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
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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

<table>
<thead>
<tr>
<th>IRON OXIDE BLACK</th>
<th>50-70%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS-No.: 1317-61-9</td>
<td>EC No.: 215-277-5</td>
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<tr>
<td>CLASSIFICATION (67/548)</td>
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<table>
<thead>
<tr>
<th>IRON OXIDE RED</th>
<th>50-70%</th>
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<tr>
<td>CAS-No.: 1309-37-1</td>
<td>EC No.: 215-168-2</td>
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<td>CLASSIFICATION (67/548)</td>
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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

<table>
<thead>
<tr>
<th>Name</th>
<th>Std</th>
<th>TWA - 8 hrs</th>
<th>STEL - 15 min</th>
<th>Notes</th>
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<tbody>
<tr>
<td>IRON OXIDE RED</td>
<td>ACGIH</td>
<td>5 mg/m³ resp. dust</td>
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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

BOILING POINT (°C)
Not Applicable

RELATIVE DENSITY
~ 4.8

VAPOUR PRESSURE
Not Applicable

pH-VALUE, DIULUTED SOLUTION
6-8 @ 10%

AUTO IGNITION TEMPERATURE (°C)
Not Applicable

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
Regulation 2008/128/EC to lay down specific purity criteria for food dyes.
Directive 76/768/EC on cosmetic agents.
Commission Regulation (EC) 790/2009, 1st ATP of CLP.
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<th>16 OTHER INFORMATION</th>
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<tr>
<td>ISSUED BY</td>
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<td>HS&amp;E Manager.</td>
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<td>REVISION DATE</td>
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<td>REV. NO./REPL. SDS GENERATED</td>
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**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.