

# CHEMCO INDUSTRIES, INC

Material Safety Data Sheet

Commercial Product



## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:**

**Buccaneer® Plus Glyphosate Herbicide**

**EPA Reg. No.:**

524-454-55467

**Chemical Name:**

Not applicable.

**Synonyms:**

None.

**Company:**

CHEMCO INDUSTRIES, INC

5731 MANCHESTER AVENUE

ST. LOUIS, MO 63110

PHONE: 314-647-1888/800-854-4236

FAX: 314-647-1888

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

**Active ingredient:**

Isopropylamine salt of N-(phosphonomethyl)glycine; {Isopropylamine salt of glyphosate}

**Composition:**

**COMPONENT CAS No. % by weight (approximate)**

Isopropylamine salt of glyphosate 38641-94-0 41

**Other ingredients: 59**

Trade secret composition.

**OSHA Status:**

This product is hazardous according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

## 3. HAZARDS IDENTIFICATION

**Emergency overview:**

**Appearance and odor (color/form/odor):** Amber - Brown / Liquid / Slight

WARNING!

CAUSES SUBSTANTIAL BUT TEMPORARY EYE INJURY

HARMFUL IF SWALLOWED

HARMFUL IF INHALED

**Potential Health Effects:**

**Likely Routes Of Exposure:**

Skin contact, eye contact, inhalation

**Eye Contact, Short Term:**

May cause temporary eye irritation.

**Skin Contact, Short Term:**

Not expected to produce significant adverse effects when recommended use instructions are followed.

**Inhalation, Short Term:**

Harmful by inhalation.

**Single Ingestion:**

Harmful if swallowed. Causes gastrointestinal tract irritation. Refer to section 11 for toxicological and section 12 for environmental information.

#### 4. FIRST AID MEASURES

**Eye Contact:**

If in eyes, hold eye open and rinse slowly and gently for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, and then continue rinsing.

**Skin Contact:**

Immediately wash affected skin with plenty of water. Take off contaminated clothing, wristwatch, and jewelry. Wash clothes and clean shoes before re-use.

**Inhalation:**

Remove to fresh air. If not breathing, give artificial respiration. Get medical advice from a poison control center or Doctor.

**Ingestion:**

Immediately offer water to drink. Get medical advice from a poison control center or doctor. Never give anything by mouth to an unconscious person.

**Advice To Doctors:**

This product is not an inhibitor of cholinesterase.

**Antidote:**

Treatment with atropine and oximes is not indicated.

#### 5. FIRE-FIGHTING MEASURES

**Flash Point:**

None.

**Unusual Fire And Explosion Hazards:**

Minimize use of water to prevent environmental contamination. Environmental precautions: see section 6.

**Hazardous Products Of Combustion:**

Carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), phosphorus oxides (P<sub>x</sub>O<sub>y</sub>)

**Fire Fighting Equipment:**

Self-contained breathing apparatus. Equipment should be thoroughly decontaminated after use.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:**

Use personal protection recommended in section 8.

**Environmental Precautions:****SMALL QUANTITIES:**

Low environmental hazard.

**LARGE QUANTITIES:**

Minimize spread. Contain spillage with sand bags or other means. Keep out of drains, sewers, ditches and water ways.

**Methods For Cleaning Up:****SMALL QUANTITIES:**

Flush spill area with water.

**LARGE QUANTITIES:**

Absorb in earth, sand or absorbent material. Dig up heavily contaminated soil. Collect in containers for disposal. Refer to section 7 for types of containers. Flush residues with small quantities of water. Minimize use of water to prevent environmental contamination. Refer to section 13 for disposal of spilled material.

#### 7. HANDLING AND STORAGE

Good industrial practice in housekeeping and personal hygiene should be followed.

**Handling:**

Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Wash hands thoroughly after handling or contact. Wash contaminated clothing before re-use. Thoroughly clean equipment after use. Do not contaminate drains, sewers and water ways when disposing of equipment rinse water. Emptied containers retain vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed.

**Storage:**

Compatible materials for storage: stainless steel, aluminum, fiberglass, plastic, glass lining

Incompatible materials for storage: galvanized steel, unlined mild steel, see section 10.

Keep out of reach of children. Keep away from food, drink and animal feed. Keep only in the original container.

Minimum shelf life: 5 years.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Airborne Exposure Limits:

#### Components Exposure Guidelines:

Isopropylamine salt of glyphosate No specific occupational exposure limit has been established.

Other ingredients No specific occupational exposure limit has been established.

#### Engineering Controls:

Have eye wash facilities immediately available at locations where eye contact can occur.

#### Eye Protection:

If there is potential for contact:

Wear chemical goggles. Applicators and other handlers must wear eye protection.

#### Skin Protection:

No special requirement when used as recommended.

If repeated or prolonged contact:

Wear chemical resistant gloves.

#### Respiratory Protection

If airborne exposure is excessive:

Wear respirator. Full face piece/hood/helmet respirator replaces need for chemical goggles. Respiratory protection programs must comply with all local/regional/national regulations. When recommended, consult manufacturer of personal protective equipment for the appropriate type of equipment for a given application.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

Color/color range: Amber - Brown

Form: Liquid

Odor: Slight

Flash point: None.

Specific gravity: 1.17 20 °C / 20 °C

pH: 4.4 - 4.9 80 g/l

Partition coefficient (log Pow): < 0.000 (active ingredient)

## 10. STABILITY AND REACTIVITY

### Stability:

Stable under normal conditions of handling and storage.

### Materials To Avoid/Reactivity:

Reacts with galvanized steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode.

## 11. TOXICOLOGICAL INFORMATION

This section is intended for use by toxicologists and other health professionals. Data obtained on similar products and on components are summarized below.

### Similar Formulation:

#### Acute Oral Toxicity:

**Rat, LD50 (limit test):** > 5,000 mg/kg body weight

Practically non-toxic.

FIFRA category IV.

#### Acute Dermal Toxicity:

**Rat, LD50 (limit test):** > 5,000 mg/kg body weight

Practically non-toxic.

FIFRA category IV.

No mortality.

#### Skin Irritation:

**Rabbit, 6 animals, OECD 404 test:**

Days to heal: 7

Primary Irritation Index (PII): 0.8/8.0

FIFRA category IV.

Slight irritation.

**Eye Irritation:**

**Rabbit, 6 Animals, OECD 405 Test:**

Days to heal: 10

Moderate irritation.

FIFRA category II.

**Skin Sensitization:**

**Guinea Pig, Buehler Test:**

Positive incidence: 0 %

**N-(Phosphonomethyl)Glycine; {Glyphosate}**

**Mutagenicity:**

**In Vitro And In Vivo Mutagenicity Test(S):**

Not mutagenic.

**Repeated Dose Toxicity:**

**Rabbit, Dermal, 21 Days:**

NOAEL toxicity: > 5,000 mg/kg body weight/day

Target organs/systems: none

Other effects: none

**Rat, Oral, 3 Months:**

NOAEL toxicity: > 20,000 mg/kg diet

Target organs/systems: none

Other effects: none

**Carcinogenicity:**

**Mouse, Oral, 24 Months:**

NOEL tumour: > 30,000 mg/kg diet

NOAEL toxicity: ~ 5,000 mg/kg diet

Tumours: none

Target organs/systems: liver

Other effects: decrease of body weight gain, histopathologic effects

**Rat, Oral, 24 Months:**

NOEL tumour: > 20,000 mg/kg diet

NOAEL toxicity: ~ 8,000 mg/kg diet

Tumours: none

Target organs/systems: eyes

Other effects: decrease of body weight gain, histopathologic effects

**Toxicity To Reproduction/Fertility:**

**Rat, Oral, 3 Generations:**

NOAEL toxicity: > 30 mg/kg body weight

NOAEL reproduction: > 30 mg/kg body weight

Target organs/systems in parents: none

Other effects in parents: none

Target organs/systems in pups: none

Other effects in pups: none

**Developmental Toxicity/Teratogenicity:**

**Rat, Oral, 6 - 19 Days Of Gestation:**

NOAEL toxicity: 1,000 mg/kg body weight

NOAEL development: 1,000 mg/kg body weight

Other effects in mother animal: decrease of body weight gain, decrease of survival

Developmental effects: weight loss, post-implantation loss, delayed ossification

Effects on offspring only observed with maternal toxicity.

**Rabbit, Oral, 6 - 27 Days Of Gestation:**

NOAEL toxicity: 175 mg/kg body weight

NOAEL development: 175 mg/kg body weight

Target organs/systems in mother animal: none

Other effects in mother animal: decrease of survival

Developmental effects: none

## 12. ECOLOGICAL INFORMATION

This section is intended for use by ecotoxicologists and other environmental specialists. Data obtained on product, similar products and on components are summarized below.

### **Aquatic Toxicity, Fish:**

#### **Bluegill Sunfish (*Lepomis Macrochirus*):**

Acute toxicity, 96 hours, static, LC50: 24 mg/L  
Slightly toxic.

#### **Rainbow Trout (*Oncorhynchus Mykiss*):**

Acute toxicity, 96 hours, static, LC50: 42 mg/L  
Slightly toxic.

### **Aquatic Toxicity, Invertebrates:**

#### **Water Flea (*Daphnia Magna*):**

Acute toxicity, 48 hours, static, EC50: 160 mg/L  
Practically non-toxic.

### **Similar Formulation:**

#### **Aquatic Toxicity, Algae/Aquatic Plants**

#### **Green Algae (*Selenastrum Capricornutum*):**

Acute toxicity, 96 hours, static, EC50: 2.6 mg/L  
Moderately toxic.

#### **Duckweed (*Lemna Minor*):**

Acute toxicity, 7 days, static, EC50: > 6 mg/L

### **Avian Toxicity:**

#### **Bobwhite Quail (*Colinus Virginianus*):**

Dietary toxicity, 5 days, LC50: > 5,620 mg/kg diet  
Practically non-toxic.

#### **Mallard Duck (*Anas Platyrhynchos*):**

Dietary toxicity, 5 days, LC50: > 5,620 mg/kg diet  
Practically non-toxic.

### **Arthropod Toxicity:**

#### **Honey Bee (*Apis Mellifera*):**

Oral/contact, 48 hours, LD50: > 326 µg/bee  
Practically non-toxic.

### **Soil Organism Toxicity, Invertebrates:**

#### **Earthworm (*Eisenia Foetida*):**

Acute toxicity, 14 days, LC50: > 5,000 mg/kg dry soil  
Practically non-toxic.

### **N-(Phosphonomethyl)Glycine; {Glyphosate}:**

#### **Bioaccumulation:**

#### **Bluegill Sunfish (*Lepomis Macrochirus*):**

Whole fish: BCF: < 1

No significant bioaccumulation is expected.

#### **Dissipation:**

#### **Soil, Field:**

Half life: 2 - 174 days

Koc: 884 - 60,000 L/kg

Adsorbs strongly to soil.

#### **Water, Aerobic:**

Half life: < 7 days

## 13. DISPOSAL CONSIDERATIONS

### **Product:**

Keep out of drains, sewers, ditches and water ways. Recycle if appropriate facilities/equipment available. Burn in proper incinerator. Follow all local/regional/national/international regulations.

### **Container:**

See the individual container label for disposal information. Emptied containers retain vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. Empty packaging completely.

Triple or pressure rinse empty containers. Do NOT contaminate water when disposing of rinse waters. Ensure packaging cannot be reused. Do NOT re-use containers. Store for collection by approved waste disposal service. Recycle if appropriate facilities/equipment available. Follow all local/regional/national/international regulations.

#### **14. TRANSPORT INFORMATION**

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation. Not hazardous under the applicable DOT, ICAO/IATA, IMO, TDG and Mexican regulations.

#### **15. REGULATORY INFORMATION**

##### **TSCA Inventory:**

Exempt

##### **Osha Hazardous Components:**

Surfactant(s)

##### **Sara Title Iii Rules:**

Section 311/312 Hazard Categories

Immediate

Section 302 Extremely Hazardous Substances

Not applicable.

Section 313 Toxic Chemical(s)

Not applicable.

##### **CERCLA Reportable Quantity:**

Not applicable.

#### **16. OTHER INFORMATION**

The information given here is not necessarily exhaustive but is representative of relevant, reliable data. Follow all local/regional/national/international regulations. Please consult supplier if further information is needed. In this document the British spelling was applied. Health Flammability Instability Additional Markings

NFPA 3 1 1 0 = Minimal hazard, 1 = Slight hazard, 2 = Moderate hazard, 3 = Severe hazard, 4 = Extreme hazard

Full denomination of most frequently used acronyms. BCF (Bioconcentration Factor), BOD (Biochemical Oxygen Demand), COD (Chemical Oxygen Demand), EC50 (50% effect concentration), ED50 (50% effect dose), I.M. (intramuscular), I.P. (intraperitoneal), I.V. (intravenous), Koc (Soil adsorption coefficient), LC50 (50% lethality concentration), LD50 (50% lethality dose), LDLo (Lower limit of lethal dosage), LEL (Lower Explosion Limit), LOAEC (Lowest Observed Adverse Effect Concentration), LOAEL (Lowest Observed Adverse Effect Level), LOEC (Lowest Observed Effect Concentration), LOEL (Lowest Observed Effect Level), MEL (Maximum Exposure limit), MTD (Maximum Tolerated Dose), NOAEC (No Observed Adverse Effect Concentration), NOAEL (No Observed Adverse Effect Level), NOEC (No Observed Effect Concentration), NOEL (No Observed Effect Level), OEL (Occupational Exposure Limit), PEL (Permissible Exposure Limit), PII (Primary Irritation Index), Pow (Partition coefficient n-octanol/water), S.C. (subcutaneous), STEL (Short-Term Exposure Limit), TLV-C (Threshold Limit Value-Ceiling), TLV-TWA (Threshold Limit Value - Time Weighted Average), UEL (Upper Explosion Limit)

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