



DENDRITECH, INC.

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www.Dendritech.com

In case of a Chemical Emergency involving a spill, leak, fire, exposure, or accident contact Chemtrec® at 1-800-424-9300.

-----SECTION I - PREPARATION/PRODUCT INFORMATION-----

Producer's Name: Dendritech® Inc.
3110 Schuette Drive
Midland, MI 48642
(989) 496-2016

Revision Date: June 8, 2011
Preparation Date: February, 1994

Product Name: Polyamidoamine (PAMAM) Dendrimer (*AQUEOUS SOLUTION*)

(*AQUEOUS SOLUTION – All Generations/Molecular Weights*)

-----SECTION II - INGREDIENTS-----

INGREDIENTS	CAS#	%	ACGIH	OSHA	CARCINOGEN LIST			SARA
			TLV	PEL	IARC	NTP	OSHA	313

A) HAZARDOUS INGREDIENTS - NONE

B) NON-HAZARDOUS INGREDIENTS:

Polyamidoamine	26937-01-9	5-50%	NONE	NONE	NO	NO	NO	NO
Water	7722-18-5	50-95%	NONE	NONE	NO	NO	NO	NO

HMIS Rating: Health = 0, Flammability = 0, Reactivity = 0, Protection = B

-----SECTION III - PHYSICAL AND CHEMICAL DATA-----

Boiling Point - 100°C (212°F)

Solubility in Water - Very Soluble
(water solution)

Vapor Pressure - Not Available

Vapor Density - Not Available

Odor - Essentially Odorless

Appearance - Slightly yellow, viscous liquid

Decomposition Temperature - 150°C

Melting/Softening Pt. - Not Available

Specific Gravity - Not Available pH - Alkaline (~ 10)

-----SECTION IV - FIRE AND EXPLOSION HAZARD-----

Flash Pt. - Not Available (aqueous solution) Special Fire Fighting Procedure- None

Extinguishing Media - Carbon Dioxide, foam, Flammable Limits - Not Available
dry powder

Hazardous Combustion Products - May Produce Unusual Fire or Explosion Hazards
Irritant Fumes -None

Auto-Ignition Temperature - Not Available

-----SECTION V - REACTIVITY DATA-----

Stability - Stable under normal conditions

Hazardous Decomposition Products-Carbon Oxides; Nitrogen Oxides

Hazardous Polymerization - Does not Occur

Conditions to Avoid: Prolonged storage above normal room temperature can lead to some deterioration in product quality, but hazardous decomposition does not occur.

Incompatibility - Oxidizing agents; acids, halogenated organic compounds, aldehydes, ketones, and acrylates. Mixtures with these materials will result in temperature and/or pressure increases. Amines can also react with copper, brass, or other copper alloys. Ensure all piping or containers are amine compatible.

-----SECTION VI - HEALTH HAZARD DATA/TOXICOLOGICAL PROPERTIES-----

Hazards to Humans- None during normal use. Skin contact is the primary route of exposure during handling.

Test Data - 50% aqueous solution
LD50 Oral/Rats: >5000mg/kg. - Essentially non-toxic
LD50 Dermal/Rabbit: >2000mg/kg - Moderately Toxic
Skin irritation: Slight irritant
Eye irritation: Essentially non-irritating

Additional Information:

Mutagenicity: Negative, not a bacterial mutagen by the Ames test. Skin sensitization: Using a modified Buehler technique, neutralized solutions (pH=7) of dendrimer showed no sensitization reactions in guinea pigs under test conditions.

-----SECTION VII - EMERGENCY/FIRST AID PROCEDURES-----

Inhalation - Remove to fresh air. Support breathing if necessary and contact a physician.

Skin - Promptly wash with soap and water.

Eyes - Flush eyes with large quantities of water for at least 15 minutes. If irritation is present after washing contact a physician.

Ingestion - Seek medical attention.

-----SECTION VIII - SAFE HANDLING/PREVENTATIVE MEASURES-----

Personal protective equipment: Good ventilation, gloves, and safety glasses are minimum protective equipment. Goggles and protective clothing should be used if contact with large quantities is possible.

Waste Disposal: Incineration recommended; dispose of in accordance with all Federal, State, and Local regulations.

Leak/Spill Procedures: Soak up with inert absorbant material (sand, silica gel, or clay). Dispose of in accordance with all regulations. Flush area with water after cleanup.

Storage: To maintain product quality, store at room temperature. For prolonged storage, refrigeration (5-10°C) under a nitrogen pad is recommended.

Handling Procedures: Normal Precautions

-----SECTION IX - TRANSPORTATION REQUIREMENTS-----

Proper Shipping Name - None

Hazard Class - None

Identification Number - None

Reportable Quantity - None

Packing Group - None

International Air Transportation Association (IATA) requirements: None

MSDS H2O