

# SAFETY DATA SHEET

# Section 1: Product & Company Identification

Product Name: Plasma Green 1050

Recommended Use: Rust Preventive & Bioactivity Controller

KCI Chemical Company 2721 W Peterson Avenue Chicago, Illinois 60659 (708) 878-7636 Phone (708) 748-0136 Fax

24 HOUR EMERGENCY CONTACT: INFOTRAC (800) 535-5053

### **Section 2: Hazards Identification**

# **Emergency Overview**

WARNING: May Cause Mild Eye, Skin, and Respiratory Irritation

General Effects of Overexposure: May cause chemical burns to sensitive tissue.

Eye Contact: May cause chemical burns.

Skin Contact: May cause chemical burns to sensitive tissue. If Swallowed: May cause severe gastrointestinal damage.

Inhaling this product or mist from its solutions can cause nasal and respiratory

damage.

Health Note: None

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)



Pictogram

Signal Word Warning

# **Section 3: Composition and Information of Ingredients**

Ingredients	%	Recommeded Exposure Limits and Toxicity Information
*Sodium Nitrite CAS #7632-00-0	< 6	TWA(TLV) – Not Established TWA (PEL) – Not Established

<sup>\*</sup> Reportable in certain quantities under SARA TITLE III, Section 313

### **Section 4: First Aid Measures**

FIRST AID: Remove yourself from the source of contamination. The chemicals must be rinsed off immediately from the affected areas. Ask for help if you need any assistance.

EYES: Immediately flush eyes with cool potable water for at least 20 minutes. Look up down and side to side, while flushing to insure thorough rinse. Contact a physician. Do Not rub eyes. Do Not keep eyes tightly closed. Do Not use hot water to rinse. Do Not use any oil or ointments in the eye(s) without medical assistance.

SKIN: Quickly remove clothing and jewelry from the affected area, while flushing the Affected area with cool potable water. Continue flushing with the fresh water until the Feeling of slipperiness or soapiness disappears. Dry skin gently with a clean soft towel. Contact a physician. Do Not use hot water to rinse. Do Not rub or apply pressure to Affected area. Do Not remove skin or break open blisters. If clothing is stuck to the Affected area after flushing with water, do not remove clothing.

INHALATION: Move to fresh air. Blow your nose gently to remove as much substance as Possible. Contact a physician.

INGESTION: Call a physician. If swallowed do not induce vomiting. Rinse a mouth several Times with cool water and spit out. Drink 1 – 2 cups of cool water or milk. Do Not give Anything by mouth to an unconscious or convulsing person. Follow the physician's Directions, if they differ. Do Not take any oils. Do Not try to neutralize a base with an Acid. Do Not take sodium bicarbonate or any carbonated drinks.

NOTE TO PHYSICIAN: None.

# **Section 5: Fire Fighting Measures**

FLASH POINT (Test Method): None

EXPLOSIVE LIMITS (% By Vol. In Air): LOWER: ND UPPER: ND

EXTINGUISHING MEDIA: Usual extinguishing media.

SPECIAL FIRE FIGHTING PROCEDURES: Wear chemically resistant clothing and full protective equipment, including self-contained breathing apparatus. Use water to cool off surrounding area including equipment and structures.

FIRE AND EXPLOSIVE HAZARDS: None

### **Section 6: Accidental Release Measures**

Personnel wearing appropriate equipment should confine spill to a small area and remove all incompatibilities. Spread clay or sand to absorb solution. Shovel completely into a clean dry and approved container. Neutralize area with vinegar. Flush with water, then mop up or wet vacuum. Dispose of waste as local codes permit.

## **Section 7: Handling and Storage**

PRECAUTIONS: Warning: Liquid alkaline product. May cause severe burns. Do not contact eyes, skin, or clothing. Do not take internally.

HANDLING: Do not use this product before thoroughly reading the Safety Data Sheet and consulting with your account manager. When handling, wear safety goggles, face shield, neoprene goggles, respirator, and chemical resistant clothing depending on the degree of exposure.

PERSONAL HYGIENE: Use fresh clothing daily. When clothing or shoes become contaminated, remove at once and launder before re-use. If laundering is not effective, discard the article of clothing. Bathe after working using plenty of soap and water.

#### OTHER PRECAUTIONS

FOR BEST RESULTS: (1) Store in cool dry place.

- (2) Store in original container with lid tightly closed.
- (3) DO NOT CUT, MUTILATE, OR RE-USE CONTAINER.
- (4) Consult your account manager before using this product.

FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN

# **Section 8: Exposure Controls and Personal Protection**

VENTILATION: Use adequate local exhaust ventilation, where mist, vapors etc., from this product may be generated, to maintain exposure below recommended values. (See Section II.)

RESPIRATORY: If spray vapors, dust, etc. from this product are present, wear the Correct NIOSH/OSHA approved respiratory equipment, depending on the degree of exposure.

EYES: Do not wear contact lenses. Wear NIOSH/OSHA approved splash goggles.

GLOVES: Neoprene

OTHER PROTECTIVE EQUIPMENT: To prevent contact with skin wear face shield, impervious clothing and safety boots depending on degree of exposure.

# Section 9: Physical and Chemical Properties

BOILING POINT: > 212 F SPECIFIC GRAVITY (Water = 1): 1.01 - 1.08

PH: (100%) 10.5 VAPOR PRESSURE (mm Hg): 17.5 VAPOR DENSITY (Air = 1): >1 SOLUBILITY IN WATER: Complete

% VOLATILE BY VOL: ND EVAPORATION RATE: (Butyl Acetate = 1): < 1

APPERANCE AND ODOR: Fluorescent Green Liquid- Mild Odor

### **Section 10: Stability and Reactivity**

STABILITY: Stable CONDITIONS TO AVOID: Keep from freezing.

HAZARDOUS POLYMERIZATION: Will Not Occur

INCOMPATIBILITY (MATERIALS TO AVOID): Oxidizing and reducing agents. Acids and

reactive metals

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon, and nitrogen oxide.

# **Section 11: Toxicological Information**

RTECS#:

CAS# 7632-00-0: RA1225000; RA1425000

**LD50/LC50:** CAS# 7632-00-0:

Draize test, rabbit, eye: 500 mg/24H Mild; Inhalation, rat: LC50 = 5.5 mg/m3/4H; Oral, mouse: LD50 = 175 mg/kg; Oral, rabbit: LD50 = 186 mg/kg;

Oral, rat: LD50 = 180 mg/kg;

### **Carcinogenicity:**

CAS# 7632-00-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** Oral, rat: TDLo = 2190 gm/kg/2Y-C (Tumorigenic - Carcinogenic by RTECS criteria - Gastrointestinal - tumors).; Oral, rat: TD = 91 gm/kg/2Y-C (Tumorigenic - equivocal tumorigenic agent by RTECS criteria - Skin and Appendages - tumors and Reproductive - Tumorigenic effects - testicular tumors).; Oral, rat: TD = 40 gm/kg/56W-C - (Tumorigenic - neoplastic by RTECS criteria - Liver - tumors). **Teratogenicity:** Oral, rat: TDLo = 660 mg/kg (female 1-22 day(s) after conception) Effects on Embryo or Fetus - fetal death and Effects on Newborn - growth statistics (e.g.%, reduced weight gain).; Oral, rat: TDLo = 10280 mg/kg (female 1-22 day(s) after conception and lactating female 20 day(s) post-birth) Effects on Newborn - weaning or lactation index (e.g., # alive at weaning per # alive at day 4).; Oral,mouse: TDLo = 280 mg/kg (female 1-14 day(s) after conception) Specific Developmental Abnormalities - blood and lymphatic systems (including spleen and marrow).

**Reproductive Effects:** Oral, mouse: TDLo = 1200 mg/kg (female 6-15 day(s) after conception) Fertility - pre-implantation mortality (e.g. reduction in number of implants per female; total number of implants per corpora lutea).; Oral, mouse: TDLo = 1680 mg/kg (male 14 day(s) pre-mating) Fertility - male fertility index (e.g. # males impregnating females per # males exposed to fertile nonpregnant females).; Oral, mouse: TDLo = 840 mg/kg (male 14 day(s) pre-mating) Paternal Effects - spermatogenesis (incl. genetic material, sperm morphology, motility, and count).

Mutagenicity: Unscheduled DNA Synthesis: Human, HeLa cell = 6 mmol/L.; DNA Inhibition: Human,

Fibroblast = 2000 ppm.; DNA Inhibition: Human Cells - not otherwise specified = 725 umol/L.

Neurotoxicity: No information found

Other Studies: Not Determined

#### **Section 12: Ecological Information**

**Ecotoxicity:** Fish: Rainbow trout: LC50 = 0.19-0.39 mg/L; 96 Hr; Flow-through bioassayFish: Mosquito Fish: TLm =8.1 ppm; 24 Hr; Highly turbid waterFish: Creek chub: Critical range = 400-2000 ppm; 24 Hr; Detroit River No data available.

**Environmental:** In water sodium nitrite dissociates completely and under aerobic conditions the nitrite ions are oxidized to nitrates.

**Physical:** No information available.

**Other:** Harmful to aquatic life in very low concentrations.

#### **Section 13: Disposal Considerations**

Waste Disposal should be in accordance with applicable local, regional, and national laws and regulations.

### **Section 14: Transport Information**

PROPER SHIPPING NAME: Not Regulated under the DOT 49 CFR

HAZARD CLASS: Not regulated IDENTIFICATION NUMBER: Not Required

Transport by sea

Not regulated according to IMDG guidelines

Air transport

Not regulated according to IATA guidelines

### **Section 15: Other Regulatory Information**

Federal and State Regulations: California

California Proposition 65: This product and its ingredients are not listed. However, this product may contain impurities/trace elements known to the State of California to cause cancer or reproductive toxicity as listed under Proposition 65 State Drinking Water and Toxic Enforcement Act. For additional information, contact KCI Chemical Technical Services at (708) 878-7636

Other Regulations: None Other Classifications:

WHMIS (Canada): None DSCL (EEC): None

**HMIS Information** 

Health 1
Flammability 0
Reactivity 0
Personal Protection H

National Fire Protection Association (USA)

Health: 0
Flammability: 0
Reactivity: 0
Specific Hazard: 0

- Reportable Limit for Sodium Nitrite is 100 pounds
  - 4 Severe Hazard 3 Serious Hazard
  - 2 Moderate Hazard 1 Slight Hazard
  - 0 Minimal Hazard
  - C Safety glasses, gloves, synthetic apron
  - D Face shield, gloves, synthetic apron
  - E Safety glasses, gloves, dust respirator
  - F Safety glasses, gloves, dust respirator, synthetic apron
  - G Safety glasses, gloves, vapor respirator
  - H Splash goggles, gloves, synthetic apron, vapor respirator
  - J Splash goggles, gloves, synthetic apron, vapor & dust respirator

### Section 16: Other Information

#### REFERENCES

Lefevre, Marc, J. First Aid Manual for Chemical Accidents, NY: Van Nostrand Reinhold, 1989

Material Safety Data Sheet on "Sodium Nitrite", from Union Carbide, Texas

#### **ABBREVIATIONS**

TIDDICE VILLIONS	
DNA	Does Not Apply
NA	Not Available
NOT EST	Not Established
TLV	Threshold Limit Value
TWA	Total Weighted Average
STEL	Short Term Exposure Limit
PEL	Permissible Exposure Limit
OSHA	Occupational Safety and Health Administration
ACGIH	American Conference of Governmental Industrial Hygienists
LD50	Lethal Dose that Cause Half of the Animals in the Study to Die
LD50	Lethal Concentration of Gases and Vapors in the Air that Causes
	Half of the Animals in the Study to Die

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