

# Certificate of Analysis

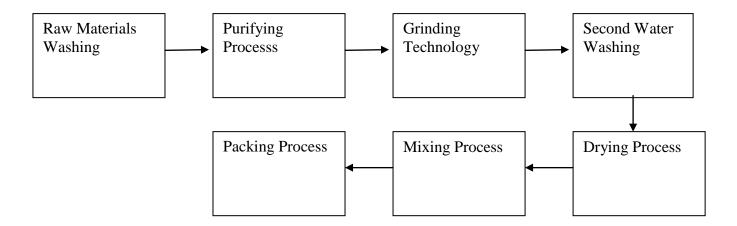
Product: Brown Iron Oxide

Batch No.: #200605

| Assay(INCI)             | Cas No.    | Spec.Values   | Batch Values  | Method       |
|-------------------------|------------|---------------|---------------|--------------|
| Red Iron Oxide          | 1309-37-1  | 42%-45%       | 44%           | Manufacturer |
| Yellow Iron Oxide       | 20344-49-4 | 40-%44%       | 42%           | Manufacturer |
| Black Iron Oxide        | 1317-61-9  | 11%-18%       | 14%           | Manufacturer |
| Heavy metals            |            |               |               |              |
| As                      |            | ≤2 ppm        | ≤2 ppm        | Manufacturer |
| Ba                      |            | ≤50 ppm       | ≤50 ppm       | Manufacturer |
| Cd                      |            | ≤3 ppm        | ≤3 ppm        | Manufacturer |
| Cr                      |            | ≤20 ppm       | ≤20 ppm       | Manufacturer |
| Cu                      |            | ≤50 ppm       | $\leq$ 50 ppm | Manufacturer |
| Hg                      |            | ≤1 ppm        | ≤1 ppm        | Manufacturer |
| Ni                      |            | $\leq$ 10 ppm | $\leq$ 10 ppm | Manufacturer |
| Pb                      |            | ≤5 ppm        | ≤5 ppm        | Manufacturer |
| Sb                      |            | ≤1 ppm        | ≤1 ppm        | Manufacturer |
| Zn                      |            | ≤50 ppm       | ≤50 ppm       | Manufacturer |
| Visual and colorimetric | :          |               |               |              |
| evaluation              |            | confirms      | confirms      | Manufacturer |
| Microbiological purity  |            |               |               |              |
| Microorganisms          |            | 100CFU/g      | 100CFU/g      | Manufacturer |
| Ph.Eur.USP              | XXII)      | No Pathogens  | No Pathogens  | Manufacturer |



## **Iron Oxide Production Flow Chart**





## **Declaration**

TO: Who may concern

We, MADAR Corporation, state that all Oxides and Micas are GMO free.



According to ECRegulation 1907/2006 (REACH), 1272/2008 (CLP) & 453/2010

Date of issue: 07.09.2011 - Version: EU\_EN/2 - Print date: February 2014

## **Material Safety Data Sheet**

#### 1.IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### **Product Identifier**

Trade name : Brown Iron Oxide

Relevant identified uses of the substance

or mixture and uses advised against : colouring agent
Uses advised against : not known

Details of the supplier of the safety

data sheet : MADAR Corporation Limited

#### 2. HAZARD IDENTIFICATION

#### Classification of the substance or mixture

According to Regulation (EC) No.

1272/2008(CLP) : not classified

According to Directive 67/548/EEC &

Directive 1999/45/EC : not classified
Additional information : not available

Label elements

GHS label elements : not applicable
Hazard pictogram(s) : not applicable
Signal word(s) : not applicable
Hazard statement(s) : not applicable
Precautionary statement(s) : not applicable
Other hazards : not known

### 3.COMPOSITION/INFORMATION ON INGREDIENTS

 $Chemical\ family:\ Red\ iron\ oxide-\ yellow\ iron\ oxide-\ bl\textbf{a}ck\ iron\ oxid\textbf{e}.\ Contains\ no\ hazardous\ i\textbf{n}gredients$ 

| Commen chemical   | CAS No.    | EINECS No. | Colour Index | Chemical        | Hazard classification                |
|-------------------|------------|------------|--------------|-----------------|--------------------------------------|
| name              |            |            |              | composition     | According to directive               |
|                   |            |            |              |                 | 67/548/EEC & Directive               |
|                   |            |            |              |                 | 199 <b>9</b> /45/EC, Regulation (EC) |
|                   |            |            |              |                 | No. <b>1</b> 272/2008(CLP)           |
| Red Iron Oxide    | 1309-37-1  | 215-168-2  | 77491        |                 | Not <b>c</b> lassified               |
| Yellow Iron Oxide | 20344-49-4 | 215-168-2  | 77492        | 99-1 <b>0</b> 0 | Not <b>c</b> lassified               |
| Black Iron Oxide  | 1317-61-9  | 215-277-5  | 77499        |                 | Not <b>c</b> lassified               |



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#### 4. FIRST AID MEASURES

Description of first aid measures

Inhalation: in case of accident by inhalation : remove casualty to fresh air and keep at rest

Skin contact : wash affected skin with plenty of water

Eye contact : if contact with eyes directly, flush with gently flowing fresh water

thoroughly; If eye irritation persists, get medical advice/attention

Ingestion : if ingested, wash out mouth with water, drink milk or egg white

Notes to physician : no special measures are required

Most important systems and effects,

Both acute and delayed

Actue : none

Long term (repeated) : may cause irritation to the respiratory system. Cough. Increased

difficulty in breathing

Indication of immediate medical attention and special treatment needed

Recommended :a. Chest XRay

b. Lung functionality tests

### 5. FIREFIGHTING MEASURES

#### Extinguishing media

Suitable extinguishing media : extinguish with waterspray, foam or dry chemical

Unsuitable extinguishing media : carbon dioxide

Special hazards arising rom the substance or mixture

hermal hazards : noncombustible. None anticipated

Advice for firefighters : fire fighters should wear complete protective clothing including self-

contained breathing apparatus

#### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emgergency procedures

Personal precautions : do not breathe dust

Personal protection equipment : wear appropriate personal protective equipment, avoid direct contact

In case of emergency : a self contained breathing apparatus and suitable protective clothing should be

worn in fire conditions

Environmental precautions : do not allow to enter drains, sewers or watercourses

Methods and material for

Containment and cleaning up : collect mechanically and dispose of according to Section 13. Use vacuum

equipment for collecting spilt materials, where practicable

Reference to other sections : see sections 8 and 13

7. HANDLING AND STORAGE



According to ECRegulation 1907/2006 (REACH), 1272/2008 (CLP) & 453/2010 Date of issue: 07.09.2011 – Version: EU\_EN/2 – Print date: February 2014

Precautions for safe handling

: avoid breathing dust

Conditions for safe storage

including any incompatibilities : keep container in a wellventilated place

Specific end use(s): not known

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters : provide adequate ventilation when using the material and follow the principles of good

occupational hygiene to control personal exposures

Exposure limit values : not known

**Exposure controls** 

Appropriate engineering controls :provide adequate ventilation to ensure that the occupational exposure limit is not

exceeded. Isolate the dispersive process step away from other operations. This can be

achieved by local exhaust ventilation or general ventilation

Individual protections measures, such as personal protective equipment(PPE)

Hand/eye/face protection : wear gloves, eye protection and an approved dust mask if dust is generated during

handling. Goggles giving complete protection to eyes. Dust mask covering nose and mouth

Skin protection :apron or other light protective clothing, boots and plastic or synthetic rubber gloves

Respiratory protection : dust mask covering nose and mouth

Thermal hazards : none

Environmental exposure controls : avoid dust generation. Avoid accumulation of dust

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : powder
Colour : Brown
Odour : odourless
Boiling point, ° C : not applicable

Melting point, ° C : no data

Freezing point, ° C : not applicable

Density : 5.0 g/ml

Bulk density : 1.0-1.4 g/ml

Vapour pressure : not applicable

Solubility : insoluble

Primary particle size : 0.1\*0.7 micron

### 10. STABILITY AND REACTIVITY

Reactivity : there may be violent or incandescent reaction of the product with metals at high

temperatures (e.g., aluminium; calcium; magnesium; potassium; sodium; zinc;

lithium)



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Chemical stability : stable under normal conditions

Possibility of hazardous reactions : none

Conditions to avoid : high temperature

Incompatible materials : strongly acidic, strongly alkaline, oxidizing agents

Decomposition products : no information available

#### 11. TOXICOLOGICAL INFORMATION

#### Information on toxicological effects

This inorganic pigment in general is considered to be practically nontoxic.

Acute toxicity: not available

Carcinogenicity: not available

#### 12. ECOLOGICAL INFORMATION

Toxicity : no **d**ata

Persistence and degradability : insoluble in water. This product is predicted not to degrade in soil and

water

Bioaccumulative potentiall : no data

Mobility in soil : not applicable

Results of PBT and vPvB assessment : : not applicable

Other adverse effects: : not known

## 13. DISPOSAL CONSIDERATIONS

Waste treatment methods : dispose of contents in accordance with local, state or national legislation

#### 14. TRANSPORT INFORMATION

Not classed as dangerous for transport.

| International Transport Regulations                                     | ADR/RID                            | ADN                     | IMDG                   | ICAO/IATA      |
|---|------------------------------------|-------------------------|------------------------|----------------|
| UN number   | Not applicable                     | Not applica <b>b</b> le | Not applicable         | Not applicable |
| Proper shipping name  | Not applicable                     | Not applica <b>b</b> le | Not <b>a</b> pplicable | Not applicable |
| Transport hazard class(es)  | Not applicable                     | Not applica <b>b</b> le | Not <b>a</b> pplicable | Not applicable |
| Packing group   | Not applicable                     | Not applica <b>b</b> le | Not <b>a</b> pplicable | Not applicable |
| Environmental hazards   | None                               | None                    | None                   | None           |
| Special precautions for user  | None                               | None                    | None                   | None           |
| Transport in bulk according to Annex II of MARPOL73/78 and The IBC Code | N <b>o</b> t applicable            | Not applica <b>b</b> le | Not <b>a</b> pplicable | Not applicable |
| Hazard label(s)   | Not applicable                     |                         |                        |                |
| Additional information  | Custo <b>m</b> tariff No. 32061900 |                         |                        |                |



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#### 15.REGULATORY INFORMATION

According to Directive 67/548/EEC &

Directive 1999/45/EC : not classified as dangerous for supply/use

Safety, health and environmental

regulations/legislations specific for the

substance or mixture :not available

#### 16. OTHER INFORMATION

Annex to the extended Safety Data Sheet (eSDS)

ADR : European Agreement concerning international carriage of Dangerous goods by Road

CAS : Chemical Abstracts Service

EC : European Community

ICAO : International Civil Aviation OrganizationIMDG : International Maritime Dangerous GoodsIATA : International Air Transport Association

### **DATA SOURCES**

NPIRI Raw Material Handbook, Volume 4, Pigments, Second Edition, 2001 Book on "Safe Handling of Pigments", European Edition 1995, BCMA, EPSOM ETAD, VdMi HSDB

NIOSH ICSC

Hazardous Substance Fact Sheet, New Jersey Department of Health and Senior Service

We have described our product concerning possible safety requirements by the abovementioned information given to the best of our knowledge and experience. All data given are never meant to guarantee any quality description nor product properties



## TECHNICAL DATA SHEET

| Product name : Brown Iron Oxide |   |  |
|---------------------------------|---|--|
| Product code :                  | CLROXIDBROW   |  |
| INCI Name :                     | Red Iron Oxide- Yellow Iron Oxide- Black Iron Oxide |  |
| CAS No. :                       | 1309.37.1-20344.49.4-1317.61.9                      |  |
| Date :                          | 01.10.2015  |  |

| CHARACTERISTICS               |               |    | RANGE         |
|-------------------------------|---------------|----|---------------|
| Physical properties           |               |    |               |
| Characteristics               |               |    | Brown         |
| Chemical composition          |               |    |               |
| Red Iron Oxide                | ( CI: 77491 ) |    |               |
| Yellow Iron Oxide (CI: 77492) |               |    | 99.0 -100.0 % |
| Black Iron Oxide              | ( CI: 77499 ) |    |               |
| Heavy metals                  |               |    |               |
| As                            | < 2 ppm       | Hg | < 1 ppm       |
| Ва                            | < 50 ppm      | Ni | < 10 ppm      |
| Cd                            | < 3 ppm       | Pb | < 5 ppm       |
| Cr                            | < 20 ppm      | Sb | < 1 ppm       |
| Cu                            | < 50 ppm      | Zn | < 50 ppm      |
| Microbial purity              |               |    |               |
| Total viable Aerobic count    |               |    | < 100         |
| E. Coli                       |               |    | Absent in 1 g |
| Pseudomonas aeruginosa        |               |    | Absent in 1 g |
| Staphylococcus aureus         |               |    | Absent in 1 g |
| Salmonella species            |               |    | Absent in 1 g |
| Candida albicans              |               |    | Absent in 1 g |



## **Declaration**

TO: Who may concern

We, MADAR Corporation Limited, state that all Oxides and Micas are Cruelty free and Vegan.



## **COSMETIC APPLICATION GUIDELINES**

### SPECIAL EFFECT PIGMENTS FOR THE COSMETIC INDUSTRY

| COSMETICS APPLICATIONS Cosmetics Solutions For Reference |                                     |               |  |
|--|-------------------------------------|---------------|--|
| Item No.   | Usage                               | Proportion(%) |  |
| 1  | Lipsticks, Lip Gloss                | 5-10          |  |
| 2  | Eyeshadows                          | 10-40         |  |
| 3  | Blusher, CC cream, Foundation       | 2-10          |  |
| 4  | Blusher Rouge                       | 2-10          |  |
| 5  | Makeup Powders                      | 5-10          |  |
| 6  | Eyebrow Pencils, Eyeshadow Pen      | 2-15          |  |
| 7  | Vaniahing Cream, Face Cold Cream    | 2-5           |  |
| 8  | Nail Polish, Nail UV/LED Polish Gel | 2-20          |  |
| 9  | Hair Spary, Shampoo, Perfume        | 0.1-10        |  |
| 10   | Body Lotions & Body Cream           | 1-5           |  |
| 11   | Soap                                | 1-5           |  |



This data is to be used purely as a guideline. We recommend speaking to a formulation chemist to ensure the correct percentage of pigment is used for your specific product.