Please reduce your browser font size for better viewing and printing

MSDS Material Safety Data Sheet

From: Mallinckrodt Baker, Inc.
222 Red School Lane
Phillipsburg, NJ 08865

J.T.Baker

24 Hour Emergency Telephone: 800-3CB-2151
CHEMTREC: 1-800-424-9300

National Response in Canada
CANUTEC: 613-996-6666

Outside U.S. and Canada
Chemtrec: 202 483 7616

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance

# Malachite Green Hydrochloride

**MSDS Number: M0280 --- *Effective Date: 12/08/96***

## 1. Product Identification

**Synonyms:** C.I. Basic Green 4; C.I. 42000
**CAS No.:** 569-64-2
**Molecular Weight:** 364.92
**Chemical Formula:** C23H25N2Cl
**Product Codes:** P451

## 2. Composition/Information on Ingredients

| Ingredient | CAS No | Percent | Hazardous |
|---|---|---|---|
| C.I. Basic Acid Green 4 | 569-64-2 | 90 - 100% | Yes |

## 3. Hazards Identification

**Emergency Overview**

**WARNING! HARMFUL IF SWALLOWED. CAUSES IRRITATION.**

J.T. Baker SAF-T-DATA(tm) Ratings (Provided here for your convenience)

Health Rating: 2 - Moderate
Flammability Rating: 1 - Slight
Reactivity Rating: 1 - Slight
Contact Rating: 2 - Moderate
Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES
Storage Color Code: Orange (General Storage)
---

**Potential Health Effects**
---

**Inhalation:**
None identified.

**Ingestion:**
May be harmful.

**Skin Contact:**
Irritation, prolonged contact may cause dermatitis.

**Eye Contact:**
Irritation.

**Chronic Exposure:**
No information found.

**Aggravation of Pre-existing Conditions:**
No information found.

---

# 4. First Aid Measures

**Inhalation:**
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Prompt action is essential.

**Ingestion:**
Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

**Skin Contact:**
In case of contact, flush skin with water.

**Eye Contact:**
In case of eye contact, immediately flush with plenty of water for at least 15 minutes.

---

# 5. Fire Fighting Measures

**Fire:**
Not expected to be a fire hazard.

**Explosion:**
None identified.

**Fire Extinguishing Media:**
Use extinguishing media appropriate for surrounding fire.

**Special Information:**
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

---

# 6. Accidental Release Measures

Wear self-contained breathing apparatus and full protective clothing. With clean shovel, carefully place material into clean, dry container and cover; remove from area. Flush spill area with water.

---

# 7. Handling and Storage

Keep container tightly closed. Suitable for any general chemical storage area. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

---

# 8. Exposure Controls/Personal Protection

**Airborne Exposure Limits:**
None established.

**Ventilation System:**
A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

**Personal Respirators (NIOSH Approved):**
For conditions of use where exposure to the substance is apparent, consult an industrial hygienist. For emergencies, or instances where the exposure levels are not known, use a

full-facepiece positive-pressure, air-supplied respirator. WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Skin Protection:**
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Eye Protection:**
Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

---

## 9. Physical and Chemical Properties

**Appearance:**
Green Crystalline solid.

**Odor:**
No information found.

**Solubility:**
Appreciable (>10%)

**Specific Gravity:**
No information found.

**pH:**
No information found.

**% Volatiles by volume @ 21C (70F):**
0

**Boiling Point:**
No information found.

**Melting Point:**
No information found.

**Vapor Density (Air=1):**
Not applicable.

**Vapor Pressure (mm Hg):**
Not applicable.

**Evaporation Rate (BuAc=1):**
No information found.

---

# 10. Stability and Reactivity

**Stability:**
Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:**
Oxides of nitrogen.

**Hazardous Polymerization:**
Will not occur.

**Incompatibilities:**
Strong oxidizing agents.

**Conditions to Avoid:**
No information found.

---

# 11. Toxicological Information

--------\Cancer Lists\----------

| Ingredient | ---NTP Carcinogen--- Known | Anticipated | IARC Category |
|---|---|---|---|
| C.I. Basic Acid Green 4 (569-64-2) | No | No | None |

---

# 12. Ecological Information

**Environmental Fate:**
No information found.

**Environmental Toxicity:**
No information found.

---

# 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

---

# 14. Transport Information

**Domestic (Land, D.O.T.)**

---

Proper Shipping Name: TOXIC SOLID, ORGANIC, N.O.S. (MALACHITE GREEN HYDROCHLORIDE)
Hazard Class: 6.1
UN/NA: UN2811
Packing Group: III
Information reported for product/size: 100G

**International (Water, I.M.O.)**

---

Proper Shipping Name: TOXIC SOLID, ORGANIC, N.O.S. (MALACHITE GREEN HYDROCHLORIDE)
Hazard Class: 6.1
UN/NA: UN2811
Packing Group: III
Information reported for product/size: 100G

**International (Air, I.C.A.O.)**

---

Proper Shipping Name: TOXIC SOLID, ORGANIC, N.O.S. (MALACHITE GREEN HYDROCHLORIDE)
Hazard Class: 6.1
UN/NA: UN2811
Packing Group: III
Information reported for product/size: 100G

---

# 15. Regulatory Information

--------\Chemical Inventory Status - Part 1\---------------------------------

| Ingredient | TSCA | EC | Japan | Australia |
|---|---|---|---|---|
| C.I. Basic Acid Green 4 (569-64-2) | Yes | Yes | Yes | Yes |

--------\Chemical Inventory Status - Part 2\---------------------------------

| Ingredient | Korea | --Canada-- DSL | NDSL | Phil. |
|---|---|---|---|---|
| C.I. Basic Acid Green 4 (569-64-2) | Yes | Yes | No | Yes |

--------\Federal, State & International Regulations - Part 1\----------------

| Ingredient | -SARA 302- RQ | TPQ | ------SARA 313------ List | Chemical Catg. |
|---|---|---|---|---|
| C.I. Basic Acid Green 4 (569-64-2) | No | No | Yes | No |

--------\Federal, State & International Regulations - Part 2\----------------

| Ingredient | CERCLA | -RCRA- 261.33 | -TSCA- 8(d) |
|---|---|---|---|

| | | | |
|---|---|---|---|
| C.I. Basic Acid Green 4 (569-64-2) | No | No | No |

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No
Reactivity: No (Pure / Solid)

**Australian Hazchem Code:** No information found.
**Poison Schedule:** No information found.

**WHMIS:**
This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

---

# 16. Other Information

**Label Hazard Warning:**
WARNING! HARMFUL IF SWALLOWED. CAUSES IRRITATION.

**Label Precautions:**
Avoid contact with eyes, skin, clothing. Keep in tightly closed container. Wash thoroughly after handling.

**Label First Aid:**
If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse.

**Product Use:**
Laboratory Reagent.

**Revision Information:**
Pure. New 16 section MSDS format, all sections have been revised.

**Disclaimer:**
**********
**Mallinckrodt Baker, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. MALLINCKRODT BAKER, INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT**

**TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MALLINCKRODT BAKER, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.**

**********

**Prepared by:** Strategic Services Division
Phone Number: (314) 539-1600 (U.S.A.)