

NanoSperse AC MSDS

Section 1 Identification			
Product Number:	NL-NSAC-1	Health:	2
Product Name:	NanoSperse AC	Flammability	3
Trade/Chemical Synonyms	NanoSperse	Reactivity	0
Formula:	N/A	Hazard Rating:	
C.A.S	CAS# 109-99-9, 63148-65-2	Least Slight Moderate High Extreme 0 1 2 3 4 NA = Not Applicable NE = Not Established	

Section 2 Component Mixture					
Sara 313	Component	CAS Number, formula	%	Dim	Exposure Limits:
<input type="checkbox"/>	Tetrahydrofuran	CAS# 109-99-9 , C4H8O	60-70	V/V	OSHA TWA 200 ppm (590 mg/mf)
<input type="checkbox"/>	Polyvinyl butyral	CAS# 63148-65-2, (C4H6O2 C2H4O)x	20-30	V/V	OSHA TWA 10 mg/m3
<input type="checkbox"/>	Acetone	CAS# 67-64-1, (CH3)2CO	10-20	V/V	OSHA TWA 1000 ppm

Section 3 Hazard Identification (Also see section 11)

Keep away from heat and ignition sources. May be harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

Section 4 First Aid Measures

Keep away from heat and ignition sources. May be harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

FIRST AID: SKIN: Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

INGESTION: Give several glasses of milk or water. Vomiting may occur spontaneously, but **DO NOT INDUCE!** Never give anything by mouth to an unconscious person.

Section 5 Fire Fighting Measures

Fire Extinguisher Type: Water spray, dry chemical, carbon dioxide, alcohol foam

Fire/Explosion Hazards: Vapors may form explosive mixture with air.

Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

Section 6 Accidental Release Measures

Remove all sources of ignition. Ventilate area of leak or spill. Wear protective equipment. Clean up in a manner that does not disperse dust.

Section 7 Handling and Storage

Store in a cool, dry, well-ventilated place away from incompatible materials. Wash thoroughly after handling.

Section 8 Exposure Controls & Personal Protection

Respiratory Protection:NIOSH/MSHA-approved respirator

Ventilation: Mechanical: Hand Protection: Solvent resistant gloves as neoprene or nitrile

Local Exhaust: Eye Protection: Goggles and Face Shield

Other Protective Equipment: Wear appropriate clothing to prevent skin exposure

Section 9 Physical and Chemical Properties			
Melting Point:	-100°C	Specific Gravity	0.84
Boiling Point:	60°C	Percent Volatile by Volume:	70
Vapor Pressure:	220	Evaporation Rate:	12
Vapor Density:	2.5	Evaporation Standard:	Butylacetate =1
Solubility in Water:	Miscible	Auto ignition Temperature:	700° F
Appearance and Odor:	Colorless liquid, ether-like odor	Lower Flamm. Limit in Air:	2.0
Flash Point:	-16° C	Upper Flamm. Limit in Air:	12.2
Section 10 Stability and Reactivity Information			
Stability: Stable Conditions to Avoid: Avoid contact with heat, sparks, flames, or other sources of ignition.			
Materials to Avoid: Concentrated nitric and sulfuric acid mixtures, oxidizing materials, chloroform, alkalis, chlorine compounds, acids, potassium t-butoxide.			
Hazardous Decomposition Products: Carbon dioxide, carbon monoxide.			
Hazardous Polymerization: Will Not Occur			
Condition to Avoid: None known			
Section 11 Additional Information			
Effects of overexposure, Acute: Irritating to eyes and skin. May cause redness and pain. Inhalation may cause irritation of the nose and throat, dizziness and headache. Irritating to mucous membranes. Ingestion may cause sore throat and abdominal pain. Chronic: No information found. Conditions aggravated: persons with pre-existing eye, skin and respiratory conditions may be more susceptible. Target organs: Liver and kidneys			
DOT Classification: Tetrahydrofuran, 3, UN2056, PGII Acetone 3, UN1090, PGII			
DOT regulations may change from time to time. Please consult the most recent version of the relevant regulations.			
Revision No:3		Date Entered: 7/30/2010	
		Approved by: DLC	

1. NanoLab products are manufactured solely for research and development.
2. All NanoLab products are to be used by, or directly under the supervision of, a technically qualified individual.
3. Anyone engaged in experimentation, research, or analysis of NanoLab products, including the processing, use, transport, storage, and disposal of our products, should review our MSDS information and also review available literature on the health and safety of nanomaterials and carbon nanotubes. NanoLab has placed on its website, <http://www.nano-lab.com/safety.html> links to all of the health and safety studies of which it is aware. If you are aware of other studies where NanoLab nanotubes have been used, please inform us at info@nano-lab.com