

SAFETY DATA SHEET



HEALTHY ANIMALS. HEALTHY FOOD. HEALTHY WORLD.®

RED IRON OXIDE/ ROUGE

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

GHS Product Information

Product Name: RED IRON OXIDE/ ROUGE
Business Unit Prince Agri
Other means of identification: Not available

Safety data sheet number: 5178-500 -US-E

Recommended use of the chemical and restrictions on use

Recommended use: No information available.

Uses advised against: No information available

Details of the supplier of the safety data sheet

Supplier: Phibro Animal Health Corporation Glenpointe Centre East, 3rd FL 300 Frank W. Burr Blvd., Ste 21 Teaneck, NJ 07666-6712 Tel: (201) 329-7300 Toll free: (888) 475-7355 Fax: (201) 329-7070	Manufacturer: Prince Agri Products, Inc 229 Radio Road Quincy, IL 62305 Tel: 217-222-8854 Fax: 217-222-5098 Toll Free: 800-677-4623 Email: prince@princeagri.com
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SDS Contact (email of responsible person): phibroehs@pahc.com

24 Hour Emergency Phone Number: Chemtrec 1-800-424-9300 (CCN17224)

International: International Number: +1 703-527-3887

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)


Serious eye damage/eye irritation	Category 2A
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Specific target organ toxicity (repeated exposure)	Category 1

Label elements

Emergency Overview

Danger

Hazard statements
 Causes serious eye irritation
 May cause cancer
 May cause respiratory irritation
 Causes damage to organs through prolonged or repeated exposure



Appearance No information available **Physical state** Solid **Odor** Odorless

Precautionary Statements - Prevention
 Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Wear eye/face protection
 Do not breathe dust/fume/gas/mist/vapors/spray
 Do not eat, drink or smoke when using this product
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area

Precautionary Statements - Response
 IF exposed or concerned: Get medical advice/attention
 Get medical advice/attention if you feel unwell
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Call a POISON CENTER or doctor/physician if you feel unwell

Precautionary Statements - Storage
 Store locked up
 Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal
 Dispose of contents/ container to an approved landfill

Hazards not otherwise classified (HNOC)

Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture Mixture

Chemical Name	CAS No.	Weight-%	Trade Secret
Iron oxide (Fe ₂ O ₃)	1309-37-1	60 - 100	*
Silica	14808-60-7	3 - 7	*
Aluminum oxide	1344-28-1	1 - 5	*
Magnesium oxide (MgO)	1309-48-4	1 - 5	*
Calcium oxide	1305-78-8	1 - 5	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Inhalation: Remove to fresh air.

Skin Contact: Wash skin with soap and water.

Ingestion: Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms: No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical: No information available.

Explosion data

Sensitivity to Mechanical Impact: None.

Sensitivity to Static Discharge: None.

Protective equipment and precautions for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions: Ensure adequate ventilation, especially in confined areas.

For emergency responders: Use personal protection recommended in Section 8. Use personal protective equipment as required.

Environmental Precautions: See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment: Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly.

Personal precautions, protective equipment and emergency procedures

- Personal precautions:** Ensure adequate ventilation, especially in confined areas.
- For emergency responders:** Use personal protection recommended in Section 8. Use personal protective equipment as required.
- Environmental Precautions:** See Section 12 for additional ecological information.

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7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling: Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

- Storage Conditions:** Keep containers tightly closed in a dry, cool and well-ventilated place.
- Incompatible materials:** None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Component	CAS No.	ACGIH TLV	OSHA PEL	NIOSH IDLH
Iron oxide (Fe ₂ O ₃) 1309-37-1 (60 - 100)	1309-37-1	TWA: 5 mg/m ³ respirable particulate matter	TWA: 10 mg/m ³ fume TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 10 mg/m ³ fume and total dust Iron oxide (vacated) TWA: 5 mg/m ³ respirable fraction regulated under Rouge	IDLH: 2500 mg/m ³ Fe dust and fume TWA: 5 mg/m ³ Fe dust and fume
Quartz 14808-60-7 (3 - 7)	14808-60-7	TWA: 0.025 mg/m ³ respirable particulate matter	TWA: 50 µg/m ³ TWA: 50 µg/m ³ excludes construction work, agricultural operations, and exposures that result from the processing of sorptive clays (vacated) TWA: 0.1 mg/m ³ respirable dust : (250)/(%SiO ₂ + 5) mppcf TWA respirable fraction : (10)/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction	IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust
Aluminum oxide 1344-28-1 (1 - 5)	1344-28-1	TWA: 1 mg/m ³ respirable particulate matter	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 10 mg/m ³ total dust	-

			(vacated) TWA: 5 mg/m ³ respirable fraction	
Magnesium oxide (MgO) 1309-48-4 (1 - 5)	1309-48-4	TWA: 10 mg/m ³ inhalable particulate matter	TWA: 15 mg/m ³ fume, total particulate (vacated) TWA: 10 mg/m ³ fume and total particulate	IDLH: 750 mg/m ³ fume
Calcium oxide 1305-78-8 (1 - 5)	1305-78-8	TWA: 2 mg/m ³	TWA: 5 mg/m ³ (vacated) TWA: 5 mg/m ³ not in effect as a result of reconsideration	IDLH: 25 mg/m ³ TWA: 2 mg/m ³

NIOSH IDLH *Immediately Dangerous to Life or Health*

Other Information: Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls: Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

General Hygiene Considerations: Handle in accordance with good industrial hygiene and safety practice.

Eye/face protection: No special technical protective measures are necessary.

Skin and body protection: No special technical protective measures are necessary.

Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Solid	Odor	Odorless
Appearance	No information available	Odor threshold	No information available
Color	red, red brown		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting Point / Freezing Point	= 3092 °F	
Boiling point / boiling range	No information available	
Flash point °F		
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	4.5	
Water solubility	Insoluble in water	
Solubility in other solvents		
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	

Oxidizing properties No information available

Other Information

Softening point No information available
Molecular weight No information available
VOC Content (%) No information available
Density No information available
Bulk density No information available
Percent Volatile No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information: No data available

Inhalation: No data available.

Eye contact: No data available.

Skin Contact: No data available.

Ingestion: No data available.

Component Information

Chemical Name	CAS No.	Oral LD50	Dermal LD50	Inhalation LC50
Iron oxide (Fe2O3)	1309-37-1	> 10000 mg/kg (Rat)	-	-
Aluminum oxide	1344-28-1	> 5000 mg/kg (Rat)	-	-
Calcium oxide	1305-78-8	= 500 mg/kg (Rat)	-	-

Information on toxicological effects

Symptoms: No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization: No information available.
Germ cell mutagenicity: No information available.
Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	CAS No.	ACGIH	IARC	NTP	OSHA
Iron oxide (Fe2O3)	1309-37-1		Group 3		
Silica	14808-60-7	A2	Group 1	Known	X

ACGIH (American Conference of Governmental Industrial Hygienists)
 A2 - Suspected Human Carcinogen
 IARC (International Agency for Research on Cancer)
 Group 1 - Carcinogenic to Humans
 Not classifiable as a human carcinogen
 NTP (National Toxicology Program)
 Known - Known Carcinogen
 OSHA (Occupational Safety and Health Administration of the US Department of Labor)
 X - Present

Reproductive toxicity: No information available.
STOT - single exposure: No information available.
STOT - repeated exposure: No information available.
Target Organ Effects: Eyes, lungs, Respiratory system, Skin.
Aspiration hazard: No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .
 ATEmix (oral) 8333 mg/kg 9886

12. ECOLOGICAL INFORMATION

Ecotoxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	CAS No.	Algae/aquatic plants	Fish	Crustacea
Calcium oxide	1305-78-8	-	1070: 96 h Cyprinus carpio mg/L LC50 static	-

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

Other adverse effects: No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes: Refer to all federal, state and local regulations prior to disposal of container and unused contents by reuse, recycle or disposal. Disposal should be in accordance with applicable regional, national and local laws and regulations. Avoid runoff to waterways and sewers. Recover or recycle if possible. Send to a licensed recycler, reclaimer or incinerator.

Disposal methods: Do not reuse container.

14. TRANSPORT INFORMATION

Note: Store in a closed container. Keep container upright.

DOT Not regulated
IATA Not regulated
IMDG Not regulated
TDG Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL Complies
NDSL Complies
EINECS/ELINCS: Complies
ENCS: Complies
IECSC: Complies
KECL: Complies
PICCS: Complies
AICS: Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No.	SARA 313 - Threshold Values %
Aluminum oxide	1344-28-1	1.0

SARA 311/312 Hazard Categories

Acute health hazard No
Chronic Health Hazard No
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

FIFRA

Not applicable

US State Regulations



WARNING! This product contains a chemical known in the State of California to cause cancer. This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Chemical Name	California Proposition 65
Quartz - 14808-60-7	Carcinogen

U.S. State Right-to-Know Regulations

No information available

Chemical Name	CAS No.	New Jersey	Massachusetts	Pennsylvania
Iron oxide (Fe ₂ O ₃)	1309-37-1	X	X	X
Silica	14808-60-7	X	X	X
Aluminum oxide	1344-28-1	X	X	X
Calcium oxide	1305-78-8	X	X	X
Magnesium oxide (MgO)	1309-48-4	X	X	X

Canada

No information available

WHMIS Hazard Class D2A - Very toxic materials Non-controlled



16. OTHER INFORMATION

NFPA	Health hazards 3	Flammability 0	Instability 0	Physical & Chemical Properties 0
HMIS	Health hazards 3	Flammability 0	Physical hazards 0	Personal protection X

Document Review

Revision Number: 7

Revision Note: No information available

Key or legend to abbreviations and acronyms used in the safety data sheet:
 Bioconcentration factor (BCF)
 International Air Transport Association (IATA)
 Globally Harmonized System (GHS)
 International Maritime Dangerous Goods (IMDG)

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End of Safety Data Sheet