



CHIPCO(R) RONSTAR(R) G BRAND HERBICIDE

MATERIAL SAFETY DATA SHEET Date Prepared: 5/13/99 Supersedes Date: 12/18/95

1. CHEMICAL PRODUCT AND COMPANY DESCRIPTION

RHONE-POULENC AG COMPANY
AGRICULTURAL CHEMICALS
2 T.W. Alexander Drive
Research Triangle Pk NC 27709

Emergency Phone Numbers:

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CONTACT: CHEMTREC (800-424-9300) OR RHONE-POULENC (800-334-7577).

For Product Information:

(800) 334-9745

Product Status:

FIFRA regulated use only.

EPA FIFRA Registration Number:

264-445

Chemical Name or Synonym:

OXADIZAON, RP 17623

Molecular Formula:

C15H18Cl2N2O3

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS Reg Number | OSHA Hazard | Percentage |
|----------------------------------|----------------|-------------|------------|
| OXADIAZON | 19666-30-9 | Y | 2 |
| CRYSTALLINE SILICA AS QUARTZ | 14808-60-7 | Y | 3.0 |
| OTHER INGREDIENTS (TRADE SECRET) | ***** | N | BALANCE |

3. HAZARDS IDENTIFICATION

A. EMERGENCY OVERVIEW:

Physical Appearance and Odor:

off-white powder solid, slight odor.

Warning Statements:

WARNING!! CAUSES SKIN AND EYE IRRITATION. HARMFUL IF INHALED, SWALLOWED OR ABSORBED THROUGH SKIN.

B. POTENTIAL HEALTH EFFECTS:

Acute Eye:

Causes irritation, tearing, redness.

Acute Skin:

Low acute dermal toxicity. Causes irritation, redness, swelling.

Acute Inhalation:

Harmful if inhaled. May cause upper respiratory tract irritation.

Acute Ingestion:

Harmful if ingested.

Chronic Effects:

This product contains ingredients that are considered to be probable or suspected human carcinogens (see Section 11 - Chronic). Prolonged contact may cause benign changes in lung tissue.

| |
|------------------------------|
| 4. FIRST AID MEASURES |
|------------------------------|

FIRST AID MEASURES FOR ACCIDENTAL:**Eye Exposure:**

Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek medical attention.

Skin Exposure:

In case of contact, immediately wash with plenty of soap and water for at least 15 minutes. Seek medical attention. Remove contaminated clothing and shoes while washing. Clean contaminated clothing and shoes before re-use or discard if they cannot be thoroughly cleaned.

Inhalation:

Remove victim from immediate source of exposure and assure that the victim is breathing. If breathing is difficult, administer oxygen, if available. If victim is not breathing, administer CPR (cardio-pulmonary resuscitation). Seek medical attention.

Ingestion:

If victim is conscious and alert, give 2-3 glasses of water to drink and induce vomiting by touching back of throat with a finger. Do not induce vomiting or give anything by mouth to an unconscious person. Seek immediate medical attention. Do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. If vomiting occurs and the victim is conscious, give water to further dilute the chemical. Persons attending the victim should avoid direct contact with heavily contaminated clothing and vomitus. Wear impervious gloves while decontaminating skin and hair.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE:

Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

NOTES TO PHYSICIAN:

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Treat symptomatically. No specific antidote available.

5. FIRE FIGHTING MEASURES**FIRE HAZARD DATA:****Flash Point:**

Not Applicable

Extinguishing Media:

Not combustible. Use extinguishing method suitable for surrounding fire.

Special Fire Fighting Procedures:

Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards:

Under fire conditions, toxic, corrosive fumes are emitted.

Hazardous Decomposition Materials (Under Fire Conditions):

hydrogen chloride oxides of nitrogen oxides of carbon

6. ACCIDENTAL RELEASE MEASURES**Evacuation Procedures and Safety:**

Wear appropriate protective gear for the situation. See Personal Protection information in Section 8. Stay upwind if possible.

Containment of Spill:

Follow procedure described below under Cleanup and Disposal of Spill.

Cleanup and Disposal of Spill:

Scrape up and place in appropriate closed container (see Section 7: Handling and Storage). Decontaminate tools and equipment following cleanup.

Environmental and Regulatory Reporting:

Do not flush to drain. If spilled on the ground, the affected area should be scraped clean and placed in a appropriate container for disposal. Prevent material from entering public sewer system or any waterways.

7. HANDLING AND STORAGE

Minimum/Maximum Storage Temperatures:

Not Available

Handling:

Do not ingest. Avoid breathing dusts. Avoid breathing vapors and mists. Avoid direct or prolonged contact with skin and eyes. It is recommended that all dust control equipment and material transport systems involved in handling of this product contain explosion relief vents or explosion suppression system or an oxygen deficient environment. In addition, all conductive elements of the system that contact this material should be electrically bonded and grounded. This powder should not be flowed through non-conductive ducts or pipes. Use only appropriately classed electrical equipment.

Storage:

Store in an area that is away from food, feedstuffs, fertilizers and seed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Introductory Remarks:

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations. Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

Exposure Guidelines:

Exposure limits represent regulated or recommended worker breathing zone concentrations measured by validated sampling and analytical methods, meeting the regulatory requirements. The following limits apply to this material, where, if indicated, S=skin and C=ceiling limit:

CRYSTALLINE SILICA AS QUARTZ

| | Notes | TWA | STEL |
|-------|--------------|-------------|-------------|
| ACGIH | | 0.1 mg/cu m | |
| OSHA | | 0.1 mg/cu m | |

Engineering Controls:

Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures.

Respiratory Protection:

When respirators are required, select NIOSH/MSHA approved

equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations. Under conditions immediately dangerous to life or health, or emergency conditions with unknown concentrations, use a full-face positive pressure air-supplied respirator equipped with an emergency escape air supply unit or use a self-contained breathing apparatus unit.

Eye/Face Protection:

Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material. It is generally regarded as good practice to wear a minimum of safety glasses with side shields when working in industrial environments.

Skin Protection:

Skin contact should be minimized through use of gloves and suitable long-sleeved clothing (i.e., shirts and pants). Consideration must be given both to durability as well as permeation resistance.

Work Practice Controls:

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. (3) Wash exposed skin promptly to remove accidental splashes of contact with this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product Information phone number in Section 1 for its exact specifications.

Physical Appearance:

off-white powder solid.

Odor:

slight odor.

pH:

Not Applicable

Specific Gravity:

Not Available

Water Solubility:

insoluble

Melting Point Range:

Not Available

Boiling Point Range:

Not Available

Vapor Pressure:

Not Available

Vapor Density:

Not Available

Molecular Weight:

345.2

10. STABILITY AND REACTIVITY

Chemical Stability:

This material is stable under normal handling and storage conditions described in Section 7.

Conditions To Be Avoided:

none known

Materials/Chemicals To Be Avoided:

strong bases
strong acids
strong oxidizing agents

The Following Hazardous Decomposition Products Might Be Expected:

Decomposition Type: thermal hydrogen chloride oxides of nitrogen oxides of carbon

Hazardous Polymerization Will Not Occur.

Avoid The Following To Inhibit Hazardous Polymerization:

not applicable

11. TOXICOLOGICAL INFORMATION

Acute Eye Irritation:

The following data is for the specified ingredients.

Toxicological Information and Interpretation

eye - eye irritation, rabbit. Mildly irritating. Irritation is transient.

Acute Skin Irritation:

The following data is for the specified ingredient.

Toxicological Information and Interpretation

skin - skin irritation, rabbit. Moderately irritating.

Acute Dermal Toxicity:

The following data is for the specified ingredients.

Toxicological Information and Interpretation

LD50 - lethal dose 50% of test species, > 2000 mg/kg, rabbit.

Acute Respiratory Irritation:

No test data found for product.

Acute Inhalation Toxicity:

The following data is for the specified ingredients.

Toxicological Information and Interpretation

LC50 - lethal concentration 50% of test species, > 200 mg/l/4 hr, rat.

Acute Oral Toxicity:

The following data is for the specified ingredients.

Toxicological Information and Interpretation

LD50 - lethal dose 50% of test species, > 5000 mg/kg, rat.

Chronic Toxicity:

This product contains the substances that are considered to be probable or suspected human carcinogens as follows:

Regulatory Agency Listing Carcinogen

| Ingredient Name | OSHA | IARC | NTP | ACGIH |
|------------------------|-------------|-------------|------------|--------------|
| CRYSTALLINE | No | No | Yes | No |
| SILICA AS QUARTZ | | | | |

No additional test data found for product.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information

No data found for product.

Chemical Fate Information:

No data found for product.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

Container Handling and Disposal:

DO NOT REUSE CONTAINERS. Any containers or equipment used should be decontaminated immediately after use. Consult state and local

regulations regarding the proper disposal of container. EPA
Hazardous Waste - NO

14. TRANSPORTATION INFORMATION

Transportation Status:

The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

US Department of Transportation

Shipping Name:

NOT REGULATED

15. REGULATION INFORMATION

Inventory Status

| Inventory | Status |
|-------------------------|---------------|
| UNITED STATES (TSCA) | E |
| CANADA (DSL) | E |
| EUROPEAN UNION (EINECS) | P |
| AUSTRALIA (AICS) | Y |
| JAPAN (MITI) | N |
| SOUTH KOREA (KECL) | Y |

Y = All ingredients are on the inventory.

E = All ingredients are on the inventory or exempt from listing.

P = One or more ingredients fall under the polymer exemption or are on

the no longer polymer list. All other ingredients are on the inventory

or exempt from listing.

N = Not determined or one or more ingredients are not on the inventory

and are not exempt from listing.

FEDERAL REGULATIONS

TSCA Inventory Status:

This product is excluded from TSCA because it is solely for FIFRA regulated use.

SARA Title III Hazard Classes:

| | |
|-----------------------|-------|
| Fire Hazard | - NO |
| Reactive Hazard | - NO |
| Release of Pressure | - NO |
| Acute Health Hazard | - YES |
| Chronic Health Hazard | - YES |

SARA 313 Chemicals

OXADIAZON (2%)

STATE REGULATIONS:

This product contains the following components that are regulated under California Proposition 65:

| Ingredient Name | Cancer List | Reprod. List | No Sign. California | Risk Lvl (ug/day) RPI |
|--|--------------------|---------------------|----------------------------|------------------------------|
| OXADIAZON | Y | Y | ND | ND |
| SILICA, CRYSTALLINE (AIRBORNE PARTICLES OF RE SPIRABLE SIZE) | Y | N | ND | ND |

16. OTHER INFORMATION

National Fire Protection Association Hazard Ratings--NFPA(R):

- 2 Health Hazard Rating--Moderate
- 1 Flammability Rating--Slight
- 0 Instability Rating--Minimal

National Paint & Coating Hazardous Materials Identification

- 2 Health Hazard Rating--Moderate
- 1 Flammability Rating--Slight
- 0 Reactivity Rating--Minimal

Reason for Revisions:

Conversion to ANSI MSDS format.

Key Legend Information:

- ACGIH - American Conference of Governmental Industrial Hygienists
- OSHA - Occupational Safety and Health Administration
- TLV - Threshold Limit Value
- PEL - Permissible Exposure Limit
- TWA - Time Weighted Average
- STEL - Short Term Exposure Limit
- NTP - National Toxicology Program
- IARC - International Agency for Research on Cancer
- ND - Not determined
- RPI - Rhone-Poulenc Established Exposure Limits

Disclaimer:

The information herein is given in good faith but no warranty, expressed or implied, is made.