

GARDENA, CA  
NEW BRUNSWICK, NJ

# Material Safety Data Sheet

| NFPA          | HMIS  | Personal Protective Equipment |   |             |   |            |   |                     |
|---------------|---|-------------------------------|---|-------------|---|------------|---|---------------------|
|               | <table><tr><td>Health Hazard</td><td>1</td></tr><tr><td>Fire Hazard</td><td>1</td></tr><tr><td>Reactivity</td><td>0</td></tr></table> | Health Hazard                 | 1 | Fire Hazard | 1 | Reactivity | 0 | <br>See Section 15. |
| Health Hazard | 1   |                               |   |             |   |            |   |                     |
| Fire Hazard   | 1   |                               |   |             |   |            |   |                     |
| Reactivity    | 0   |                               |   |             |   |            |   |                     |

## Section 1. Chemical Product and Company Identification

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|                                    |  |                              |  |  |
|------------------------------------|--|------------------------------|--|--|
| <b>Common Name/<br/>Trade Name</b> |  | <b>Niacinamide ascorbate</b> | <b>Catalog<br/>Number(s).</b>  | N1012  |
|                                    |  |                              | <b>CAS#</b>  | 1987-71-9  |
| <b>Manufacturer</b>                |  |                              | <b>RTECS</b>   | Not applicable.  |
|                                    |  |                              | <b>TSCA</b>  | TSCA 8(b) inventory: No products were found. Niacinamide Ascorbate (CAS no. 1987-71-9 )itself is not listed on the TSCA 8(b) inventory. However, its components with CAS numbers 50-81-7and 98-92-0 are listed on the TSCA 8(b) inventory. |
| <b>Commercial Name(s)</b>          |  |                              | <b>CI#</b>   | Not available.   |
| <b>Synonym</b>                     |  |                              | <b><u>IN CASE OF EMERGENCY</u></b><br><b><u>CHEMTREC (24hr) 800-424-9300</u></b> |  |
|                                    |  |                              |  |  |
| <b>Chemical Name</b>               |  |                              |  |  |
| <b>Chemical Family</b>             |  |                              |  |  |
| <b>Chemical Formula</b>            |  |                              |  |  |
| <b>Supplier</b>                    |  |                              |  |  |

## Section 2. Composition and Information on Ingredients

|                  |         | Exposure Limits          |                           |                           |             |
|------------------|---------|--------------------------|---------------------------|---------------------------|-------------|
| Name             | CAS #   | TWA (mg/m <sup>3</sup> ) | STEL (mg/m <sup>3</sup> ) | CEIL (mg/m <sup>3</sup> ) | % by Weight |
| 1) Ascorbic acid | 50-81-7 |                          |                           |                           | 73.5-75.5   |
| 2) Niacinamide   | 98-92-0 |                          |                           |                           | 24.5-26.5   |
|                  |         |                          |                           |                           |             |

**Toxicological Data  
on Ingredients**

Continued on Next Page

**Section 3. Hazards Identification**

|   |  |
|---|--|
| <b>Potential Acute Health Effects</b>   | Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.   |
| <b>Potential Chronic Health Effects</b> | <b>CARCINOGENIC EFFECTS:</b> Not available.<br><b>MUTAGENIC EFFECTS:</b> Mutagenic for bacteria and/or yeast. [Ascorbic acid]. Mutagenic for bacteria and/or yeast. [Niacinamide].<br><b>TERATOGENIC EFFECTS:</b> Not available.<br><b>DEVELOPMENTAL TOXICITY:</b> Not available.<br>Repeated or prolonged exposure is not known to aggravate medical condition. |

**Section 4. First Aid Measures**

|                             |  |
|-----------------------------|--|
| <b>Eye Contact</b>          | Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.                                  |
| <b>Skin Contact</b>         | Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.  |
| <b>Serious Skin Contact</b> | Not available.   |
| <b>Inhalation</b>           | If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.   |
| <b>Serious Inhalation</b>   | Not available.   |
| <b>Ingestion</b>            | Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear. |
| <b>Serious Ingestion</b>    | Not available.   |

**Section 5. Fire and Explosion Data**

|  |   |
|--|---|
| <b>Flammability of the Product</b>                         | May be combustible at high temperature.   |
| <b>Auto-Ignition Temperature</b>                           | The lowest known value is 660°C (1220°F) (Ascorbic acid).   |
| <b>Flash Points</b>  | Not available.  |
| <b>Flammable Limits</b>                                    | Not available.  |
| <b>Products of Combustion</b>                              | These products are carbon oxides (CO, CO <sub>2</sub> ), nitrogen oxides (NO, NO <sub>2</sub> ...).   |
| <b>Fire Hazards in Presence of Various Substances</b>      | Slightly flammable to flammable in presence of open flames and sparks, of heat.<br>Non-flammable in presence of shocks.                         |
| <b>Explosion Hazards in Presence of Various Substances</b> | Risks of explosion of the product in presence of mechanical impact: Not available.<br>Slightly explosive in presence of open flames and sparks. |
| <b>Fire Fighting Media and Instructions</b>                | SMALL FIRE: Use DRY chemical powder.<br>LARGE FIRE: Use water spray, fog or foam. Do not use water jet.   |
| <b>Special Remarks on Fire Hazards</b>                     | Material in powder form, capable of creating a dust explosion. As with most organic solids, fire is possible at elevated temperatures.          |
| <b>Special Remarks on Explosion Hazards</b>                | Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.        |

**Section 6. Accidental Release Measures**

|                    |  |
|--------------------|--|
| <b>Small Spill</b> | Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements. |
| <b>Large Spill</b> | Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.                                 |

**Section 7. Handling and Storage**

|                    |  |
|--------------------|--|
| <b>Precautions</b> | Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, metals, acids, alkalis. |
| <b>Storage</b>     | Keep container tightly closed. Keep container in a cool, well-ventilated area. Oxygen Sensitive Sensitive to light. Store in light-resistant containers.   |

**Section 8. Exposure Controls/Personal Protection**

|   |   |
|---|---|
| <b>Engineering Controls</b>                         | Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. |
| <b>Personal Protection</b>                          | Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.   |
| <b>Personal Protection in Case of a Large Spill</b> | Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.                    |
| <b>Exposure Limits</b>                              | Not available.  |

**Section 9. Physical and Chemical Properties**

|                                      |  |              |                |
|--------------------------------------|--|--------------|----------------|
| <b>Physical state and appearance</b> | Solid. (Crystalline powde)                                     | <b>Odor</b>  | Odorless.      |
| <b>Molecular Weight</b>              | Not applicable.  | <b>Taste</b> | Not available. |
| <b>pH (1% soln/water)</b>            | Not available.   | <b>Color</b> | Lemon Yellow.  |
| <b>Boiling Point</b>                 | Not available.   |              |                |
| <b>Melting Point</b>                 | 141°C (285.8°F) - 145 C.                                       |              |                |
| <b>Critical Temperature</b>          | The lowest known value is 509.85°C (949.7°F) (Ascor bic acid). |              |                |
| <b>Specific Gravity</b>              | Weighted average: 1.58 (Water = 1)                             |              |                |
| <b>Vapor Pressure</b>                | Not applicable.  |              |                |
| <b>Vapor Density</b>                 | Not available.   |              |                |
| <b>Volatility</b>                    | Not available.   |              |                |
| <b>Odor Threshold</b>                | Not available.   |              |                |
| <b>Water/Oil Dist. Coeff.</b>        | The product is equally soluble in oil and water.               |              |                |
| <b>Ionicity (in Water)</b>           | Not available.   |              |                |
| <b>Dispersion Properties</b>         | See solubility in water, diethyl ether, n-octanol.             |              |                |

|                   |  |
|-------------------|--|
| <b>Solubility</b> | Soluble in cold water, hot water, n-octanol.<br>Slightly soluble in diethyl ether.<br>Solubility in Water: 285000 mg/l water or 1 g/3.5 ml water.<br>Solubility in Alcohol: 1 g/20 ml alcohol.<br>Very slightly soluble in chloroform.<br>Sparingly soluble in Glycerine.<br>Virtually insoluble in Benzene. |
|-------------------|--|

### Section 10. Stability and Reactivity Data

|  |   |
|--|---|
| <b>Stability</b>                               | The product is stable.  |
| <b>Instability Temperature</b>                 | Not available.  |
| <b>Conditions of Instability</b>               | Excess heat, incompatible materials, air, oxygen, dust generation.                                    |
| <b>Incompatibility with various substances</b> | Reactive with oxidizing agents, metals, acids, alkalis.   |
| <b>Corrosivity</b>                             | Non-corrosive in presence of glass.   |
| <b>Special Remarks on Reactivity</b>           | Sensitive to light. Sensitive to Oxygen. Air sensitive. It may gradually darken upon exposure to air. |
| <b>Special Remarks on Corrosivity</b>          | Not available.  |
| <b>Polymerization</b>                          | Will not occur.   |

### Section 11. Toxicological Information

|   |   |
|---|---|
| <b>Routes of Entry</b>                                  | Inhalation. Ingestion.  |
| <b>Toxicity to Animals</b>                              | Acute oral toxicity (LD50): 2500 mg/kg [Rat].   |
| <b>Chronic Effects on Humans</b>                        | <b>MUTAGENIC EFFECTS:</b> Mutagenic for bacteria and/or yeast. [Ascorbic acid]. Mutagenic for bacteria and/or yeast. [Niacinamide].   |
| <b>Other Toxic Effects on Humans</b>                    | Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.   |
| <b>Special Remarks on Toxicity to Animals</b>           | Not available.  |
| <b>Special Remarks on Chronic Effects on Humans</b>     | May affect genetic material (mutagenic).<br>May cause adverse reproductive effects and birth defects (teratogenic) based on animal test data.<br>Human: passes through the placenta, excreted in maternal milk (Ascorbic acid)  |
| <b>Special Remarks on other Toxic Effects on Humans</b> | Acute Potential Health Effects<br>Skin: May cause skin irritation.<br>Eyes: May cause eye irritation.<br>Inhalation: May cause respiratory tract irritation.<br>Ingestion: Ingestion of small amounts during normal industrial handling is a low hazard. Ingestion of large amounts may cause gastrointestinal tract irritation, hypermotility, diarrhea, acidification of the urine which may cause stones in the urinary tract and may cause renal failure. May also affect behavior (psychomotor coordination, somnolence), eyes (lacrimation), blood (anemia).<br>Chronic Potential Health Effects<br>Ingestion: Prolonged or repeated ingestion may affect the blood/bone marrow and cause weight loss |

**Section 12. Ecological Information**

|  |   |
|--|---|
| <b>Ecotoxicity</b>                                       | Not available.  |
| <b>BOD5 and COD</b>                                      | Not available.  |
| <b>Products of Biodegradation</b>                        | Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. |
| <b>Toxicity of the Products of Biodegradation</b>        | The product itself and its products of degradation are not toxic.   |
| <b>Special Remarks on the Products of Biodegradation</b> | Not available.  |

**Section 13. Disposal Considerations**

|                       |  |
|-----------------------|--|
| <b>Waste Disposal</b> | Waste must be disposed of in accordance with federal, state and local environmental control regulations. |
|-----------------------|--|

**Section 14. Transport Information**

|   |  |
|---|--|
| <b>DOT Classification</b>               | Not a DOT controlled material (United States). |
| <b>Identification</b>                   | Not applicable.                                |
| <b>Special Provisions for Transport</b> | Not applicable.                                |
| <b>DOT (Pictograms)</b>                 |  |

**Section 15. Other Regulatory Information and Pictograms**

|                                    |  |   |                 |             |   |            |   |                     |   |   |   |              |   |            |   |                 |  |
|------------------------------------|--|---|-----------------|-------------|---|------------|---|---------------------|---|---|---|--------------|---|------------|---|-----------------|--|
| Federal and State Regulations      | No products were found.  |   |                 |             |   |            |   |                     |   |   |   |              |   |            |   |                 |  |
| California Proposition 65 Warnings | California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.<br><br>California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.  |   |                 |             |   |            |   |                     |   |   |   |              |   |            |   |                 |  |
| Other Regulations                  | For CAS no. 1987-71-9:<br>EINECS: This product is not on the European Inventory of Existing Commercial Chemical Substances.<br>Canada: Not listed on Canadian Domestic Substance List (DSL) or Canadian Non- Domestic Substance List (NDSL).<br>China: Not listed on National Inventory.<br>Japan: Not listed on National Inventory (ENCS).<br>Korea: Not listed on National Inventory (KECI).<br>Philippines: Not listed on National Inventory (PICCS).<br>Australia: Not listed on AICS. |   |                 |             |   |            |   |                     |   |   |   |              |   |            |   |                 |  |
| Other Classifications              | WHMIS (Canada)   | Not controlled under WHMIS (Canada).                            |                 |             |   |            |   |                     |   |   |   |              |   |            |   |                 |  |
|                                    | DSCL (EEC)   | This product is not classified according to the EU regulations. | Not applicable. |             |   |            |   |                     |   |   |   |              |   |            |   |                 |  |
| HMS (U.S.A.)                       | <table><tr><td>Health Hazard</td><td>1</td></tr><tr><td>Fire Hazard</td><td>1</td></tr><tr><td>Reactivity</td><td>0</td></tr><tr><td>Personal Protection</td><td>E</td></tr></table>   | Health Hazard   | 1               | Fire Hazard | 1 | Reactivity | 0 | Personal Protection | E | National Fire Protection Association (U.S.A.) | <table><tr><td>Flammability</td><td>1</td></tr><tr><td>Reactivity</td><td>0</td></tr><tr><td>Specific hazard</td><td></td></tr></table> | Flammability | 1 | Reactivity | 0 | Specific hazard |  |
| Health Hazard                      | 1  |   |                 |             |   |            |   |                     |   |   |   |              |   |            |   |                 |  |
| Fire Hazard                        | 1  |   |                 |             |   |            |   |                     |   |   |   |              |   |            |   |                 |  |
| Reactivity                         | 0  |   |                 |             |   |            |   |                     |   |   |   |              |   |            |   |                 |  |
| Personal Protection                | E  |   |                 |             |   |            |   |                     |   |   |   |              |   |            |   |                 |  |
| Flammability                       | 1  |   |                 |             |   |            |   |                     |   |   |   |              |   |            |   |                 |  |
| Reactivity                         | 0  |   |                 |             |   |            |   |                     |   |   |   |              |   |            |   |                 |  |
| Specific hazard                    |  |   |                 |             |   |            |   |                     |   |   |   |              |   |            |   |                 |  |

Health



WHMIS (Canada)  
(Pictograms)



DSCL (Europe)  
(Pictograms)



TDG (Canada)  
(Pictograms)



ADR (Europe)  
(Pictograms)



**Protective Equipment**



Gloves.



Lab coat.



Dust respirator. Be sure to use an approved/certified respirator or equivalent.



Safety glasses.

**Section 16. Other Information**

MSDS Code

N3192

References

Not available.

Other Special  
Considerations

Major Uses: Nutrient; dietary supplement, ascorbic acid source, nicotinamide source in multivitamin preparations.

Validated by Sonia Owen on 5/4/2009.

Verified by Sonia Owen.  
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CALL (310) 516-8000

[Notice to Reader](#)

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*All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.*