SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT
Product Name: Manganese Violet Dry Pigment
Product Description: Pigment, colorant
Intended Use: Fine art painting and decorative coatings

COMPANY
Company Name: Gamblin Artists Colors
Company Address: 323 SE Division Pl.
Portland, OR 97202
USA
Company Phone: 503-235-1945
Emergency Phone: Local Emergency Room

SECTION 2: HAZARDS IDENTIFICATION

Physical hazards: Not classified
Health hazards: Not classified
Environmental hazards: Not classified
OSHA defined hazards: Not classified
Label elements: Not assigned
Hazard symbol: None
Signal word: Not assigned
Hazard statement: Not assigned
Precautionary statement
Prevention: Not assigned
Response: Not assigned
Storage: Not assigned
Disposal: Not assigned

Hazard(s) not otherwise classified (HNOC): Not assigned
Supplemental information Substance(s) formed under the condition of use:
NA
SAFETY DATA SHEET: Manganese Violet Dry Pigment
REVISED: 11/24/2015

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Common name</th>
<th>CAS#</th>
<th>Concentration (%)</th>
</tr>
</thead>
</table>
| Manganese ammonium pyrophosphate | V10011T
Mangano violet #11
CI Constitution #77742
CI Pigment Violet 16 | 10101-66-3 | 100%               |

Composition comments: This product is the result of high temperature calcination of the component substances. Due to its unique crystalline structure the properties of this finished pigment do not necessarily reflect the properties of the component metals or oxides.

SECTION 4: FIRST AID MEASURES

**Eyes:** Wash with clean water for at least 15 minutes. If irritation persists, get medical attention.

**Skin:** Wash skin thoroughly with soap and water.

**Inhalation:** Remove to fresh air. If the affected person is not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Call a physician if symptoms develop or persist.

**Ingestion:** Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. Give several glasses of water to dilute contents of stomach and call a physician.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: No additional information available.

SECTION 5: FIRE FIGHTING MEASURES

**FIRE FIGHTING**

**Extinguishing Media:** Use extinguishing agent suitable for type of surrounding fire.

**Unsuitable Extinguishing Media:** NA

**Special Fire Fighting Procedures:** Use protective equipment appropriate for surrounding materials.

Not a fire hazard.
This product is not flammable.

SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Wear appropriate personal protective equipment. Avoid inhalation of dust from the spilled material.

**Environmental Precautions:** Prevent contamination of soil, drains, and surface waters.

**Methods for clean up:** Avoid dust formation. Following product recovery, flush area with water. Collect
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powder using special dust vacuum cleaner with particle filter or carefully sweep into the closed container.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling:
Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Keep formation of airborne dusts to a minimum. When using, do not eat, drink or smoke. Wash hands thoroughly after handling.

Cautions for Safe Storage:
Store in closed original container in a dry place. Room temperature-normal conditions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS

US OSHA Table z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Metals</th>
<th>Type</th>
<th>Value</th>
<th>Percent (%)</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manganese</td>
<td>Ceiling</td>
<td>5mg/m³</td>
<td>20-30</td>
<td>(as Mn) Fume.</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Metals</th>
<th>Type</th>
<th>Value</th>
<th>Percent (%)</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manganese</td>
<td>TWA</td>
<td>0.1 mg/m³</td>
<td>20-30</td>
<td>(as Mn) Inhalable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.02 mg/m³</td>
<td>20-30</td>
<td>(as Mn) Respirable fraction.</td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Metals</th>
<th>Type</th>
<th>Value</th>
<th>Percent (%)</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manganese</td>
<td>STEL</td>
<td>3 mg/m³</td>
<td>20-30</td>
<td>(as Mn) Fume.</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1 mg/m³</td>
<td>20-30</td>
<td>(as Mn) Fume.</td>
</tr>
</tbody>
</table>

BIOLOGICAL LIMIT VALUES
No biological exposure limits noted for the ingredient(s).

PERSONAL PROTECTION
Respiratory Protection: If engineering controls do not maintain airborne concentrations below
recommended exposure limits (where applicable) or acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit. A respiratory protection program that meets OSHA’s 29CFR 1910.134 and ANSI Z288.2 requirements must be followed whenever workplace conditions
warrant respirator use. If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection. MSHA/NIOSH respirators approved for dusts TC-1c or NIOSH approved cartridges for non-oil aerosols, N95, N99, N100 (42 CFR84).

**Skin Protection:** Rubber or plastic gloves. PVC disposable gloves. Use impervious gloves. Normal work clothing (long sleeved shirt and pants) is recommended.

**Eye Protection:** Safety glasses with side-shields

**ENGINEERING CONTROLS**

**Ventilation:** Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

**Hygiene:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**GENERAL INFORMATION**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Powder</td>
</tr>
<tr>
<td>Color</td>
<td>Purple/violet</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>N/D</td>
</tr>
</tbody>
</table>

**IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Melting Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Relative Density</td>
<td>2.7</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Slightly</td>
</tr>
<tr>
<td>Solids by Weight</td>
<td>N/D</td>
</tr>
<tr>
<td>Volatile</td>
<td>N/A</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>N/A</td>
</tr>
<tr>
<td>Viscosity</td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decomposition Temp</td>
<td>700-750°F (371.1-398.9°C)</td>
</tr>
<tr>
<td>pH</td>
<td>3.8</td>
</tr>
</tbody>
</table>

**SECTION 10: STABILITY AND REACTIVITY**

**Stability:** Material is stable under normal conditions

**Conditions to Avoid:** None known

**Materials to Avoid:** No additional information

**Hazardous Decomposition or Bi-Products:** No hazardous decomposition products are known.
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Possibility of Hazardous Reactions:
Hazardous polymerization does not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

- **Inhalation:** May cause irritation to the respiratory system.
- **Ingestion:** No adverse effects due to ingestion are expected.
- **Skin:** May cause irritation.
- **Eye:** May cause irritation.
- **Other:** Early symptoms of chronic manganese poisoning includes: languor, sleepiness and weakness in the legs. A stolid mask-like appearance of the face, emotional disturbances such as uncontrollable laughter and spastic gait with tendency to fall in walking are findings in more advanced cases.

<table>
<thead>
<tr>
<th>HAZARD CLASS</th>
<th>CONCLUSION/REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>May cause respiratory irritation</td>
</tr>
<tr>
<td>Ingestion</td>
<td>No adverse effects due to ingestion are expected. Oral LD50: 12900 mg/kg (rat)</td>
</tr>
<tr>
<td>Skin</td>
<td>Contact with skin may cause irritation</td>
</tr>
<tr>
<td>Eye</td>
<td>May irritate eyes</td>
</tr>
<tr>
<td>Sensitization</td>
<td>No sensitizing effects known</td>
</tr>
<tr>
<td>Specific Target Organ Toxicity (STOT)</td>
<td></td>
</tr>
<tr>
<td>Single Exposure</td>
<td>Not classified (No Data Available)</td>
</tr>
<tr>
<td>Repeated Exposure</td>
<td>Not classified (No Data Available)</td>
</tr>
</tbody>
</table>

Further information: Overexposure to the dust of manganese compounds may cause chronic manganese poisoning, which is unlikely in the normal workplace setting. This product is the result of high temperature calcination of the component substances. Due to the unique crystalline structure of the properties of this finished material do not necessarily reflect the properties of the component metals or oxides.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION

- **Ecotoxicity:** Not expected to be harmful to aquatic organisms
  EC50 40 mg/l, 48 hours (daphnia magna)
- **Mobility:** No information available
PERSISTENCE AND MOBILITY

Biodegradation: Not expected to be biodegradable
Bioaccumulative potential: Does not contain any substance expected to be bioaccumulating

SECTION 13: DISPOSAL CONSIDERATIONS

NOTE: Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at the time of disposal.

Waste Disposal: Dispose of in accordance with national, state, and local regulations.
Empty Container: Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations.

SECTION 14: TRANSPORT INFORMATION

LAND (DOT): Not regulated
SEA (IMDG): Not regulated
AIR (IATA): Not regulated

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS TSCA (TOXIC SUBSTANCE CONTROL ACT):
Not regulated
CERCLA HAZARDOUS SUBSTANCE LIST (40 CFR 302.4):
Not listed
SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):
Immediate Hazards - Yes
Delayed Hazards - No
Fire Hazards - No
Pressure Hazards - No
Reactivity Hazards - No
SARA 302 Extremely hazardous substances - No
SARA 311/312 Hazardous chemical - Yes
SARA 313 (TRI reporting) - Chemical name: Manganese compounds CAS number 7439-96-5 100% by weight.
CLEAN AIR ACT (CAA) SECTION 112 HAZARDOUS AIR POLLUTANTS (HAPs) LIST:
Manganese compounds (CAS 7439-96-5)
STATE REGULATIONS:
Massachusetts RTK - Substance List:
Manganese compounds (CAS 7439-96-5)

**New Jersey Worker and Community Right-to-Know Act:**
Manganese compounds (CAS 7439-96-5) 500 lbs

**Pennsylvania RTK - Hazardous Substances:**
Manganese compounds (CAS 7439-96-5)

**Rhode Island RTK:**
Manganese compounds (CAS 7439-96-5)

**California Proposition 65:**
Not listed

## INTERNATIONAL REGULATIONS:

<table>
<thead>
<tr>
<th>Country(s) or Region</th>
<th>Inventory Name</th>
<th>On Inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substance List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINCES)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s). A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## SECTION 16: OTHER INFORMATION

N/D = Not determined, N/A = Not applicable

**THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:**
Updates made in accordance with implementation of GHS requirements.

The information and recommendations contained herein are, to the best of Gamblin’s knowledge and belief, accurate and reliable, but it is not warranted to be. You can contact Gamblin to ensure that this document is the most current available. The information and recommendations are offered for the user’s consideration and examination. It is the user’s responsibility to satisfy itself that the product is suitable for the intended use and it is the user’s responsibility to carefully read the product label and follow instructions for safe use of the product.