



SAFETY DATA SHEET

Red Iron Oxide

1. Identification

Product identifier

Product name Red Iron Oxide

Product number 100,117,160,1114,1115,1117,1119,1134,1396,3105,3107,10196,10289,10299,10311,10327,10362,10375,10384,C1190,C2977

Recommended use of the chemical and restrictions on use

Application Industrial color

Details of the supplier of the safety data sheet

Supplier Huntsman Pigments Americas LLC
P.O. Box 4980
The Woodlands, TX 77387
+1 301 210 3400 / +1 323 269 7311
MSDS@huntsman.com

Emergency telephone number

Emergency telephone CHEMTREC: (800) 424-9300 (Contract No: 191118)

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

Label elements

Hazard statements NC Not Classified

3. Composition/information on ingredients

Mixtures

C.I. PIGMENT RED 101 > 75%

CAS number: 1309-37-1 REACH registration number: Proprietary

Classification

Not Classified

C.I. PIGMENT BLACK 11 < 20%

CAS number: 1317-61-9 REACH registration number: Proprietary

Classification

Not Classified

Red Iron Oxide

| | |
|--------------------------|--|
| CALCIUM CARBONATE | < 25% |
| CAS number: 1317-65-3 | REACH registration number: Proprietary |
| Classification | |
| Not Classified | |

The Full Text for all Hazard Statements are Displayed in Section 16.

4. First-aid measures

Description of first aid measures

| | |
|---------------------|---|
| Inhalation | If exposed to excessive levels of dust or fumes, remove to fresh air. Get medical attention if cough or other symptoms develop. |
| Ingestion | Rinse mouth thoroughly with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed by medical personnel. Get medical attention if symptoms occur. |
| Skin Contact | Wash with soap and water. Get medical attention if irritation develops or persists. |
| Eye contact | Rinse with water. Get medical attention if any discomfort continues. |

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire. Extinguish with the following media: Water spray, foam, dry powder or carbon dioxide.

Special hazards arising from the substance or mixture

Flammability Class No Uniform Fire Code noted.

Advice for firefighters

Protective actions during firefighting As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Special protective equipment for firefighters Wear self-contained breathing apparatus as combustion may produce hazardous fumes.

6. Accidental release measures

Methods and material for containment and cleaning up

Methods for cleaning up If dust is generated, use appropriate respiratory protection. Vacuum or sweep up material and place in a disposal container. Avoid generation and spreading of dust. Large Spillages: Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Avoid runoff into storm sewers and ditches which lead to waterways.

7. Handling and storage

Precautions for safe handling

Usage precautions Minimize dust generation and accumulation. Do not breathe dust. Avoid contact with skin and eyes. Wash contaminated skin thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Red Iron Oxide

Storage precautions Store dry at ambient temperature away from food and beverages, excessive heat or flame sources (furnace, kilns, boilers etc.). Store away from substances subject to catalytic decomposition by dust, e.g. peroxides Store at temperatures not exceeding 55°C/130°F.

8. Exposure Controls/personal protection

Control parameters

Occupational exposure limits

C.I. PIGMENT RED 101

Long-term exposure limit (8-hour TWA): OSHA 10 mg/m³ fume
 Long-term exposure limit (8-hour TWA): OSHA 15 mg/m³ total dust
 Long-term exposure limit (8-hour TWA): OSHA 5 mg/m³ respirable fraction
 Long-term exposure limit (8-hour TWA): ACGIH 5 mg/m³ respirable fraction
 A4

OSHA = Occupational Safety and Health Administration.

ACGIH = American Conference of Governmental Industrial Hygienists.

A4 = Not Classifiable as a Human Carcinogen.

Ingredient comments Although no exposure limit has been established by OSHA for this product, the limit for nuisance particulates should be followed: OSHA 8-hr TWA 10mg/m³ Total Dust 5 mg/m³ respirable dust. ACGIH TLV-TWA 10mg/m³ Total dust or 5mg/m³ respirable dust.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

| | |
|---|----------------------------------|
| Appearance | Dusty powder. |
| Color | Red. Red-brown. |
| Odor | Odorless. |
| Odor threshold | Not available. |
| pH | pH (diluted solution): 4-8 @ 10% |
| Melting point | > 1000 deg C / 1832 deg F |
| Initial boiling point and range | Not available. |
| Flash point | Not available. |
| Evaporation rate | Not available. |
| Evaporation factor | Not available. |
| Flammability (solid, gas) | Not available. |
| Upper/lower flammability or explosive limits | Not available. |
| Other flammability | Not available. |
| Vapour pressure | Not available. |
| Vapour density | Not available. |
| Relative density | Not available. |
| Bulk density | Not available. |
| Solubility(ies) | Insoluble in water. |
| Partition coefficient | Not available. |

Red Iron Oxide

| | |
|----------------------------------|----------------|
| Auto-ignition temperature | Not available. |
| Decomposition Temperature | Not available. |
| Viscosity | Not available. |
| Explosive properties | Not available. |
| Volatile organic compound | None. |

10. Stability and reactivity

| | |
|---|---|
| Reactivity | There are no known reactivity hazards associated with this product. |
| Stability | From ca. 60°C, transformation of black iron oxide to Fe ₂ O ₃ will occur as an exothermic reaction. Yellow iron oxide will lose water of hydration at 180°C and convert to Fe ₂ O ₃ . |
| Possibility of hazardous reactions | None known. |
| Conditions to avoid | Keep at temperature not exceeding 55°C/130°F. |
| Materials to avoid | Substances subject to catalytic decomposition caused by dust such as peroxides. Further avoid contact with aluminum dust, calcium hypochlorite, hydrazine, ethylene oxide, caesium carbide. |
| Hazardous decomposition products | No known hazardous decomposition products. |

11. Toxicological information

Information on toxicological effects

| | |
|------------------------------|--|
| Toxicological effects | No information available. |
| Inhalation | Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases. |
| Ingestion | No harmful effects expected from quantities likely to be ingested by accident. |
| Skin Contact | Substance may cause slight skin irritation. |
| Eye contact | May cause slight irritation. |

12. Ecological Information

| | |
|---|--|
| Ecotoxicity | The product is not expected to be hazardous to the environment. |
| <u>Persistence and degradability</u> | |
| Persistence and degradability | The product is not readily biodegradable. |
| <u>Bioaccumulative potential</u> | |
| Bio-Accumulative Potential | Bioaccumulation is unlikely to be significant because of the low water-solubility of this product. |
| Partition coefficient | Not available. |
| <u>Mobility in soil</u> | |
| Mobility | The product is insoluble in water. |

Red Iron Oxide

Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Other adverse effects

Other adverse effects None known.

13. Disposal considerations

Waste treatment methods

General information Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

14. Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed or exempt.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

None of the ingredients are listed or exempt.

SARA 313 Emission Reporting

None of the ingredients are listed or exempt.

CAA Accidental Release Prevention

None of the ingredients are listed or exempt.

OSHA Highly Hazardous Chemicals

None of the ingredients are listed or exempt.

US State Regulations

State Regulations Comments California Prop 65 Warning: This product contains chemicals, as trace impurities and not intentionally added, known to the state of California to cause cancer (C) and birth defects or other reproductive (R) harm.

California Proposition 65 Carcinogens and Reproductive Toxins

CRYSTALLINE SILICA

None of the ingredients are listed or exempt.

<1%

Massachusetts "Right To Know" List

C.I. PIGMENT BLACK 11

Not listed.

C.I. PIGMENT RED 101

Present.

CALCIUM CARBONATE

Yes.

Red Iron Oxide

Rhode Island "Right To Know" List

C.I. PIGMENT BLACK 11

Not listed.

C.I. PIGMENT RED 101

Present.

CALCIUM CARBONATE

Yes.

Minnesota "Right To Know" List

C.I. PIGMENT BLACK 11

Not listed.

C.I. PIGMENT RED 101

Present.

CALCIUM CARBONATE

Yes.

New Jersey "Right To Know" List

C.I. PIGMENT BLACK 11

Not listed.

C.I. PIGMENT RED 101

Present.

CALCIUM CARBONATE

Yes.

Pennsylvania "Right To Know" List

C.I. PIGMENT BLACK 11

Not listed.

C.I. PIGMENT RED 101

Present.

CALCIUM CARBONATE

Yes.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

Canada - DSL/NDSL

C.I. PIGMENT BLACK 11

DSL

C.I. PIGMENT RED 101

DSL

CALCIUM CARBONATE

Non Domestic Substance List

US - TSCA

All the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification

No.

Red Iron Oxide

Australia - AICS

All the ingredients are listed or exempt.

Japan - MITI

C.I. PIGMENT BLACK 11

Yes

C.I. PIGMENT RED 101

Yes

CALCIUM CARBONATE

No.

Korea - KECI

All the ingredients are listed or exempt.

China - IECSC

All the ingredients are listed or exempt.

Philippines - PICCS

All the ingredients are listed or exempt.

New Zealand - NZIOC

All the ingredients are listed or exempt.

16. Other information

| | |
|------------------------|-----------|
| Revision date | 6/9/2015 |
| Revision | 2 |
| Supersedes date | 6/3/2015 |
| SDS No. | 21087 |
| SDS status | Approved. |

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.