

Exposure Limits	0 ACGIHTLV	<b>0</b> osh	A PEL	<b>0</b> Other (\$	specify)
Specific Engineering Controls (such as	ventilation, enclosed process)				
Personal Protective Equipment <b>X</b> Gle	oves <b>0</b> N95 Mask	<b>X</b> Eye	<b>0</b> Footwear	<b>0</b> Clothing	<b>0</b> Other
If checked, please specify type					
When handling NanoGel, it is from potential irritation. Addit accidental splashes or exposur while using NanoGel.	tionally, safety goggles or gl	lasses with side	e shields should be	used to safegua	ard the eyes from

### Product Identifier- 3-

### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Odor and Appearance	Odor Threshold (ppm)
Non-Newtonian Gel	Odorless & jet black in appearance	N/A
Specific Gravity	Vapor Density (air = 1)	Vapor Pressure (mmHg)
Unknown	Unknown	Unknown
Evaporation Rate Unknown	Boiling Point (° C) Unknown	Freezing Point(° C) Unknown
pH Unknown	Coefficient of Water/Oil Distribution Unknown	[Solubility in Water] Unknown

Chemical Stability	If no, under which conditions?			
X Yes 0 No				
Incompatibility with Other Substances	If yes, which ones?			
0 Yes X No				
Reactivity, and under what conditions?				
Reactivity, and under what conditions?				
Reactivity, and under what conditions?				
Reactivity, and under what conditions?				
Reactivity, and under what conditions?				
Reactivity, and under what conditions?  Hazardous Decomposition Products				

## **SECTION 11 -TOXICOLOGICAL INFORMATION**

Effects of Acute Exposure

Minimal effects of acute exposure. Gel is inert, odorless, and stable so unless unreasonably acted upon, the Gel itself should cause no harm for the acute/short term exposure.

Effects of chronic exposure

The long-term effects of exposure to NanoGel, especially considering its unique composition with stabilized graphene and other nanoparticles, are not fully established. Due to the stabilization of graphene within the gel, it is unlikely to be released into the environment as a dust. However, long-term exposure to nanoparticles can potentially pose health risks, although the specific effects largely depend on the nature and size of the nanoparticles, as well as the route and duration of exposure.

Irritancy of Product Unknown	
Skin sensitization Unknown	Respiratory sensitization Unknown
Carcinogenicity-IARC Unknown	Carcinogenicity – ACGIH Unknown
Reproductive toxicity Unknown	Teratogenicity Unknown
Embrotoxicity Unknown	Mutagenicity Unknown
Name of synergistic products/effects Unknown	

## Product Identifier-4-

SECTION 12-ECOLOGICAL INFORMATION					
Aquatic Toxicity Unknown					
SECTION 13-DISPOSAL CONSIDERATIONS					
Waste Disposal					
Proper disposal of NanoGel should adhere to local environmental NanoGel in regular waste streams or in the environment, as its un environmentally responsible disposal, consult with local waste macontaining nanoparticles like those in NanoGel.	ique composition may require specialized handling. To ensure				
SECTION 14 - TRANSPORT INFORMATION					
Special Shipping Information $N\!/A$					
ID3 N/A	[DOT] N/A				
PMOJ	[ICAOI				
N/A	N/A				
SECTION 15 - REGULATORY INFORMATION	_				
(OSHA) N/A					
[SERA)	[TSCA]				
N/A	N/A				
SECTION 16 - OTHER INFORMATION					