

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Credit® K6 Herbicide

**EPA Reg. No.:** 71368-122 **Product Type:** Herbicide

Company Name: Nufarm Americas, Inc.

11901 S. Austin Avenue

Alsip, IL 60803 1-800-345-3330

Telephone Numbers: For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,

Call CHEMTREC Day or Night: 1-800-424-9300 For Medical Emergencies Only, Call 1-877-325-1840

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not exactly the same as on the FIFRA label. Certain sections are superseded by federal law governed by EPA for a registered pesticide. Please see Section 15. REGULATORY INFORMATION for explanation.

#### 2. HAZARDS IDENTIFICATION

## For EPA FIFRA-Specific Information see Section 15

### **PHYSICAL HAZARDS:**

None

### **HEALTH HAZARDS:**

Acute toxicity, inhalation Category 4

## **ENVIRONMENTAL HAZARDS:**

None

## **SIGNAL WORD:**

WARNING

#### **HAZARD STATEMENTS:**

Harmful if inhaled.



### PRECAUTIONARY STATEMENTS

Do not breathe mist/vapours/spray. Use only outdoors or in a well-ventilated area.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a Poison Center or doctor/physician if you feel unwell.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENTSCAS NO.% BY WEIGHTPotassium salt of glyphosate70901-12-148.7

Other Ingredients Trade Secret 51.3

Synonyms: None

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

#### 4. FIRST AID MEASURES

**If in Eyes:** Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**If on Skin or Clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

**If Inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**If Swallowed:** Call a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**Most Important symptoms/effects, acute and delayed:** May cause temporary eye irritation. Not expected to produce significant adverse effects when recommended use instructions are followed.

Indication of Immediate medical attention and special treatment if needed, if necessary: None expected.

#### 5. FIRE FIGHTING MEASURES

**Extinguishing Media:** Use extinguishing media suitable for surrounding materials. Dry chemical, carbon dioxide, foam, water spray or fog.

**Special Fire Fighting Procedures:** Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

**Unusual Fire and Explosion Hazards:** If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.

**Hazardous Decomposition Materials (Under Fire Conditions):** May produce gases such as oxides of carbon, phosphorus and nitrogen.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

**Environmental Precautions:** Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

**Methods for Containment:** Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

**Methods for Cleanup and Disposal:** Avoid creation of dusty conditions. Scrape up and place in appropriate closed container. Wash entire spill area with a detergent slurry, absorb and sweep into container for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

**Other Information:** Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

#### 7. HANDLING AND STORAGE

**HANDLING**: Do not get in eyes or on clothing or skin. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/Personal Protective Equipment (PPE) immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**STORAGE:** Compatible materials for storage: stainless steel, fiberglass, plastic, glass lining. Incompatible materials for storage: galvanized steel, unlined mild steel. Keep out of reach of children. Keep away from food, drink and animal feed. Keep only in original container. Partial crystallization may occur on prolonged storage below the minimum storage temperature. If frozen, place in warm room and shake frequently to put back into solution.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### **Engineering Controls:**

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

**Eye/Face Protection:** Not normally required. To avoid contact with eyes, wear chemical goggles or shielded safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.

**Skin Protection:** Wear chemical resistant gloves. If there is significant potential for contact: Wear face shield. To avoid contact with skin, wear long pants, long-sleeved shirt, socks and shoes. An emergency shower or water supply should be readily accessible to the work area.

**Respiratory Protection:** Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

**General Hygiene Considerations:** Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

## **Exposure Guidelines:**

	OSHA		ACGIH		
Component	TWA	STEL	TWA	STEL	Unit
Potassium salt of glyphosate	NE	NE	NE	NE	
Other Ingredients	NE	NE	NE	NE	

NE = Not Established

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Pale amber, pale brown liquid

Odorless Odorless

Odor threshold: No data available

**pH:** 4.3 – 4.8

Melting point/freezing point:No data availableInitial boiling point and boiling rangeNo data available

Flash point: No flash

Evaporation rate:

Flammability (solid, gas):

Upper/lower flammability or explosive limits:

No data available

No data available

Vapor pressure: No significant volatility; aqueous solution

Vapor density:No data availableRelative density:1.3565 g/cm3 @ 20°C

Solubility(ies): Miscible

Partition coefficient: n-octanol/water: Log Pow: -3.2 @25°C (glyphosate)

Autoignition temperature:

Decomposition temperature:

Viscosity:

No data available

**Note:** Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

## 10. STABILITY AND REACTIVITY

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

Chemical Stability: Stable under normal conditions of handling and storage.

**Possibility of Hazardous Reactions:** Reacts with galvanized steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode.

Incompatible Materials: galvanized steel; unlined mild steel; see Section 10

**Hazardous Decomposition Products:** Thermal decomposition: Hazardous products of combustion:

See Section 5.

### 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Dermal, inhalation, eye irritation

**Symptoms of Exposure:** 

**Eye Contact:** Mildly irritating based on toxicity studies.

Skin Contact: Minimally toxic and slightly irritating based on toxicity studies.

**Ingestion:** Slightly toxic if ingested based on toxicity studies. **Inhalation:** Low inhalation toxicity based on toxicity studies. **Delayed, immediate and chronic effects of exposure:** 

**Toxicological Data:** 

Data from laboratory studies conducted are summarized below:

**Oral:** Rat LD<sub>50</sub>: > 5,000 mg/kg **Dermal:** Rat LD<sub>50</sub>: >5,000 mg/kg

**Inhalation:** Rat 4-hr LC<sub>50</sub>: Practically non-toxic. No 4-Hr LC50 at the maximum tested concentration. For purposes of the inhalation test, product was artificially aerosolized. Since this material will not become aerosolized to a hazardous concentration during transport, it is classified as non-hazardous under the transportation regulations in accordance with 2.6.2.2.4.7(b) and (c) of the UN Recommendations on the Transport of Dangerous Goods.

Eye Irritation: Rabbit: Moderately irritating

**Skin Irritation:** Rabbit: Slightly irritating (PDII = 1.9/8.0)

Skin Sensitization: Not a contact sensitizer in guinea pigs following repeated skin exposure.

**Reproductive/Developmental Toxicity:** Developmental effects in rats and rabbits only in the presence of significant maternal toxicity. Reproductive effects in rats only in the presence of significant maternal toxicity.

Genotoxicity: Not genotoxic

Assessment Carcinogenicity: Not carcinogenic in rats and mice.

# 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity:**

### Aquatic toxicity. fish

Bluegill sunfish (Lepomis macrochirus):

Acute toxicity, 96 hours, static, LC50: 5.2 mg/L Moderately toxic.

Common carp (Cyprinus carpio):

Acute toxicity, 96 hours, static, LC50: 4.0 mg/L Moderately toxic.

<u>Aquatic toxicity. invertebrates</u> Water flea (Daphnia magna):

Acute toxicity, 48 hours, static, EC50: 8.0 mg/L Moderately toxic.

### Aquatic toxicity. algae/aquatic plants

Green algae (Selenastrum capricornutum):

Acute toxicity, 72 hours, static, EC50: 0.46 mg/L Highly toxic.

# **Arthropod toxicity**

# Honey bee (Apis mellifera):

Oral, 48 hours, LD50: > 281 µg/bee Practically non-toxic.

# Honey bee (Apis mellifera):

Contact, 48 hours, LD50:  $> 273 \mu g/bee$  Practically non-toxic.

### Soil organism toxicity, invertebrates

#### Earthworm (Eisenia foetida):

Acute toxicity, 14 days, LC50: > 10,000 mg/kg dry soil Practically non-toxic.

## Soil organism toxicity, microorganisms Nitrogen and carbon transformation test:

29.5 kg/ha, 28 days: Less than 25% effect on nitrogen or carbon transformation processes in soil.

### N-fphosphonomethyl}glycine; { glyphosate acid} Avian toxicity

### Bobwhite quail (Colinus virginianus):

Dietary toxicity, 5 days, LC50: > 4,640 mg/kg diet No more than slightly toxic.

## Mallard duck (Anas platyrhynchos):

Dietary toxicity, 5 days, LC50: > 4,640 mg/kg diet No more than slightly toxic.

# Bobwhite quail (Colinus virginianus):

Acute oral toxicity, single dose, LD50: > 3,851 mg/kg body weight Practically non-toxic.

# Bioaccumulation

# Bluegill sunfish (Lepomis macrochirus):

Whole fish: BCF: < 1

No significant bioaccumulation is expected.

## **Dissipation** Soil, field:

Halfl ife: 2 - 174 days Koc: 884 - 60,000 L/kg Adsorbs strongly to soil.

### Water, aerobic:

Half life: < 7 days

### 13. DISPOSAL CONSIDERATIONS

## **Waste Disposal Method:**

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

Container Handling and Disposal: See the individual container label for disposal information. Emptied containers retain vapour 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.

Use handling recommendations in Section 7 and personal protection recommendations in Section 8.

# 14. TRANSPORTATION INFORMATION

US Dept. of Transportation (DOT) Hazardous Materials Regulations (49 CFR Parts 105-180)

## <u>DOT</u>

Not Regulated

### IMO / IMDG

Not Regulated

### **IATA**

Not Regulated

#### 15. REGULATORY INFORMATION

#### **EPA FIFRA INFORMATION**

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

DANGER.

#### **U.S. FEDERAL REGULATIONS**

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

**Section 313 Toxic Chemical(s):** Not applicable. Section 311/312 Hazard Categories: Immediate

Section 302 Extremely Hazardous Substances: Not applicable. Section 313 Toxic Chemical(s): Not

applicable.

## Reportable Quantity (RQ) under U.S. CERCLA:

None

#### **RCRA Waste Code:**

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

### **State Information:**

Other state regulations may apply. Check individual state requirements.

California Proposition 65: Not Listed.

### **16. OTHER INFORMATION**

National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 1 Flammability: 1 Reactivity: 1

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Nufarm Americas Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition

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