## SAFETY DATA SHEET


### SECTION 1: Identification of the substance/mixture and of the company/undertaking

**1.1. Product identifier**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Thermoplastic Dye Sachet. Black</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Inclusion</td>
<td>This document covers Thermoplastic Dye Sachet. Black only.</td>
</tr>
<tr>
<td>Container Size</td>
<td>190g</td>
</tr>
</tbody>
</table>

**1.2. Relevant identified uses of the substance of mixture and uses advised against**

<table>
<thead>
<tr>
<th>Identified Uses</th>
<th>Colorants (pigments and dyestuffs), inorganic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses advised against</td>
<td>No specific uses advised against are identified.</td>
</tr>
</tbody>
</table>

**1.3. Details of the supplier of the safety data sheet**

<table>
<thead>
<tr>
<th>Supplier</th>
<th>Meon Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Railside</td>
<td></td>
</tr>
<tr>
<td>Northarbour Spur</td>
<td></td>
</tr>
<tr>
<td>Portsmouth</td>
<td></td>
</tr>
<tr>
<td>PO6 3TU</td>
<td></td>
</tr>
<tr>
<td>+44 (0) 23 9220 0606</td>
<td></td>
</tr>
<tr>
<td>+44 (0) 23 9220 0707</td>
<td></td>
</tr>
<tr>
<td><a href="mailto:mail@meonuk.com">mail@meonuk.com</a></td>
<td></td>
</tr>
</tbody>
</table>

**1.4. Emergency Telephone Number**

| Emergency telephone   | +44 (0) 808 118 1922 |

### SECTION 2: Hazards identification

**2.1. Classification of the substance or mixture**

Classification according to Regulation (EC) No. 1272/2008
Not classified.

Classification according to Directive 67/548/EEC 1999/45/EEC
Not classified.

**2.2. Label Elements**

<table>
<thead>
<tr>
<th>Hazard pictograms</th>
<th>Not applicable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal word</td>
<td>No signal word.</td>
</tr>
<tr>
<td>Hazardous component(s) to be indicated on label</td>
<td></td>
</tr>
<tr>
<td>H-statement(s)</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>P-statement(s)</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

**2.3. Other hazards**

Other hazards which do not result in classification

Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

### SECTION 3: Composition/information on ingredients

SUBSTANCE [ ] MIXTURE [X]
Product definition (REACH)
Mono-constituent substance

**Hazardous ingredients**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Cas-No:</th>
<th>EC No:</th>
<th>Reach No:</th>
<th>R-Phrases</th>
<th>CLP Hazard Statements</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fe₃O₄</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting in this section, in accordance with EU or national regulations.

**SECTION 4: First aid measures**

Show this safety data sheet to the doctor in attendance.

4.1. Description of first aid measures

General advice

In case of inhalation: Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if symptoms occur. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

In case of skin contact: No special measures required.

In case of eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

In case of ingestion: No special measures required.

Self-protection of the first aider: None.

4.2. Most important symptoms and effects, both acute and delayed

See section 11 for more detailed information on health effect and symptoms.

4.3. Indication of any immediate medical attention and special treatment needed

See section 11 for more detailed information on health effect and symptoms.

**SECTION 5: Firefighting measures**

5.1. Extinguishing media

Suitable extinguishing media: In case of fire, use water spray (fog), foam, dry chemical or CO₂.

Extinguishing media which must not be used for safety reasons: None known.

5.2. Special hazards arising from the substance or mixture

Hazards from the substance or mixture: No specific fire or explosion hazard.

Hazardous combustion products: No specific data.

5.3. Advice for firefighters

Special precautions for firefighting: Not applicable.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Avoid breathing dust. Provide adequate ventilation. Put on appropriate personal protective equipment (see Section 8). Hazard of slipping on split product.
6.2. Environmental precautions
Environmental precautions
Avoid dispersal of split material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewer, waterways, soil or air).

6.3. Methods and material for containment and cleaning up
Small spill
Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.
Large spill
Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

6.4. Reference to other sections
See section 1 for emergency contact information.
See section 8 for information on appropriate personal protective equipment.
See section 13 for additional waste treatment information.

6.5. Additional information
No information.

SECTION 7: Handling and storage
7.1. Precautions on safe handling
No special measures required.
7.2. Conditions for safe storage, including any incompatibilities
No special measures required
7.3. Specific end uses
No specific advice for end use available.

SECTION 8: Exposure controls/personal protection
8.1. Control parameters
EH40/2005 WELs (United Kingdom (UK), 1/2012)

<table>
<thead>
<tr>
<th>Name</th>
<th>LTEL ppm</th>
<th>STEL ppm</th>
<th>STEL mg/m3</th>
<th>LTEL mg/m3</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triiron tetraoxide</td>
<td></td>
<td></td>
<td>10(as Fe)</td>
<td>5(as Fe)</td>
<td>fume</td>
</tr>
</tbody>
</table>

Derived effect levels

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Exposure</th>
<th>Value</th>
<th>Population</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triiron tetraoxide</td>
<td>DNEL</td>
<td>Long term inhalation</td>
<td>10mg/m3</td>
<td>Workers</td>
<td>Inhalable dust</td>
</tr>
<tr>
<td></td>
<td>DNEL</td>
<td>Long term inhalation</td>
<td>3mg/m3</td>
<td>Workers</td>
<td>Inhalable dust</td>
</tr>
</tbody>
</table>

Recommended monitoring procedures
If this product contains ingredients with exposure limits, personal, work place atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

8.2. Exposure controls
Risk management measures
Technical measures
Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust.
Thermoplastic Dye Sachet. Black

ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Respiratory protection**
Recommended: Dust-protection mask

**Eye/face protection**
Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases, or dusts. If operating conditions cause high dust concentrations to be produced, use dust goggles. Recommended safety glasses with side-shields.

**Hand protection**
Recommended: gloves

**Eye/face protection**
Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases, or dusts. If operating conditions cause high dust concentrations to be produced, use dust goggles. Recommended safety glasses with side-shields.

**Environmental exposure controls**
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of the environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### SECTION 9: Physical and Chemical Properties

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid. [powders]</td>
</tr>
<tr>
<td>Colour</td>
<td>Black</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless</td>
</tr>
<tr>
<td>Ph</td>
<td>5 to 8 [Conc. (%w/w): 5%]</td>
</tr>
<tr>
<td>Melting point</td>
<td>&gt;1000°C (&gt;1832°F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>Closed cup: not applicable.</td>
</tr>
<tr>
<td>Density</td>
<td>4,6 kg/L (20°C)</td>
</tr>
<tr>
<td>Bulk density</td>
<td>300 to 1000 kg/m3</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in the following materials: cold water</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>&gt;80°C</td>
</tr>
</tbody>
</table>

#### 9.2. Other information

No information.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No specific test data related to reactivity available for this product or its ingredients.

#### 10.2. Chemical stability

The product is stable.

#### 10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

#### 10.4. Conditions to avoid

At temperatures above 80°C the product may become unstable and oxidise. This generates additional heat which, under unflavourable conditions, may result in the combustion of flammable materials. The product should therefore not be stored near heat sources.

#### 10.5. Incompatible materials

No specific data.

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### SECTION 11: Toxicological information

**Toxicity values**

**Acute toxicity**

**Hazardous ingredients**
Thermoplastic Dye Sachet. Black

<table>
<thead>
<tr>
<th>Name According to EEC</th>
<th>Oral LD50 (RAT)</th>
<th>Dermal LD50 (RAT)</th>
<th>Dermal LD50 (RBT)</th>
<th>Inhale LC50 (RAT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAYFERROX 318 M</td>
<td>&gt;5000mg/kg</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Test results on an analogous product.

11.1. Information on toxicological effects

Potential acute health effects

Eye contact

Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Irritation/corrosion

Skin: Non-irritating (Rabbit)

Eyes: Non-irritating (Rabbit)

Sensitization

Not sensitizing

Potential chronic health effects

Test: Ames test

Result: In vitro Subject: Bacteria

Negative

Chronic effects: Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous ingredients

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Test</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triiron tetraoxide</td>
<td>EU C.2</td>
<td>Acute EC0 &gt;10000 mg/l</td>
<td>Daphnia-Daphnia magna</td>
<td>48h</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute LC0 &gt;10000mg/l</td>
<td>Fish –Danio rerio</td>
<td>96h</td>
</tr>
</tbody>
</table>

Conclusion/summary

Not available.

12.2. Persistence and degradability

Not available.

12.3. Bioaccumulative potential

Not available.

12.4. Mobility in soil

Not available.

12.5. Results of PBT and vPvB assessment

Not applicable.

12.6. Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product

Methods of disposal

Examine possibilities for re-utilisation. Product residues and uncleaned empty containers should be packaged, sealed, labelled and disposed of or recycled according to relevant national and local regulations. Where large quantities are concerned, consult the supplier. When uncleaned empty containers are passed on, the recipient must be warned of any possible hazard they may be caused by residues. For disposal within the EC, the appropriate code according to European Waste List (EWL) should be used. It is among the tasks of the polluter to assign the waste to waste codes specific to industrial sectors and processes acording to the European Waste List (EWL).

Hazardous waste
Thermoplastic Dye Sachet. Black

Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

Packaging
Methods of disposal
The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions
This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of split material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

<table>
<thead>
<tr>
<th>Transport class</th>
<th>Land transport ADR/RID</th>
<th>Marine transport IMDG</th>
<th>Air transport ICAO/IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1 UN-No</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14.3 Transport hazard classes</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14.2 Description of the goods</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14.2 UN proper shipping name</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Danger releasing substance</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Labels</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Category</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Factor</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Classification Code</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tunnel restriction code</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14.5 Environmental hazards</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>EmS</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stowage category</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not available.

Hazard notes:
Not dangerous cargo.
Keep separated from foodstuffs.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles
Not applicable

Other EU regulations
Seveso II Directive
This product is not controlled under the Seveso II Directive.

15.2 Chemical Safety Assessment
Not applicable.

SECTION 16: Other information

Relevant R-phrases and H-phrases
- List of Wastes® Acronym & Abbreviation Key:
BMGV Biological Monitoring Guidance Values are given in Table 2 of EH40/2005 Workplace exposure limits.
Sk Can be absorbed through the skin. Dermal absorption may lead to systemic toxicity.
CLP Classification, Labelling & Packaging Regulation
EC European Commission
Thermoplastic Dye Sachet. Black

EU European Union
US United States
CAS Chemical Abstract Service
EINECS European Inventory of Existing Chemical Substances
REACH Registration, Evaluation, Authorization of Chemicals Regulation
GHS Globally Harmonized System of Classification and Labeling of Chemicals
LTEL Long term exposure limit
STEL Short term exposure limit
OEL Occupational exposure limit
ppm Parts per million
mg/m3 Milligrams per cubic meter
TLV Threshold Limit Value
ACGIH American Conference of Governmental Industrial Hygienists
OSHA Occupational Safety & Health Administration
PEL Permissible Exposure Limits
VOC Volatile organic compounds
g/l Grams per liter
mg/kg Milligrams per kilogram
N/A Not applicable
LD50 Lethal dose at 50%
LC50 Lethal concentration at 50%
EC50 Half maximal effective concentration
IC50 Half maximal inhibitory concentration
PBT Persistent bioaccumulative toxic chemical
vPvB Very persistent and very bioaccumulative
EEC European Economic Community
ADR International Transport of Dangerous Goods by Road
RID International Transport of Dangerous Goods by Rail
UN United Nations
IMDG International Maritime Dangerous Goods Code
IATA International Air Transport Association
MARPOL International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978
IBC International Bulk Container

This information is provided in accordance with the current status of our knowledge and experience. The Safety Data Sheet describes products with a view to relevant safety requirements. This information does not constitute a warranty of properties, features or qualities.