



# West & Senior Limited

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## SAFETY DATA SHEET PY SIGNAL YELLOW RAL1003 PIGMENT

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 453/2010

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

#### 1.1. Product identifier

**Product name** PY SIGNAL YELLOW RAL1003 PIGMENT

**Product number** WS40024A

#### 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.  
TEL + 44 01617247131  
FAX + 44 01617249519  
[info@westsenior.co.uk](mailto:info@westsenior.co.uk)

#### 1.4. Emergency telephone number

**Emergency telephone** 24 HOUR EMERGENCY TELEPHONE NUMBER : + 44 (0) 7930 595916

### SECTION 2: Hazards identification

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

##### Classification (EC 1272/2008)

**Physical hazards** Not Classified

**Health hazards** Not Classified

**Environmental hazards** Not Classified

**Environmental** The product is not expected to be hazardous to the environment.

#### 2.2. Label elements

**Hazard statements** NC Not Classified

**Supplemental label information** EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

#### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

## PY SIGNAL YELLOW RAL1003 PIGMENT

TITANIUM DIOXIDE			10-30%
CAS number: 13463-67-7	EC number: 236-675-5	REACH registration number: 01-2119489379-17-0000	
Classification Not Classified			

BARIUM SULPHATE			5-10%
CAS number: 7727-43-7	EC number: 231-784-4	REACH registration number: 01-2119491274-35-0001	
Classification Not Classified			

The full text for all hazard statements is displayed in Section 16.

**Composition comments**      This mixture contains  $\geq 1\%$  Titanium Dioxide (CAS 13463-67-7) The Annex VI classification of Titanium Dioxide does not apply to this mixture according to its Note 10. No other disclosure required under the latest EC Directives

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>General information</b>	No specific recommendations. If in doubt, get medical attention promptly.
<b>Inhalation</b>	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues. None.
<b>Skin contact</b>	Remove affected person from source of contamination. Get medical attention if irritation persists after washing.
<b>Eye contact</b>	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

<b>General information</b>	Get medical attention if any discomfort continues.
<b>Inhalation</b>	No specific symptoms known.
<b>Ingestion</b>	No specific symptoms known.
<b>Skin contact</b>	No specific symptoms known.
<b>Eye contact</b>	No specific symptoms known.

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

<b>Notes for the doctor</b>	No specific recommendations.
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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.

## PY SIGNAL YELLOW RAL1003 PIGMENT

### 5.2. Special hazards arising from the substance or mixture

<b>Specific hazards</b>	No unusual fire or explosion hazards noted.
<b>Hazardous combustion products</b>	Heating may generate flammable vapours. Vapours may form explosive mixtures with air.

### 5.3. Advice for firefighters

<b>Protective actions during firefighting</b>	No specific firefighting precautions known.
<b>Special protective equipment for firefighters</b>	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Avoid heat, flames and other sources of ignition. Provide adequate ventilation.
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### 6.2. Environmental precautions

<b>Environmental precautions</b>	Avoid the spillage or runoff entering drains, sewers or watercourses.
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### 6.3. Methods and material for containment and cleaning up

<b>Methods for cleaning up</b>	Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Avoid the spillage or runoff entering drains, sewers or watercourses.
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### 6.4. Reference to other sections

<b>Reference to other sections</b>	For waste disposal, see section 13.
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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

<b>Usage precautions</b>	Wear suitable protective equipment for prolonged exposure and/or high concentrations of vapours, spray or mist. Take precautionary measures against static discharges. Contaminated rags and cloths must be put in fireproof containers for disposal.
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### 7.2. Conditions for safe storage, including any incompatibilities

<b>Storage precautions</b>	Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep only in the original container. Keep separate from food, feedstuffs, fertilisers and other sensitive material.
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### 7.3. Specific end use(s)

<b>Specific end use(s)</b>	The identified uses for this product are detailed in Section 1.2.
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## SECTION 8: Exposure controls/Personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### TITANIUM DIOXIDE

EH40 WEL, Time Weighted Average (TWA):, Inhalable dust. 10 mg/m<sup>3</sup>, 8 h  
EH40 WEL, Time Weighted Average (TWA):, Respirable dust. 4 mg/m<sup>3</sup>, 8 h

##### BARIUM SULPHATE

Long-term exposure limit (8-hour TWA): 4 mg/m<sup>3</sup> respirable dust  
Long-term exposure limit (8-hour TWA): 10 mg/m<sup>3</sup> inhalable dust

##### CARBON BLACK

## PY SIGNAL YELLOW RAL1003 PIGMENT

Argentina 3.5, TWA  
 Australia 3.0, TWA, inhalable  
 Belgium 3.6, TWA  
 Brazil 3.5, TWA  
 Canada (Ontario) 3.0 TWA, inhalable  
 China 4.0, TWA 8.0, TWA, STEL (15 min)  
 Colombia 3.0, TWA, inhalable  
 Czech Republic 2.0, TWA  
 Egypt 3.5, TWA  
 Finland 3.5, TWA; 7.0, STEL  
 France – INRS 3.5, TWA/VME inhalable  
 Germany – BeKGS527 0.5, TWA, respirable; 2.0, TWA, inhalable (DNEL values)  
 Hong Kong 3.5, TWA  
 Indonesia 3.5, TWA/NABs  
 Ireland 3.5, TWA; 7.0, STEL  
 Italy 3.5, TWA, inhalable  
 Japan – MHLW 3.0  
 Japan – SOH 4.0, TWA; 1.0, TWA, respirable  
 Korea 3.5, TWA  
 Malaysia 3.5, TWA  
 Mexico 3.5, TWA  
 Russia 4.0, TWA  
 Spain 3.5, TWA (VLA-ED)  
 Sweden 3.0, TWA  
 United Kingdom 3.5, TWA, inhalable; 7.0, STEL, inhalable  
 EU REACH DNEL 2.0, TWA, inhalable; 0.5, TWA respirable  
 United States 3.5, TWA, OSHA-PEL  
 3.0, TWA, ACGIH-TLV®, inhalable  
 3.5, TWA, NIOSH-REL

**Ingredient comments** No exposure limits known for ingredient(s).

### TITANIUM DIOXIDE (CAS: 13463-67-7)

<b>DNEL</b>	Workers - Inhalation; Long term local effects: 10 mg/m <sup>3</sup> Professional - Inhalation; Long term local effects: 10 mg/m <sup>3</sup> Consumer - Oral; Long term systemic effects: 700 mg/kg/day
<b>PNEC</b>	marine water; 0.0184 mg/l Fresh water; 0.184 mg/l Intermittent release; 0.193 mg/l STP; 100 mg/l Sediment, marine water; 100 mg/kg Sediment, Fresh water; 1000 mg/kg Soil; 100 mg/kg

### BARIUM SULPHATE (CAS: 7727-43-7)

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 10 mg/m <sup>3</sup> Workers - Inhalation; Long term local effects: 10 mg/m <sup>3</sup> Consumer - Inhalation; Long term systemic effects: 10 mg/m <sup>3</sup> Consumer - Oral; Long term systemic effects: 13000 mg/kg
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## PY SIGNAL YELLOW RAL1003 PIGMENT

### PNEC

Fresh water; 115 µg/l  
STP; 62.2 mg/l  
Sediment (Freshwater); 600.4 mg/kg  
Soil; 207.7 mg/kg

### C.I. PIGMENT YELLOW 83 (CAS: 5567-15-7)

### DNEL

Workers - Dermal; Long term systemic effects: 45 mg/kg/day  
Workers - Inhalation; Long term local effects: 3 mg/m<sup>3</sup>  
General population - Dermal; Long term systemic effects: 28 mg/kg/day  
General population - Oral; Long term systemic effects: 28 mg/kg/day

### Trimethylolpropane (CAS: 77-99-6)

### DNEL

Workers - Inhalation; Long term systemic effects: 3.3 mg/m<sup>3</sup>  
Workers - Dermal; Long term systemic effects: 0.94 mg/kg  
Consumer - Inhalation; Long term systemic effects: 0.58 mg/m<sup>3</sup>  
Consumer - Dermal; Long term systemic effects: 0.34 mg/kg  
Consumer - Oral; Long term systemic effects: 0.34 mg/kg

### CARBON BLACK (CAS: 1333-86-4)

### DNEL

Workers - Inhalation; Long term : 0.5 mg/m<sup>3</sup>, respirable fraction  
Workers - Inhalation; Long term : 2 mg/m<sup>3</sup>, inhalable fraction

## 8.2. Exposure controls

### Protective equipment



### Appropriate engineering controls

No specific ventilation requirements.

### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.

### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.

### Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

### Hygiene measures

Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin.

## SECTION 9: Physical and chemical properties

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

Appearance	Viscous liquid. or Coloured paste.
Colour	Various colours.
Odour	Aromatic.
Odour threshold	No information available.

## PY SIGNAL YELLOW RAL1003 PIGMENT

<b>pH</b>	No information available.
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	No information available.
<b>Flash point</b>	>65°C
<b>Evaporation rate</b>	No information available.
<b>Evaporation factor</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Other flammability</b>	No information available.
<b>Vapour pressure</b>	No information available.
<b>Vapour density</b>	No information available.
<b>Relative density</b>	No information available.
<b>Bulk density</b>	No information available.
<b>Solubility(ies)</b>	Organic solvents. Insoluble in water.
<b>Partition coefficient</b>	Not available.
<b>Auto-ignition temperature</b>	No information available.
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Explosive properties</b>	No information available.
<b>Explosive under the influence of a flame</b>	No
<b>Oxidising properties</b>	No information available.
<b><u>9.2. Other information</u></b>	
<b>Other information</b>	No information required.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
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#### 10.2. Chemical stability

<b>Stability</b>	Stable at normal ambient temperatures.
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#### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	No potentially hazardous reactions known.
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#### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Avoid excessive heat for prolonged periods of time. Avoid heat, flames and other sources of ignition.
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#### 10.5. Incompatible materials

## PY SIGNAL YELLOW RAL1003 PIGMENT

**Materials to avoid** Strong oxidising agents. Peroxides.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** This product contains a diaryl pigment. This product should not be used if the processing temperature exceeds 200°C because of possible thermal decomposition, which can, with prolonged exposure or further increased temperature, form e.g. traces of aromatic amines. 3,3'-Dichloro-benzidine.  
Thermal decomposition may lead to formation of a multiplicity of compounds some of which may be hazardous. With incomplete combustion smoke and hazardous fumes and gases, including carbon monoxide, may be formed.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

**Toxicological effects** Not classified.

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** Not relevant.

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** Not relevant.

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** Not relevant.

**Acute and chronic health hazards** No specific health hazards known.

### Toxicological information on ingredients.

#### BARIUM SULPHATE

##### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 5,000.0

**Species** Rat

**ATE oral (mg/kg)** 5,000.0

#### CARBON BLACK

##### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** LD<sub>50</sub> >8000 mg/kg, Oral, Rat

##### Germ cell mutagenicity

**Summary** In vivo mutagenicity in rats occurs by mechanisms secondary to a threshold effect and is a consequence of "lung overload," which leads to chronic inflammation and the release of genotoxic oxygen species. This mechanism is considered to be a secondary genotoxic effect and, thus, carbon black itself would not be considered to be mutagenic.

## PY SIGNAL YELLOW RAL1003 PIGMENT

**Genotoxicity - in vitro** Carbon black is not suitable to be tested directly in bacterial (Ames test) and other in vitro systems because of its insolubility. However, when organic solvent extracts of carbon black have been tested, results showed no mutagenic effects. Organic solvent extracts of carbon black can contain traces of polycyclic aromatic hydrocarbons (PAHs). A study to examine the bioavailability of these PAHs showed that they are very tightly bound to carbon black and are not bioavailable (Borm, 2005).

**Genotoxicity - in vivo** In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black (Driscoll, 1997). This observation is considered to be rat-specific and a consequence of "lung overload," which leads to chronic inflammation and release of reactive oxygen species. This is considered to be a secondary genotoxic effect and, thus, carbon black itself would not be considered to be mutagenic.

### Carcinogenicity

**IARC carcinogenicity** IARC Group 2B Possibly carcinogenic to humans.

## SECTION 12: Ecological information

**Ecotoxicity** Not regarded as dangerous for the environment.

### 12.1. Toxicity

**Toxicity** Not considered toxic to fish.

### 12.2. Persistence and degradability

**Persistence and degradability** There are no data on the degradability of this product.

### 12.3. Bioaccumulative potential

**Partition coefficient** Not available.

### 12.4. Mobility in soil

**Mobility** No information available.

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** No information available.

### 12.6. Other adverse effects

**Other adverse effects** None known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## SECTION 14: Transport information

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

### 14.1. UN number

Not applicable.



## PY SIGNAL YELLOW RAL1003 PIGMENT

### 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 MARPOL and the IBC Code

Transport in bulk according to Not relevant.

Annex II of MARPOL 73/78  
and the IBC Code

## SECTION 15: Regulatory information

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

<b>National regulations</b>	Control of Substances Hazardous to Health Regulations 2002 (as amended).
<b>EU legislation</b>	Commission Regulation (EU) 2015/830 of 28 May 2015 amending 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 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.
<b>Guidance</b>	A guide to local exhaust ventilation (LEV) HSG258 (as ammended) Workplace Exposure Limits EH40.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information

<b>Revision date</b>	22/10/2021
<b>Revision</b>	13
<b>Supersedes date</b>	13/06/2019
<b>SDS number</b>	40056

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