1. Identification

Product identifier
Product name Natural Red Iron Oxide
Product number 521, NO1085, NO1283

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 Eye Irrit. 2A - H319 Carc. 1A - H350 STOT RE 2 - H373
Environmental hazards Not Classified

Label elements
Pictogram

Signal word Danger

Hazard statements
H319 Causes serious eye irritation.
H350 May cause cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
Natural Red Iron Oxide

Precautionary statements

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe vapor/spray.
P264 Wash contaminated skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 If exposed or concerned: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P337+P313 If eye irritation persists: Get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents/container in accordance with national regulations.

Contains

CRYSSTALLINE SILICA

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>C.I. PIGMENT RED 101</th>
<th>&gt; 80%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 1309-37-1</td>
<td>REACH registration number: Proprietary</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CRYSTALLINE SILICA</th>
<th>&lt; 9%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 14808-60-7</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ALUMINUM OXIDE</th>
<th>1-5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 1344-28-1</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>CALCIUM OXIDE</th>
<th>&lt; 1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 1305-78-8</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MAGNESIUM OXIDE</th>
<th>1-5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 1309-48-4</td>
<td></td>
</tr>
</tbody>
</table>

The Full Text for all Hazard Statements are Displayed in Section 16.
Natural Red Iron Oxide

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

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**
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**

**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

8. Exposure Controls/personal protection

**Control parameters**

**Occupational exposure limits**

C.I. PIGMENT RED 101
Natural Red Iron Oxide

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

CRYSTALLINE SILICA
Long-term exposure limit (8-hour TWA): ACGIH 0.025 mg/m³ respirable fraction

ALUMINUM OXIDE
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

CALCIUM OXIDE
Long-term exposure limit (8-hour TWA): ACGIH 2 mg/m³
Long-term exposure limit (8-hour TWA): OSHA 5 mg/m³

MAGNESIUM OXIDE
Long-term exposure limit (8-hour TWA): OSHA 15 mg/m³ fume total particulate
Long-term exposure limit (8-hour TWA): ACGIH 10 mg/m³ inhalable fraction

OSHA = Occupational Safety and Health Administration.
ACGIH = American Conference of Governmental Industrial Hygienists.
A4 = Not Classifiable as a Human Carcinogen.
A2 = Suspected Human Carcinogen.

Ingredient comments
Although no exposure limit has been established by OSHA for this product, the limit for nuisence 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-brown.

Odor
Odorless.

Odor threshold
Not available.

pH
pH (diluted solution): 4-8 @10% suspension

Melting point
> 1000°C/1832°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.
Natural Red Iron Oxide

Vapour density  Not available.
Relative density  Not available.
Bulk density  Not available.
Solubility(ies)  Insoluble in water.
Partition coefficient  Not available.
Auto-ignition temperature  Not available.
Decomposition Temperature  Not available.
Viscosity  Not available.
Explosive properties  Not available.
Volatile organic compound  None.

10. Stability and reactivity

Stability  No particular stability concerns.
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.

11. Toxicological information

Information on toxicological effects

Toxicological effects  No specific toxicity tests have been carried out on this product.

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.
Persistence and degradability  The product is not readily biodegradable.
Bioaccumulative potential  Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.
Partition coefficient  Not available.
Mobility in soil  The product is insoluble in water.
Mobility  None known.
Other adverse effects  None known.
Natural Red Iron Oxide

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
This product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID, 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

ALUMINUM OXIDE
1.0 %

MAGNESIUM OXIDE
1.0 %

CAA Accidental Release Prevention
None of the ingredients are listed or exempt.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

CRystalline Silica
None of the ingredients are listed or exempt.

Massachusetts "Right To Know" List

C.I. PIGMENT RED 101
Present.

ALUMINUM OXIDE
Present.

CALCIUM OXIDE
Present.

CRYSTALLINE SILICA
Present.

MAGNESIUM OXIDE
Present.

Rhode Island "Right To Know" List

C.I. PIGMENT RED 101
Present.
Natural Red Iron Oxide

ALUMINUM OXIDE
Present.

CALCIUM OXIDE
Present.

CRYSTALLINE SILICA
Present.

MAGNESIUM OXIDE
Present.

Minnesota "Right To Know" List

C.I. PIGMENT RED 101
Present.

ALUMINUM OXIDE
Present.

CALCIUM OXIDE
Present.

CRYSTALLINE SILICA
Present.

MAGNESIUM OXIDE
Present.

New Jersey "Right To Know" List

C.I. PIGMENT RED 101
Present.

ALUMINUM OXIDE
Present.

CALCIUM OXIDE
Present.

CRYSTALLINE SILICA
Present.

MAGNESIUM OXIDE
Present.

Pennsylvania "Right To Know" List

C.I. PIGMENT RED 101
Present.

ALUMINUM OXIDE
Present.

CALCIUM OXIDE
Present.

CRYSTALLINE SILICA
Present.

MAGNESIUM OXIDE
Present.

Inventories

EU - EINECS/ELINCS
Natural Red Iron Oxide

EINECS
All the ingredients are listed or exempt.

Canada - DSL/NDSL
DSL
All the ingredients are listed or exempt.

US - TSCA
All the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification
No.

Australia - AICS
All the ingredients are listed or exempt.

Japan - MITI
The following ingredients are not listed or exempt:

CRYSTALLINE SILICA

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.

16. Other information

Revision date 6/3/2015
Revision 2
Supersedes date 3/24/2015
SDS No. 21020
SDS status Approved.

Hazard statements in full
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H350 May cause cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs (Lungs) through prolonged or repeated exposure.

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.