

SAFETY DATA SHEET

IRON OXIDE BROWN POWDER

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

| | |
|---------------------|---|
| PRODUCT NAME | IRON OXIDE BROWN POWDER |
| PRODUCT NO. | SICOVIT® BROWN 75 E172 |
| INTERNAL ID | MSDS 32/HP |
| APPLICATION | Pigment for the colouration of: paper plastics cosmetics animal food food pharmaceuticals |
| SUPPLIER | ROCKWOOD ITALIA SPA, DIV. SILO Via G. Reiss Romoli 44/12 10148 Torino, Italy +39-0112280501 +39-0112269275 msds.silo@rpigments.com |
| EMERGENCY TELEPHONE | +39-0112280587 |

2 HAZARDS IDENTIFICATION

CLASSIFICATION (EC 1272/2008)

| | |
|---------------|-----------------|
| Physical | Not classified. |
| Health | Not classified. |
| Environmental | Not classified. |

HUMAN HEALTH

Skin contact may cause irritation due to mechanical action on sensitive skin. Eye contact causes irritation due to mechanical action and secretion of tears. Inhalation causes coughing, sneezing and respiratory problems. Ingestion may cause stomach ache, vomiting and diarrhoea.

3 COMPOSITION/INFORMATION ON INGREDIENTS

| | |
|-------------------------|-------------------|
| IRON OXIDE BLACK | 50-70% |
| CAS-No.: 1317-61-9 | EC No.: 215-277-5 |
| CLASSIFICATION (67/548) | |
| - | |
| IRON OXIDE RED | 50-70% |
| CAS-No.: 1309-37-1 | EC No.: 215-168-2 |
| CLASSIFICATION (67/548) | |
| - | |

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16

4 FIRST-AID MEASURES

GENERAL INFORMATION

Remove contaminated clothes.

INHALATION

Move into fresh air and keep at rest. Get medical attention if any discomfort continues.

INGESTION

Drink plenty of water. Do not give victim anything to drink if he is unconscious. Get medical attention if any discomfort continues.

SKIN CONTACT

Wash skin thoroughly with soap and water for several minutes. Get medical attention if irritation persists after washing.

IRON OXIDE BROWN POWDER

EYE CONTACT

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Extinguish with foam, carbon dioxide, dry powder or water fog.

SPECIAL FIRE FIGHTING PROCEDURES

Dispose material resulting from fire extinguishing according to local regulations.

SPECIFIC HAZARDS

The product is non-combustible. In case of fire, toxic gases may be formed.

PROTECTIVE MEASURES IN FIRE

Use air-supplied respirator during fire fighting.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Avoid contact with skin and eyes. Avoid inhalation of dust. Wear dust mask if necessary.

ENVIRONMENTAL PRECAUTIONS

Do not discharge into drains, water courses or onto the ground.

SPILL CLEAN UP METHODS

Avoid dust formation. Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel, broom or the like. Wear necessary protective equipment. Do not use compressed air for cleaning.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Use mechanical ventilation in case of handling which causes formation of dust. Observe occupational exposure limits and minimise the risk of inhalation of dust. Provide sufficient means of filtration of exhausted air.

STORAGE PRECAUTIONS

Store in tightly closed original container in a dry and cool place. No specific recommendations. Keep away from food, drink and animal feeding stuffs. Keep separate from substances subject to catalytic decomposition by dust, e.g. peroxides. Removal of the polyethylene film may cause electrostatic charge, therefore removal should NOT be carried out where this could be dangerous.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

| Name | Std | TWA - 8 hrs | | STEL - 15 min | | Notes |
|----------------|-------|-------------|----------------------|---------------|--|-------|
| IRON OXIDE RED | ACGIH | | 5 mg/m3 resp.dust | | | |

ACGIH = American Conference of Governmental Industrial Hygienists.

INGREDIENT COMMENTS

Total Inhalable Dust 10mg/m3 - 8hr TWA.

TLV ACGIH (2006)

RESPIRATORY EQUIPMENT

Use respiratory equipment with particle filter, type P1.

HAND PROTECTION

PVC or rubber gloves are recommended.

EYE PROTECTION

Use eye protection.

OTHER PROTECTION

Provide eyewash station.

SKIN PROTECTION

Wear appropriate clothing to prevent repeated or prolonged skin contact.

ENVIRONMENTAL EXPOSURE CONTROLS

All machinery used handling the product in powder form (packing unit, blenders, dryers) have to be provided with sufficient exhaust ventilation and air filter systems to avoid contamination of working area and environment

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Powder, dust

COLOUR Dark Brown

IRON OXIDE BROWN POWDER

| | | | |
|--|---|-------------------------------|----------------|
| ODOUR | Odourless | | |
| SOLUBILITY | Insoluble in water Organic solvents. Disperses. Soluble in: Mineral acids (some). | | |
| BOILING POINT (°C) | Not Applicable | MELTING POINT (°C) | Not Applicable |
| RELATIVE DENSITY | ~ 4.8 | BULK DENSITY | ~ 0.6 kg/l |
| VAPOUR PRESSURE | Not Applicable | EVAPORATION RATE | Not Applicable |
| pH-VALUE, DILUTED SOLUTION | 6-8 @ 10% | VISCOSITY | Not Applicable |
| AUTO IGNITION | Not Applicable | FLAMMABILITY LIMIT - LOWER(%) | Non-Flammable |
| TEMPERATURE (°C) | | | |
| PARTITION COEFFICIENT (N-Octanol/Water) | Not Applicable | | |

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 aluminium dust, calcium hypochlorite, hydrazine, ethylene oxide, caesium carbide.

HAZARDOUS DECOMPOSITION PRODUCTS

No hazardous decomposition products.

11 TOXICOLOGICAL INFORMATION

TOXIC DOSE 1 - LD 50 > 5000 mg/kg (oral rat)

12 ECOLOGICAL INFORMATION

LC 50, 96 Hrs, FISH mg/l >1000 (48 h) Idus Idus dorata

MOBILITY

The product is insoluble in water and will sediment in water systems.

BIOACCUMULATION

No data available on bioaccumulation.

DEGRADABILITY

The product is not expected to be biodegradable.

WATER HAZARD CLASSIFICATION

nwg

13 DISPOSAL CONSIDERATIONS**DISPOSAL METHODS**

Dispose of waste and residues in accordance with local authority requirements.

WASTE CLASS

Non Hazardous

14 TRANSPORT INFORMATION

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

15 REGULATORY INFORMATION**EU DIRECTIVES**

Directive 94/36/EC on dyes authorized for use in foods.

Regulation 2008/128/EC to lay down specific purity criteria for food dyes.

Directive 76/768/EC on cosmetic agents.

Directive 78/25/EC on colouring matter authorized for use in drugs.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP).

Commission Regulation (EC) 790/2009, 1st ATP of CLP.

Commission Regulation (EU) No 453/2010 on Safety Data Sheets.

IRON OXIDE BROWN POWDER

16 OTHER INFORMATION

ISSUED BY

HS&E Manager.

REVISION DATE 26/11/2010

REV. NO./REPL. SDS GENERATED 0

SDS NO. 18631

DISCLAIMER

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 a 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.