

1.	<b>Chemical Product and Company Identification</b>
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**VINATI ORGANICS LIMITED**  
**Plot No.A-20, MIDC Industrial Area,Lote Parashuram – 415722,**  
**Tal.Khed, Dist. Ratnagiri Maharashtra, INDIA**

<b>Product Trade Name</b>	2-ACRYLAMID 2-METHYLPROPANESULFONIC ACID, SODIUM SALT, MONOMER
<b>CAS Number</b>	5165-97-9
<b>Synonyms</b>	None.
<b>Generic Chemical Name</b>	2-Acrylamido-2-Methyl Propane Sulfonic Acid, Sodium Salt
<b>Product Type</b>	Multipurpose
<b>Preparation/Revision Date</b>	10 <sup>th</sup> March 2009
<b>Transportation Emergency Phone No.</b>	Lote Office (91-2356-273032) Mumbai Office (91-22-28510811).

2.	<b>Hazards Identification</b>
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<b>Appearance</b>	Light Colored liquid
<b>Order</b>	Mild

**Principal Hazards**

- **This material has no known health hazards.**

This material is not considered hazardous by the OSHA Hazard Communication Standard 29CFR 1910.1200.  
**See Section 11 for Complete health hazard information.**

3.	<b>Composition / Information on Ingredients</b>
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<b>Hazardous Ingredients</b>	This material has no known hazards under applicable laws.
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4.	<b>First Aid Measures</b>
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<b>Eyes</b>	Flush with water for at least 30 minutes. Get medical attention if eye irritation develops or persists.
<b>Skin</b>	Wash with soap and water. Get medical attention if irritation develops. Wash contaminated clothing before reuse.
<b>Inhalation</b>	Remove exposed person to fresh air if adverse effects are observed.
<b>Oral</b>	DO NOT INDUCE VOMITING. If conscious, give 2 glasses of water. Get immediate medical attention.
<b>Additional Information</b>	Note to physician: Treat symptomatically.

5.	<b>Fire Fighting Measures</b>
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<b>Flash Point</b>	Not applicable
<b>Extinguishing Media</b>	Not applicable
<b>Firefighting Procedures</b>	Not applicable

**Unusual Fire & Explosion Hazards** Material will not burn until water has been evaporated. Toxic fumes, gases or vapors may evolve on burning.

<b>6.</b>	<b>Accidental Release Measures</b>
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**Spill Procedures** Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations. Ventilate spill area. Prevent entry into sewers and waterways. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material. Check under Transportation and Labeling (DOT/CERCLA) and Other Regulatory Information Section (SARA) for hazardous substances to determine regulatory reporting requirements for spills.

<b>7.</b>	<b>Handling and Storage</b>
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**Pumping Temperature** Ambient  
**Maximum Handling Temperature** 35 °C, 95 °F  
**Handling Procedures** Keep container closed when not in use. Wash thoroughly after handling. Empty container contains product residue, which may exhibit hazards of product.  
**Maximum Storage Temperature** 35 °C, 95 °F  
**Storage Procedures** Not special storage precautions required.  
**Loading Temperature** 35 °C, 95 °F

<b>8.</b>	<b>Exposure Controls/Personal Protection</b>
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**Exposure Limits** None established  
**Other Exposure Limits** See Hazardous Ingredients Section for any applicable exposure limits for components.  
**Engineering Controls** Use with adequate ventilation.  
**Gloves Procedures** Use good industrial hygiene practices to avoid skin contact. If contact with the material may occur wear chemically protective gloves.  
**Eye Protection** Safety Glasses.  
**Respiratory Protection** Under normal use conditions, respirator is not usually required.  
**Clothing Recommendation** Long sleeve shirt is recommended.

<b>9.</b>	<b>Physical and Chemical Properties</b>
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**Flash Point** Not applicable  
**Upper Flammable Limit** Not determined  
**Lower Flammable Limit** Not determined  
**Autoignition Point** Not determined  
**Explosion Data** Material does not have explosive properties.  
**Vapor Pressure** Not determined  
**pH** 9.7  
**Specific Gravity** 1.22 (15.6 °C)  
**Bulk Density** Not determined  
**Water Solubility** Soluble  
**Percent Volatile** 50%  
**Percent VOC** Not determined  
**Vapor Density** Not determined

<b>Evaporation Rate</b>	Not determined
<b>Odor</b>	Mild
<b>Appearance</b>	Light colored liquid.
<b>Viscosity</b>	6 Centistokes (40 °C)
<b>Odor Threshold</b>	Unknown
<b>Boiling Point</b>	Not determined
<b>Pour Point Temperature</b>	Not determined
<b>Melting / Freezing Point</b>	Not determined

*The above data are typical values and do not constitute a specification.*

<b>10.</b>	<b>Stability and Reactivity</b>
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<b>Stability</b>	Material is normally stable at moderately elevated temperatures and pressures.
<b>Decomposition Temperature</b>	Not determined
<b>Incompatibility</b>	Oxidizing agents.
<b>Polymerization</b>	Non-hazardous polymerization may occur. Avoid concentrated aqueous solutions. Avoid depletion of polymerization inhibitor.
<b>Thermal Decomposition</b>	Thermal decomposition and combustion are not expected to occur except under extreme conditions.
<b>Conditions to Avoid</b>	Not determined.

<b>11.</b>	<b>Toxicological Information</b>
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**- ACUTE EXPOSURE -**

<b>Eye Irritation</b>	Not expected to cause eye irritation. Based on actual data.
<b>Skin Irritation</b>	Not expected to be a primary skin irritant. Based on actual data
<b>Respiratory Irritation</b>	No data available to indicate product or components may cause respiratory irritation under normal workplace conditions and good industrial hygiene practices.
<b>Dermal Toxicity</b>	The LD50 in rabbits is >2000 mg/kg. Based on actual data.
<b>Inhalation Toxicity</b>	No data available to indicate product or components may be a toxic inhalation hazard
<b>Oral Toxicity</b>	The LD50 in rats is >5000 mg/Kg. Based on actual data.
<b>Dermal Sensitization</b>	No data available to indicate product or components may be respiratory sensitizers.

**- CHRONIC EXPOSURE -**

<b>Chronic Toxicity</b>	Ammonium 2-Acrylamido-2-Methyl Propane Sulfonic Acid was studied in a 28-day oral gavage study in rats with a 14-day recovery period, and no significant toxicological effects were observed. The No Observed Adverse Effect Level (NOEL) was established at 1000 mg/kg/day.
<b>Carcinogenicity</b>	No data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.
<b>Mutagenicity</b>	2-Acrylamido-2-Methyl Propane Sulfonic Acid Monomer was marginally active in an in vitro chromosome aberration study. 2-Acrylamido-2-Methyl Propane Sulfonic Acid Monomer showed no activity in an Ames test, an in vivo chromosome aberration study, or a CHO/HGPRT in vitro cell mutation assay. Results of a dominant lethal test in rats have been negative for this material.
<b>Reproductive Toxicity</b>	Ammonium 2-Acrylamido-2-Methyl Propane Sulfonic Acid was evaluated for reproduction toxicity in a OECD 421 assay. No adverse effects on reproductive parameters were observed. The No Observed Effect Level (NOEL) was established at 1000 mg/kg/day
<b>Teratogenicity</b>	Ammonium 2-Acrylamido-2-Methyl Propane Sulfonic Acid was evaluated for development toxicity in OECD 421 assay. No adverse effects on developmental parameters were observed. The No Observed Effect Level (NOEL) was established at

1000 mg/kg/day.

**- ADDITIONAL INFORMATION -**

**Other** No other health hazards known.

<b>12.</b>	<b>Ecological Information</b>
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**- ENVIRONMENTAL TOXICITY -**

<b>Freshwater Fish Toxicity</b>	The acute LC50 is 100 – 1000 mg/L based on actual data.
<b>Freshwater Invertebrates Toxicity</b>	The acute EC50 is 100 – 1000 mg/L based on actual data.
<b>Algal Inhibition</b>	The acute EC50 is > 1000 mg/L based on similar products.
<b>Saltwater Fish Toxicity</b>	Not determined
<b>Saltwater Invertebrates Toxicity</b>	Not determined
<b>Bacteria Toxicity</b>	The acute EC50 for bacteria is > 1000 ppm based on similar materials
<b>Miscellaneous Toxicity</b>	Not determined.

**- ENVIRONMENTAL FATE -**

<b>Biodegradation</b>	This product shows limited biodegradation based on actual OECD 301-type test data for similar products. This product shows limited biodegradation based on OECD 302-type test data for similar products.
<b>Bioaccumulation</b>	This material displays no potential to bioconcentrate
<b>Soil Mobility</b>	Not determined.

<b>13.</b>	<b>Disposal Consideration</b>
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**Waste Disposal** This material, if discarded, is not a hazardous waste under RCRA Regulation 40 CFR 261

<b>14.</b>	<b>Transport Information</b>
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<b>ICAO/IATA (US)</b>	Not regulated.
<b>ICAO/IATA (International)</b>	Not regulated.
<b>IMDG</b>	Not regulated.
<b>IMDG EMS Fire</b>	Not applicable
<b>IMDG EMS Spill</b>	Not applicable
<b>IMDG MFAG</b>	Not applicable
<b>USCG Compatibility</b>	Not determined.
<b>U.S. DOT Bulk</b>	Not regulated.
<b>U.S. DOT Non-Bulk</b>	Not regulated.
<b>DOT NAERG</b>	Not regulated.
<b>TDG Bulk</b>	Not regulated.
<b>TDG Non-Bulk</b>	Not regulated.
<b>Mexico</b>	Not regulated.
<b>Mexico Non-Bulk</b>	Not regulated.
<b>Bulk Quantity</b>	25000 Kgs.
<b>Non-Bulk Quantity</b>	240 Kgs.

<b>15.</b>	<b>Regulatory Information</b>
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**--Global Chemical Inventories--**

<b>U.S.TSCA Inventory</b>	All components of this material are on the US TSCA Inventory or are exempt.
<b>Other TSCA Reg.</b>	Section 8d (1, 4-Benzenediol (Hydroquinone)). Section 8a, 4a (p-Methoxyphenol). May be subject to export notification under TSCA Section 12(b).
<b>EEC EINECS</b>	All components are in compliance with the EC Seventh amendment Directive 92/32/EEC.
<b>Japan METI</b>	All components are in compliance with the Chemical Substances Control Law of Japan.
<b>Australia</b>	All components are in compliance with chemical notification requirements in Australia.
<b>Canada</b>	All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.
<b>Switzerland</b>	All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.
<b>Korea</b>	All components are in compliance in Korea.
<b>Philippines</b>	All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).
<b>China</b>	All components of this product are listed on the Inventory of Existing Chemical Substances in China.

**--Other U.S. Federal Regulations --**

<b>SARA Ext. Haz. Subst.</b>	This product does not contain greater than 1.0% of any chemical substance on the SARA Extremely Hazardous Substances list.
<b>SARA Section 313</b>	This product does not contain greater than 1.0% (greater than 0.1% for carcinogenic substance) of any chemical substances listed under SARA Section 313.

**SARA 311 Classifications**

Acute Hazard	No
Chronic Hazard	No
Fire Hazard	No
Reactivity Hazard	Yes

<b>CERCLA Hazardous Substances</b>	None known
<b>FDA Approval</b>	Not applicable.

**-- State Regulations --**

<b>Cal. Prop. 65</b>	This product contains the following chemical(s) known to the state of California to cause cancer and/or birth defects: acrylonitrile, acrylamide.
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**-- Regulations --**

<b>U.S. Fuel Registration</b>	Not applicable.
<b>U.S. Dept of Agriculture</b>	This product has not been filed with the USDA to support H2 approvals.
<b>NSF Nonfood Compounds Registration</b>	Not determined.
<b>Finnish Registration Number</b>	Not Registered.
<b>Sweden Registration Number</b>	Not Registered
<b>Norway Registration Number</b>	Not Registered
<b>Danish Registration Number</b>	Not Registered
<b>Switzerland Bag T Registration Number</b>	Not Registered.
<b>China Registration Number</b>	Not Registered

**New Zealand Registration Number** Not Registered.

-- Other / International --

**TDG Regulated Limit** None known.

**U.S. Tariff Heading Number** 2924.19.10.50

**Schedule B Number** 2924.19.0000

<b>16.</b>	<b>Other Information</b>
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**US NFPA Codes**

Health	Fire	Reactivity	Special
2	0	1	N/E

**HMIS Codes**

Health	FIRE	Reactivity
0	0	1

**Precautionary Labels**

- This material has no known health hazards.

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