



SAFETY DATA SHEET

Revision Date 01/30/2015

REVISION NUMBER: 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name MIDFLOC 1321L, Cationic Coagulant

Other means of identification

Product code 117773

Synonyms NONE

Recommended use of the chemical and restrictions on use

Recommended Use Flocculating agent.

Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

Rochester Midland Corporation
155 Paragon Drive
Rochester, New York 14624 USA

Emergency telephone number

EMERGENCY TELEPHONE INFOTRAC: 1-800-535-5053
OUTSIDE U.S.: +1-352-323-3500

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Emergency Overview

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance Clear Yellow Clear Amber

Physical state Liquid

Odor Organic

Hazards not otherwise classified (HNOC)

No information available

Other Information

• May be harmful in contact with skin

Unknown Acute Toxicity 12.5% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT COMPOSITION CAS#	CAS No.	%	TRADE SECRET
Aluminum hydroxychloride	12042-91-0	30-40	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

General advice	No hazards which require special first aid measures.
Eye contact	IF IN EYES: Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	IF ON SKIN: Wash with soap and water.
Inhalation	IF INHALED: Remove to fresh air.
Ingestion	IF SWALLOWED: Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms	No information available.
----------	---------------------------

Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
--------------------	------------------------

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

Explosion data

Sensitivity to Mechanical Impact NONE.

Sensitivity to Static Discharge NONE.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear adequate personal protective equipment, see Section 8, Exposure Controls/Personal Protection.
----------------------	--

Environmental precautions

Environmental precautions	See Section 12 for additional ecological information.
---------------------------	---

Methods and material for containment and cleaning up

Methods for containment	Dike to contain. Pick up with absorbant material. Put in suitable container for disposal.
-------------------------	---

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials Chlorine containing materials. Oxidizing materials. Nitric acid. Peroxides.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

PRODUCT COMPOSITION CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
Aluminum hydroxychloride 12042-91-0	TWA: 1 mg/m ³ respirable fraction	NA	-

Appropriate engineering controls

ENGINEERING CONTROLS Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety glasses are recommended to minimize eye contact.

Skin and body protection Chemical resistant gloves are recommended to minimize skin contact. 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.

RESPIRATORY PROTECTION If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Organic
Appearance	Clear Yellow Clear Amber	Odor threshold	No information available
Color	Light Yellow or Amber		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	4.0	
Melting point/freezing point	No information available	
Boiling point / boiling range	100 °C / 212 °F	
Flash point	-	None to boiling.
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		

Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific gravity	1.265 - 1.30
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

Other Information

Softening point	No information available
VOC (EPA METH.24) (G/L):	0
Density	10.66 lbs/gal
Bulk density	No information available

10. STABILITY AND REACTIVITY

REACTIVITY

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

CONDITIONS TO AVOID

Extremes of temperature and direct sunlight.

Incompatible materials

Chlorine containing materials. Oxidizing materials. Nitric acid. Peroxides.

Hazardous Decomposition Products

Oxides of Nitrogen. Oxides of Carbon. Hydrogen chloride gas. Hydrogen cyanide. Aluminum compounds.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	No data available
Inhalation	No data available.
Eye contact	May cause slight irritation.
Skin contact	May be harmful in contact with skin.
Ingestion	Large amounts may cause irritation, nausea, diarrhea.

PRODUCT COMPOSITION CAS#	Oral LD50	Dermal LD50	Inhalation LC50
Aluminum hydroxychloride 12042-91-0	= 9187 mg/kg (Rat)	> 2000 mg/kg (Rat)	-

Information on toxicological effects

Symptoms No information available.

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

Sensitization No information available.
Germ cell mutagenicity No information available.
Carcinogenicity No information available.
Reproductive Toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 12.5% of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document .
ATEmix (oral) 21436 mg/kg
ATEmix (dermal) 4671 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

12.5% of the mixture consists of components(s) of unknown hazards to the aquatic environment

PRODUCT COMPOSITION CAS#	Algae/aquatic plants	Fish	Crustacea
Aluminum hydroxychloride 12042-91-0	-	100 - 500: 96 h Brachydanio rerio mg/L LC50 static	-

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

Proper shipping name Not Regulated by DOT

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Does not Comply
ENCS	Does not Comply
IECSC	Complies
KECL	Does not Comply
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

ACUTE HEALTH HAZARD	No
CHRONIC HEALTH HAZARD	No
FIRE HAZARD	No
Sudden release of pressure hazard	No
REACTIVE HAZARD	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

PRODUCT COMPOSITION CAS#	NJRTK:	MARTK:	PARTK:
Aluminum hydroxychloride 12042-91-0	Listed		

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA

Health hazards 1

Flammability 0

Instability 0

Physical and Chemical Properties -

HMIS

Health hazards 1

Flammability 0

Physical hazards 0

Personal protection B

Revision Date

01/30/2015

Revision Note

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

***** END OF SDS *****