

MIDFLOC 1368E, Cationic Flocculant Emulsion

5. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:	(F): None to boiling (C): None to boiling
METHOD:	None
FLAMMABLE LIMITS IN AIR	
LOWER (%):	No data
UPPER (%):	No data
SENSITIVITY TO MECHANICAL IMPACT(Y/N):	NO
SENSITIVITY TO STATIC DISCHARGE:	Sensitivity to static discharge is not expected.
SUITABLE EXTINGUISHING MEDIA:	Water fog, carbon dioxide, foam, dry chemical.
FIRE FIGHTING PROCEDURES:	Spills produce extremely slippery surfaces. Fire-fighters should wear self-contained breathing apparatus and full protective clothing when fighting chemical fires.

6. ACCIDENTAL RELEASE MEASURES

SPILL PROCEDURES:

SMALL SPILLS:

Pick up with absorbant material.

LARGE SPILLS:

Do not flush with water. Dike to contain. Pick up with absorbant material. Put in suitable container for disposal. Keep out of drains, sewers, streams, or other bodies of water.

PERSONAL PRECAUTIONS:

Not applicable

ENVIRONMENTAL PRECAUTIONS:

Not applicable

METHODS FOR CLEANING UP:

Not applicable

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Avoid contact with skin and eyes. Do not store near heat, sparks or flame. Observe proper grounding procedures to prevent fire hazard from static accumulation and discharge. Store in a cool, dry area. Keep from freezing. Keep container closed when not in use.

OTHER PRECAUTIONS:

Use only with sufficient ventilation.

SPECIFIC USE(S):

Not applicable.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

PROTECTIVE EQUIPMENT:



EXPOSURE CONTROLS:

None known.

RESPIRATORY PROTECTION:

None normally required. Use NIOSH approved organic vapor respirator as needed if spray mist or vapors exceed PEL or TLV.

PROTECTIVE GLOVES:

Chemical resistant gloves are recommended to minimize skin contact.

EYE PROTECTION:

Safety glasses are recommended to minimize eye contact.

OTHER PERSONAL PROTECTION EQUIPMENT:

Appropriate protective clothing as needed to prevent skin contact. It is the responsibility of the end user of this product to determine level of PPE required that is consistent with safe use of this product.

VENTILATION:

General mechanical and/or local exhaust as needed to meet exposure limits if mist in air. Recommended in confined space or if mixture is heated or agitated. Use non-sparking equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR:

Opaque. Off-white. Emulsion. Hydrocarbon odor.

BOILING POINT (F):

212° - 370° F

(C) 100° - 187.8° C

VAPOR PRESSURE:

Approx. 0.13 mm Hg @ 20° C

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9. PHYSICAL AND CHEMICAL PROPERTIES

VAPOR DENSITY (AIR=1):	Approx. 6.3 (oil)
SOLUBILITY IN WATER:	Not determined
SPECIFIC GRAVITY:	1.00 - 1.05
VOC Content (%):	Not determined
EVAPORATION RATE:	Not determined
PH:	3 - 7 @ 5 g/l

10. STABILITY AND REACTIVITY

STABILITY DATA:	STABLE
POLYMERIZATION:	Will Not Occur.
HAZARDOUS DECOMPOSITION:	Oxides of Carbon. When heated to high temperatures, the following may be produced: Oxides of Nitrogen. Oxides of Sulfur. Hydrogen chloride gas.
INCOMPATIBILITY (MATERIALS TO AVOID):	Contact with water forms a gel at product solids content greater than 10%. Do not use iron, copper, or aluminum for storage or delivery system. Oxidizing material can cause reaction.
CONDITIONS/HAZARDS TO AVOID:	Temperature over 200° F. Temperatures below 32° F.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:	Oral: LD50/oral/rat > 5000 mg/kg Dermal: The results of testing on rabbits showed this material to be non-toxic even at high dose levels. Inhalation: The product is not expected to be toxic by inhalation.
EFFECTS OF CHRONIC EXPOSURE:	A two year feeding study on rats did not reveal adverse health effects. A one year feeding study on dogs did not reveal adverse health effects. Prolonged skin contact may defat the skin and produce dermatitis.
OTHER TOXIC EFFECTS:	Not established.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:	LC50/Danio rerio/96 hours > 100 mg/L (OECD 203) EC50/Daphnia magna / 48 hours > 50 mg/L (OECD 202). Algal inhibition tests are not appropriate. The flocculating characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.
CHEMICAL FATE INFORMATION:	The product is rapidly eliminated from the aquatic medium through irreversible adsorption onto suspended matter and dissolved organics. Does not bioaccumulate. Not readily biodegradable.
MOBILITY:	Not applicable.
PERSISTENCE/DEGRADABILITY:	Not applicable
BIOACCUMULATIVE POTENTIAL:	Not applicable
OTHER ADVERSE EFFECTS:	Not applicable

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS:	Dispose in accordance with Federal, State and Local regulations.
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14. TRANSPORT INFORMATION

Please refer to the Bill of Lading/Receiving documents for up to date shipping information.

15. REGULATORY INFORMATION

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PRODUCT COMPOSITION CAS#	%	TSCA:	EINECS:	Canada DSL:	CA PROP 65:
Cationic polyacrylamide - eye and skin irritant 69418-26-4	45 max.	Listed	Not Listed	Listed	Not Listed
Nonyl phenol (surfactant) 9016-45-9	3 max.	Listed	Not Listed	Listed	Not Listed
Petroleum distillate 64742-47-8	28 max.	Listed	Listed	Listed	Not Listed
Sorbitan Monooleate 1338-43-8	3 max.	Listed	Listed	Listed	Not Listed

PRODUCT COMPOSITION CAS#	%	CERCLA:	SARA 302:	SARA 313:
Cationic polyacrylamide - eye and skin irritant 69418-26-4	45 max.	Not Listed	Not Listed	Not Listed
Nonyl phenol (surfactant) 9016-45-9	3 max.	Not Listed	Not Listed	Not Listed
Petroleum distillate 64742-47-8	28 max.	Not Listed	Not Listed	Not Listed
Sorbitan Monooleate 1338-43-8	3 max.	Not Listed	Not Listed	Not Listed

PRODUCT COMPOSITION CAS#	%	Canada WHMIS:
Nonyl phenol (surfactant) 9016-45-9	3 max.	Puesto en Lista

None of the components of this material are included in the Massachusetts Substance List nor are present at or above reportable levels.

None of the components of this material are included in the New Jersey Substance List nor are present at or above reportable levels.

None of the components of this material are included in the Pennsylvania Substance List nor are present at or above reportable levels.

16. OTHER INFORMATION

This information was compiled from current, reliable sources and is believed to be correct. As data, and/or regulations change, and conditions of use and handling are beyond our control, no warranty, express or implied, is made as to completeness or continuing accuracy of this information.

*** END OF MSDS ***