



West & Senior Limited

Milltown Street • Radcliffe • Manchester • M26 1WE • United Kingdom

Tel +44 (0) 161 724 7131 • Fax +44 (0) 161 724 9519

<http://www.westsenior.co.uk> • info@westsenior.co.uk

SAFETY DATA SHEET PY SIGNAL ORANGE RAL2010 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 ORANGE RAL2010 PIGMENT**Product number** WS40122A

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

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

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

TITANIUM DIOXIDE		5-10%
CAS number: 13463-67-7	EC number: 236-675-5	REACH registration number: 01-2119489379-17-0000
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

General information	No specific recommendations. If in doubt, get medical attention promptly.
Inhalation	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	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.
Skin contact	Remove affected person from source of contamination. Get medical attention if irritation persists after washing.
Eye contact	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

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

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

Notes for the doctor No specific recommendations.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

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5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

Protective actions during firefighting	No specific firefighting precautions known.
Special protective equipment for firefighters	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

Personal precautions	Avoid heat, flames and other sources of ignition. Provide adequate ventilation.
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6.2. Environmental precautions

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

Methods for cleaning up	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

Reference to other sections	For waste disposal, see section 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	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

Storage precautions	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)

Specific end use(s)	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

BARIUM SULPHATE

Long-term exposure limit (8-hour TWA): 4 mg/m³ respirable dust
 Long-term exposure limit (8-hour TWA): 10 mg/m³ inhalable dust

TITANIUM DIOXIDE

EH40 WEL, Time Weighted Average (TWA):, Inhalable dust. 10 mg/m³, 8 h
 EH40 WEL, Time Weighted Average (TWA):, Respirable dust. 4 mg/m³, 8 h

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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

rosin

Long-term exposure limit (8-hour TWA): WEL 0.05 mg/m³ fume

Short-term exposure limit (15-minute): WEL 0.15 mg/m³ fume

Sen

WEL = Workplace Exposure Limit.

Sen = Capable of causing occupational asthma.

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

BARIUM SULPHATE (CAS: 7727-43-7)

DNEL	Workers - Inhalation; Long term systemic effects: 10 mg/m ³ Workers - Inhalation; Long term local effects: 10 mg/m ³ Consumer - Inhalation; Long term systemic effects: 10 mg/m ³ Consumer - Oral; Long term systemic effects: 13000 mg/kg
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)

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

TITANIUM DIOXIDE (CAS: 13463-67-7)

DNEL	Workers - Inhalation; Long term local effects: 10 mg/m ³
	Professional - Inhalation; Long term local effects: 10 mg/m ³
	Consumer - Oral; Long term systemic effects: 700 mg/kg/day

PNEC	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	

CARBON BLACK (CAS: 1333-86-4)

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

Trimethylolpropane (CAS: 77-99-6)

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

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

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

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No potentially hazardous reactions known.

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10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time. Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

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 LD₅₀) Not relevant.

Acute toxicity - dermal

Notes (dermal LD₅₀) Not relevant.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Not relevant.

Acute and chronic health hazards No specific health hazards known.

Toxicological information on ingredients.

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Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >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.

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).

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Genotoxicity - in vivo In an experimental investigation, mutational changes in the hprt ene 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.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

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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

National regulations	Control of Substances Hazardous to Health Regulations 2002 (as amended).
EU legislation	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.
Guidance	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

Revision date	29/11/2021
Revision	11
Supersedes date	08/10/2019
SDS number	40124

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