

# Material Safety Data Sheet

## *Equal 65 WP*

Date issued: 12/14/2009 (m/d/y)

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: Equal 65 WP

Norac Concepts Inc.  
P.O. Box 31097, Guelph, ON N1H 8K1  
519-821-3633

Emergency telephone number: All hours, 613-787-5620, **ONLY** for health and environmental information.

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients	% (w/w)	ACGIH TLV	CAS No.
Dodine	65	Not listed	2439-10-3
Aluminium silicate hydrate	10 – 30	10.0 mg/m <sup>3</sup>	1332-58-7
Sodium di-hexyl sulphosuccinate	1 – 5	Not listed	3006-15-3
Crystalline Silica - Quartz	< 1.0	0.1 mg/m <sup>3</sup>	14808-60-7

Synonyms: Dodine, Cyprex, Syllit.

Chemical name: Dodine: N-dodecylguanidine acetate.

Chemical family: Guanidine fungicide.

Product use: Agricultural fungicide.

Registration number: 15608 Pest Control Products Act.

### 3. HAZARDS IDENTIFICATION

**Summary:** Hazardous properties of all ingredients have been considered in the preparation of this MSDS. Read the entire MSDS for the complete hazard evaluation of this product.

**Emergency overview:** May cause severe irritation to eyes. May be irritating to the respiratory tract and skin. Moderately toxic by ingestion. Crystalline Silica is possibly carcinogenic to humans.

### 4. FIRST AID MEASURES

**Inhalation:** Move victim to fresh air. Give artificial respiration **ONLY** if breathing has stopped. Give cardiopulmonary resuscitation (CPR) if there is no breathing **AND** no pulse. Obtain medical advice **IMMEDIATELY**.

**Skin contact:** Flush skin with running water for a minimum of 20 minutes. Start flushing while removing contaminated clothing. If irritation persists, repeat flushing. Obtain medical attention **IMMEDIATELY**.

**Eye contact:** Immediately flush eyes with running water for a minimum of 20 minutes. Hold eyelids open during flushing. If irritation persists, repeat flushing. Obtain medical attention **IMMEDIATELY**.

**Ingestion:** If victim is alert and not convulsing, rinse mouth out and give 200-300 mL (1 cup) of water to dilute material. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus, rinse mouth and administer more water. Obtain medical attention **IMMEDIATELY**.

### 5. FIRE AND EXPLOSION HAZARD DATA

Flash point: Not applicable.

Autoignition temperature: No data.

Flammable limits (lower): Not applicable.

Flammable limits (upper): Not applicable.

**Extinguishing media:** For large fires, apply aqueous film-forming foam or water in the form of a fog. For small fires, use carbon dioxide or dry chemical.

**Fire-fighting procedures:** Wear self-contained breathing apparatus and impervious clothing. Minimize the amount of water used and contain the run-off from entering water supplies or the environment by dyking.

**Other fire and explosion hazards:** Thermal decomposition of the active ingredients may produce oxides of carbon and nitrogen and noxious fumes. Explosive potential for dusts as with any organic dust (such as flour).

## 6. ACCIDENTAL RELEASE MEASURES

**Spills, leaks or releases:** Wear personal protective equipment. For release to land, stop any further release and spread of contamination, wash hard surfaces with detergent and water, then absorb with suitable absorbent. For release to water, stop any further release and utilize damming and/or water diversion to minimize the spread of contamination. Collect the spilled material, any contaminated soil, water and absorbent, then place in a waste container for proper disposal. Notify applicable government authority if release is reportable or could adversely affect the environment.

**Deactivating chemicals:** None known.

## 7. HANDLING AND STORAGE INFORMATION

**Handling procedures:** Use only with adequate ventilation. Avoid breathing dusts, and contact with eyes, skin and clothing. Wear appropriate personal protective equipment. Wash thoroughly after use. If clothing becomes contaminated, wash thoroughly before re-use.

**Storage requirements:** Store in a cool, well-ventilated area. Keep containers closed and prevent moisture contamination. Keep out of reach of children and pets.

**Storage temperature:** Do not expose sealed containers to temperatures above 40°C.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Eye protection:** Use chemical safety goggles when there is a potential for eye contact.

**Skin protection:** Chemical-resistant gloves and protective clothing that is impervious under conditions of use.

**Respiratory protection:** NIOSH/MSHA-approved respirator equipped with pesticide cartridges, if required.

**Other protective equipment:** Eye wash station.

**Engineering controls:** Provide local exhaust and/or adequate ventilation.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** White to cream powder.

**Odour:** Pungent.

**Bulk density:** 28 g/100 mL.

**Boiling point:** No data.

**Melting point:** 136°C for dodine.

**Solubility (water):** Negligible.

**Solubility (other):** No data.

**pH:** Neutral.

**% volatile:** Not applicable.

**Evaporation rate (ether=1):** Not applicable.

**Vapour pressure (mm Hg at 20°C):** Not applicable.

**Vapour density (air=1):** Not applicable.

## 10. STABILITY AND REACTIVITY DATA

**Chemical stability:** Stable at room temperature.

**Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Keep away from heat and ignition sources. Prolonged exposure to temperatures above 40°C may result in some decomposition of dodine. Avoid moisture in storage.

**Incompatibility with other substances:** Strong oxidizing agents and bases.

**Hazardous decomposition products:** Thermal decomposition products are toxic and may include oxides of carbon and nitrogen, and irritating gases.

## 11. TOXICOLOGICAL INFORMATION

**Summary:** May cause severe irritation to eyes. May be irritating to the respiratory tract and skin. Moderately toxic by ingestion. Crystalline Silica is possibly carcinogenic to humans.

### Toxicological data

#### Dodine

Oral LD<sub>50</sub> (rat) = 1456 mg/kg  
Dermal LD<sub>50</sub> (rabbit) = >2000 mg/kg  
Inhalation LC<sub>50</sub> (rat) = >1.05 mg/kg

#### Sodium Di-hexyl sulphosuccinate

Oral LD<sub>50</sub> (rat) = 1750 mg/kg  
Dermal LD<sub>50</sub> (rabbit) = 5000 mg/kg

**Inhalation:** High concentrations of this product are an irritant to the nose, throat and respiratory tract.

**Skin contact:** Prolonged and repeated contact may cause skin irritation.

**Eye contact:** May cause severe eye irritation.

**Ingestion:** Ingestion may cause irritation of the gastrointestinal tract, nausea, abdominal pain, vomiting and diarrhoea.

**Subchronic effects:** None known.

**Chronic effects:** None known.

**Carcinogenicity:** Product contains Crystalline Silica, which is listed as an IARC Group 2B - possibly carcinogenic to humans.

**Mutagenicity:** There is no evidence that this product has mutagenic potential.

**Reproductive effects:** Dodine did not adversely affect reproductive parameters in rats over two generations, therefore no adverse reproductive effects are anticipated.

**Teratogenicity:** No information is available and no adverse teratogenic effects are anticipated.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicological information:** Dodine is toxic to aquatic organisms.

**Environmental effects:** Do not contaminate domestic or irrigation water supplies, lakes, streams, ponds, or rivers.

## 13. DISPOSAL CONSIDERATIONS

Dispose of waste material at an approved (hazardous) waste treatment/disposal facility in accordance with applicable local, provincial and federal regulations. Do not dispose of waste with normal garbage or to sewer systems.

## 14. TRANSPORT INFORMATION

**TDG classification:** Not regulated.

**Transportation emergency telephone number:** 613-787-5620.

## 15. REGULATORY INFORMATION

**WHMIS classification:** This product is registered under the *Pest Control Product Act* and is exempt from the requirements of WHMIS.

## 16. OTHER INFORMATION

The information contained herein is offered only as a guide to the handling of this specific material and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive and the manner and conditions of use and handling may involve other and additional considerations. No warranty of any kind is given or implied and Norac Concepts Inc. will not be liable for any damages, losses, injuries or consequential damages which may result from the use of or reliance on any information contained herein. This Material Safety Data Sheet is valid for three years.

**Prepared by:** Norac Concepts Inc.