SAFETY DATA SHEET
LEAD-BASED POLYESTER PIGMENT PASTES

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier
Product name: LEAD-BASED POLYESTER PIGMENT PASTES
Product No.: VARIOUS PY LEAD

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses: COLOURING OF POLYESTER RESINS & GELCOATS.

1.3. Details of the supplier of the safety data sheet
Supplier: WEST AND SENIOR LIMITED
MILLTOWN STREET
RADCLIFFE
MANCHESTER. M26 1WE.
+44 01617247131
+44 01617249519
info@westsenior.co.uk

1.4. Emergency telephone number
24 HOUR EMERGENCY TELEPHONE NUMBER: +44 (0) 7775 840728

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture
Classification (1999/45/EEC) Carc. Cat. 2;R45, Repr. Cat. 1;R61. Repr. Cat. 3;R62. N;R50/53. R33.
Human health
Contains lead which can accumulate in the body. Lead is absorbed into the body through inhalation of spray mist or by ingestion.
Environment
The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

2.2. Label elements
Contains
C.I.PIGMENT RED 104 (C.I. 77605)
C.I.PIGMENT YELLOW 34 (C.I. 77603)

Labelling

Risk Phrases
R33 Danger of cumulative effects.
R45 May cause cancer.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R61 May cause harm to the unborn child.
R62 Possible risk of impaired fertility.
LEAD-BASED POLYESTER PIGMENT PASTES

Safety Phrases

S38 In case of insufficient ventilation, wear suitable respiratory equipment.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
S53 Avoid exposure - obtain special instructions before use.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S57 Use appropriate containment to avoid environmental contamination.
S60 This material and its container must be disposed of as hazardous waste.
S61 Avoid release to the environment. Refer to special instructions/safety data sheets.
P1 Contains lead. Should not be used on surfaces that are liable to be chewed or sucked by children.
P11 Restricted to professional users.

2.3. Other hazards
No information available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

<table>
<thead>
<tr>
<th>C.I. PIGMENT YELLOW 34 (C.I. 77603)</th>
<th>0 - 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS-No.: 1344-37-2</td>
<td>EC No.: 215-693-7</td>
</tr>
<tr>
<td>Classification (EC 1272/2008)</td>
<td>Classification (67/548/EEC)</td>
</tr>
<tr>
<td>Carc. 1B - H350</td>
<td>Carc. Cat. 2; R45</td>
</tr>
<tr>
<td>Repr. 1A - H360Df</td>
<td>Repr. Cat. 1; R61</td>
</tr>
<tr>
<td>STOT RE 2 - H373</td>
<td>Repr. Cat. 3; R62</td>
</tr>
<tr>
<td>Aquatic Acute 1 - H400</td>
<td>R33</td>
</tr>
<tr>
<td>Aquatic Chronic 1 - H410</td>
<td>N; R50/53</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C.I. PIGMENT RED 104 (C.I. 77605)</th>
<th>0 - 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS-No.: 12656-85-8</td>
<td>EC No.: 235-759-9</td>
</tr>
<tr>
<td>Classification (EC 1272/2008)</td>
<td>Classification (67/548/EEC)</td>
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<td>Carc. 1B - H350</td>
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<td>Repr. Cat. 3; R62</td>
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<td>R33</td>
</tr>
<tr>
<td>Aquatic Chronic 1 - H410</td>
<td>N; R50/53</td>
</tr>
</tbody>
</table>

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

Composition Comments
One or both C.I. Pigments may appear in the product.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures
LEAD-BASED POLYESTER PIGMENT PASTES

Inhalation
Remove victim immediately from source of exposure. Keep the affected person warm and at rest. Get prompt medical attention.

Ingestion
Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Get medical attention immediately! Consult a physician for specific advice.

Skin contact
Remove affected person from source of contamination. Promptly wash contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above. Get medical attention if any discomfort continues.

Eye contact
Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention. Get medical attention promptly if symptoms occur after washing.

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

General information
Get medical attention immediately!

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

Treatment: The presence of lead in the body can be detected by determining the amount of this substance in the body and/or urine.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media
This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Unusual Fire & Explosion Hazards
Fire causes formation of toxic gases.

Specific hazards
Fire or high temperatures create: Toxic gases/vapours/fumes of: Carbon dioxide (CO2). Carbon monoxide (CO). Oxides of: Lead and Chromium

5.3. Advice for firefighters

Special Fire Fighting Procedures
Use special protective clothing. Regular protection may not be safe. Avoid breathing fire vapours. If risk of water pollution occurs, notify appropriate authorities.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Wash skin thoroughly with soap and water for several minutes. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container. Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel, broom or the like.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. See section 11 for additional information on health hazards. For waste disposal, see section 13.
LEAD-BASED POLYESTER PIGMENT PASTES

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling
Avoid spilling, skin and eye contact. Pregnant women should not work with the product, if there is the least risk of lead exposure. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Wash hands after handling.

7.2. Conditions for safe storage, including any incompatibilities
Store in tightly closed original container in a dry, cool and well-ventilated place.
Storage Class
Chemical storage.

7.3. Specific end use(s)
The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>STD</th>
<th>TWA - 8 Hrs</th>
<th>STEL - 15 Min</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.I.PIGMENT RED 104 (C.I. 77605)</td>
<td>WEL</td>
<td>0.15 mg/m³</td>
<td></td>
<td></td>
</tr>
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<td>C.I.PIGMENT YELLOW 34 (C.I. 77603)</td>
<td>WEL</td>
<td>0.15 mg/m³</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

WEL = Workplace Exposure Limit.

Ingredient Comments
WEL = Workplace Exposure Limits Due to the hazardous nature of ingredients, exposure should be minimal.

8.2. Exposure controls

Protective equipment

Process conditions
- Provide eyewash station.
- Engineering measures
- Well-ventilated area.
- Hand protection
- Chemical resistant gloves required for prolonged or repeated contact.

Eye protection
- Wear approved safety goggles.

Other Protection
- AVOID ALL SKIN AND RESPIRATORY CONTACT! Wear appropriate clothing to prevent any possibility of skin contact.
- Hygiene measures
- Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Viscous liquid.</td>
</tr>
<tr>
<td>Odour</td>
<td>Aromatic.</td>
</tr>
</tbody>
</table>
LEAD-BASED POLYESTER PIGMENT PASTES

Initial boiling point and boiling range
Solubility Value (G/100G H2O@20°C)
Not applicable.
Flash point >65

9.2. Other information
Not available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
In the event of fire, oxides of lead, chromium and antimony may be generated.

10.2. Chemical stability
Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions
Not applicable.

10.4. Conditions to avoid
Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials
Materials To Avoid
No information available.

10.6. Hazardous decomposition products

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

General information
Possible reproductive impact. Known or suspected carcinogen for humans. Lead is accumulated in the body and may cause damage to the brain and nervous system after prolonged exposure. Known or suspected teratogen.

Ingestion
Toxic: danger of very serious irreversible effects if swallowed.

Skin contact
Prolonged or repeated exposure may cause severe irritation.

Eye contact
Repeated exposure may cause chronic eye irritation.

Toxicological information on ingredients.
LEAD-BASED POLYESTER PIGMENT PASTES
C.I.PIGMENT YELLOW 34 (C.I. 77603) (CAS: 1344-37-2)

Toxic Dose 1 - LD 50
>2, 000 mg/kg (oral rat)

Specific target organ toxicity - repeated exposure:
STOT - Repeated exposure
LOAEL 70 mg/kg Oral Rat

Aspiration hazard:
General information
Possible reproductive impact. Known or suspected carcinogen for humans. Lead is accumulated in the body and may cause damage to the brain and nervous system after prolonged exposure. Known or suspected teratogen.

Ingestion
Toxic if swallowed. Toxic: danger of very serious irreversible effects if swallowed.

Skin contact
Prolonged or repeated exposure may cause severe irritation.

Eye contact
Repeated exposure may cause chronic eye irritation.

C.I.PIGMENT RED 104 (C.I. 77605) (CAS: 12656-85-8)

Toxic Dose 1 - LD 50
>2, 000 mg/kg (oral rat)

Specific target organ toxicity - repeated exposure:
STOT - Repeated exposure
LOAEL 70 mg/kg Oral Rat

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity
Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.

Ecological information on ingredients.

C.I.PIGMENT YELLOW 34 (C.I. 77603) (CAS: 1344-37-2)

Ecotoxicity
Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

Due to their extreme water insolubility these products are non toxic to aquatic life. Due to its chemical stability and insolubility these products do not degrade in water. However, the commission stated that all products containing lead and hexavalent chromium must be considered toxic to environment.

Acute Toxicity - Fish
LC50 96 hours >10000 mg/l Onchorhynchus mykiss (Rainbow trout)
Acute Toxicity - Aquatic Invertebrates
EC50 48 hours >100 mg/l Daphnia magna
Acute Toxicity - Aquatic Plants
EC50 72 hours >100 mg/l Scenedesmus subspicatus
LEAD-BASED POLYESTER PIGMENT PASTES

Ecological information on ingredients.

**C.I.PIGMENT YELLOW 34 (C.I. 77603) (CAS: 1344-37-2)**

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**C.I.PIGMENT RED 104 (C.I. 77605) (CAS: 12656-85-8)**

Acute Toxicity - Fish
LC50 96 hours > 10,000 mg/l

Acute Toxicity - Aquatic Invertebrates
EC50 48 hours > 100 mg/l

Acute Toxicity - Aquatic Plants
EC50 72 hours > 100 mg/l Scenedesmus subspicatus

### 12.2. Persistence and degradability
Not applicable.

Degradability
The product is not biodegradable.

### 12.3. Bioaccumulative potential
Bioaccumulative potential
Low bioaccumulation potential. Due to the very low solubility of C.I.Pigment's in water, the bioavailability of the substance is expected to be low. Therefore, the bioaccumulation of the substance is expected to be low.

### 12.4. Mobility in soil
Adsorption/Desorption Coefficient
Soil log Koc > 5.71

### 12.5. Results of PBT and vPvB assessment
This product does not contain any PBT or vPvB substances.

### 12.6. Other adverse effects
Due to extreme insolubility in water, this product is not toxic to aquatic life. Because of their chemical stability they do not degrade in water. However, the European Commission stated that all products containing lead and hexavalent chromium must be considered toxic to the environment.

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**SECTION 13: DISPOSAL CONSIDERATIONS**

General information
Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

### 13.1. Waste treatment methods
Dispose of waste and residues in accordance with local authority requirements. Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point. Contaminated packaging should be disposed of in the same manner as contents. Clean packaging material should be subjected to waste management schemes (recovery recycling reuse) according to local legislation.

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**SECTION 14: TRANSPORT INFORMATION**

General
Contains <5% soluble lead. Not classified as Dangerous for Transport.

### 14.1. UN number
Not applicable.
LEAD-BASED POLYESTER PIGMENT PASTES

14.2. UN proper shipping name
Not applicable.

14.3. Transport hazard class(es)
Not applicable.

14.4. Packing group
Not applicable.

14.5. Environmental hazards
Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user
Not applicable.

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

SECTION 15: REGULATORY INFORMATION

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

15.2. Chemical Safety Assessment
A chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Date 05/07/2012
Revision 5
Supersedes date 28/06/2012
Risk Phrases In Full
R33 Danger of cumulative effects.
R45 May cause cancer.
R61 May cause harm to the unborn child.
R62 Possible risk of impaired fertility.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard Statements In Full
H350 May cause cancer.
H360Df May damage the unborn child and suspected of damaging fertility.
H373 May cause damage to organs <<Organs>> through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.