



L. CORNELISSEN & SON

Artists' Colourmen

Suppliers of Materials for Painters, Gilders & Printmakers

Safety Data Sheet according to Regulation (EC) No. 1907/2006

Revision Date: August 2016

1) Identification of the substance/preparation and the company

Trade Name: Cornelissen General Pigments (excludes pigments with cobalt, chrome, lead, etc.) Includes: Indian Yellow – Tartrazine, Alizarin Violet, Manganese Violet, Ultramarine Violet, Ultramarine Pink, Alizarin Crimson, Coral Red, Quinacridone Magenta, Quinacridone Red, Quinacridone Scarlet, Rose Madder, Vermillion Imitation, Red Bole (Iron Oxide), Antwerp Blue, Azure Blue, Egyptian Blue, Indigo Blue - Genuine, Indigo Blue - Synthetic, Lapis Lazuli (Light and Dark) - Genuine, Oriental Blue, Phthalo Mona Blue, Prussian Blue, Smalt Light, Ultramarine Blue Dark, Ultramarine Blue Light, Ultramarine Blue Limewash, Universal Blue, Chromium Oxide, Phthalo Green, Phthalo Turquoise, Viridian Green, Titanium White, Graphite (200 mesh), Carbon Black, Ivory Black, Lamp Black, Mars Black, Spinel Black, Vine Black.

Application: Artists' Pigment

Manufacturer/Supplier:

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2) Composition/Information on ingredients

General Non-Harmful Pigments.

Indian Yellow – Tartrazine Monoazo	PY100	CAS No: 12225-21-7
Alizarin Violet Pigment Violet 5:1	PV51 20-35%	CAS No: 1328-04-7
Alumina	60-70%	CAS No: 1344-28-1
Barium Sulphate	<10%	CAS No: 7727-43-7
Surfactant(s)	<10%	
Manganese Violet Manganese Ammonium Pyro Phosphate	PV16	CAS No: 10101-66-3

Ultramarine Violet Sodium Alumino Sulphosilicate	PV15	CAS No: 12769-96-9
Ultramarine Pink Sodium Alumino Sulphosilicate	PR259	CAS No: 12769-96-9
Alizarin Crimson Synthetic Organic Pigment based on Dyestuff Alizarin	PR83	CAS No: 72-48-0
Coral Red Diketo-pyrrolo-pyrrol	PR255	CAS No: 54660-00-3
Quinacridone Magenta Quinacridone	PR122	CAS No: 980-26-7
Quinacridone Red Quinacridone	PR19	CAS No: 1047-16-1
Quinacridone Scarlet dichloro-5,12-dihydroquino[2,3-b]acridine-7,14-dione	PR209	CAS No: 38720-66-0
Vermillion Imitation	PR4+PY1+PW21	CAS No: TBC
Rose Madder	NR9	CAS No: TBC
Red Bole Red Iron Oxide		CAS No: 1309-037-1
Antwerp Blue CI Pigment Blue 29 Barium Sulphate	PB27+PW22	CAS No: 101357-30-6 CAS No: 7727-43-7
Azure Blue	PB28	CAS No: 1345-16-0
Egyptian Blue Copper Silicate Blue - $\text{CaCu}_2\text{S}_4\text{O}_{10}$	PB31	CAS No: N/A
Indigo Blue – Genuine Natural Product	NB1	CAS No: 482-89-3
Indigo Blue – Synthetic CI Vat Blue 1	PB66	CAS No: 482-89-3
Lapis Lazuli - Genuine Light and Dark - Sodium aluminium silicate, contains sulphur, $3\text{NaAlSiO}_4 \cdot \text{NaS}_3$	PB29	CAS No: N/A
Oriental Blue Sodium Alumino Sulphosilicate	PB29	CAS No: 57455-37-5
Phthalo Mona Blue Phthalocyanine (Cu)	PB15:3	CAS No: 147-14-8
Prussian Blue Ferroprusside	PB27	CAS No: 25869-00-5
Smalt Blue Cobalt Potassium Silicate Blue	PB32	CAS No: N/A
Ultramarine Blue Dark Sodium Alumino Sulphosilicate Silicic Acid Aluminium Sodium Salt Sulphurised	PB29	CAS No: 57455-37-5 CAS No: 101357-30-6

Ultramarine Blue Light	PB29	
Sodium Alumino Sulphosilicate		CAS No: 57455-37-5
Silicic Acid Aluminium Sodium Salt Sulphurised		CAS No: 101357-30-6
Ultramarine Blue Limewash	PB29	
Sodium Alumino Sulphosilicate		CAS No: 57455-37-5
Silicic Acid Aluminium Sodium Salt Sulphurised		CAS No: 101357-30-6
Universal Blue	PB29	
Sodium Alumino Sulphosilicate		CAS No: 57455-37-5
Silicic Acid Aluminium Sodium Salt Sulphurised		CAS No: 101357-30-6
Chromium Oxide Green	PG17	CAS No: 1308-38-9
Chromium(III)Oxide		
Phthalo (Mona) Green	PG7	CAS No: 1328-53-6
Phthalocyanine		
Phthalo Turquoise	PB15:3+PG7+PW21	
Phthalocyanine	25-50%	CAS No: 147-14-8
Phthalocyanine	10-25%	CAS No: 1328-53-6
Barium Sulphate	25-50%	CAS No: 7727-43-7
Viridian Green	PG18	
Chromic Oxide Dihydrate	92-95%	CAS No: 12001-99-9
Boron Oxide	<3.1%	CAS No: 1303-86-2
Titanium White	PW6	CAS No: 1317-80-2
Titanium Dioxide		
Graphite (200 mesh)	PBk10	CAS No: 7782-42-5
Crystallised Carbon		
Carbon Black Mogul L	PBk7	CAS No: 1333-86-4
Carbon Black		
Ivory Black	PBk9	
Calcium Phosphate	>70-90%	CAS No: 7790-076-3
Carbon	10-30%	CAS No: 1333-086-4
Calcium Carbonate	1-10%	CAS No: 1317-65-3
Lamp Black	PBk6	CAS No: 1333-86-4
Carbon		
Mars Black	PBk11	CAS No: 1317-61-9
triiron tetraoxide		
Spinel Black	PBk26	CAS No: 68186-94-7
Manganese Ferrite Black		
Vine Black	PBk8	
Fe2O3	70-80%	CAS No: 1309-38-2
SiO2	3-4%	CAS No: 763-86-9
CaO	1-3%	CAS No: 1305-78-8
MgO	0.1%	CAS No: 1309-48-4
Al2O3	0.2-1%	CAS No: 1344-28-1
FeO	0.3%	

3) Hazards Identification

Classification of the substance or mixture

Classification under CLP: This product has no classification under CLP.

Label elements: This product has no label elements.

Other hazards: This substance is not identified as a PBT substance.

4) First Aid Measures

Description of first aid measures

Eye contact: Flush eye with flowing water. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Skin contact: Wash contaminated skin with soap & water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed.

Ingestion: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. In each case if symptoms develop seek medical attention.

Most important symptoms and effects, both acute and delayed

Potential acute health effects

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

Inhalation: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact: No known significant effects or critical hazards.

Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:
irritation
redness

Inhalation: Adverse symptoms may include the following:
respiratory tract irritation
coughing

Skin contact: No specific data.

Ingestion: No specific data.

Indication of any immediate medical attention and special treatment needed

Notes to physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments: No specific treatment

5) Fire Fighting Measures

Extinguishing media

Suitable extinguishing media: No restriction in fire situations. Suitable extinguishing media for the surrounding fire should be used. Avoid use of a solid water stream or jet as it may scatter and spread fire.

Unsuitable extinguishing media: Water jet.

Special hazards arising from the substance or mixture

Hazards from the substance or mixture: Fine dust clouds may form explosive mixtures with air.

Hazardous thermal decomposition products: Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
halogenated compounds
smoke
oxides of nitrogen

Advice for firefighters

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Put on appropriate personal protective equipment.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in 'For non-emergency personnel'.

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials 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. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

Large spill: Move containers from spill area. Approach release from upwind. 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. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7) Handling and Storage

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8). Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Specific end use(s)

Recommendations: Not available.

Industrial sector specific solutions: Not available.

8) Exposure/Personal Protection

Control parameters

Occupational exposure limits

General Pigments:

No exposure limit value known. Observe OEL limits for inhalable and respirable nuisance dust.

Mars Black:

EH40/2005 WELs (United Kingdom (UK), 12/2011).

STEL: 10 mg/m³, (as Fe) 15 minutes. Form: Fume

TWA: 5 mg/m³, (as Fe) 8 hours. Form: Fume

DNEL : Dust Inhalable 10 mg/m³ , Respirable dust 3 mg/m³

Exposure controls



Appropriate engineering controls:

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene measures:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye 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.

Skin protection:

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of 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.

9) Physical and chemical Properties

Appearance: Powder

Odour: None

Boiling point: N/A

Melting point:	General Products:	>1000°C
	Coral Red:	>300 °C
	Lapis Lazuli	>350°C
	Manganese Violet	>400 °C
	Prussian Blue	>140°C
	Phthalos x 2	>200 °C

Auto ignition temperature:	Quinacridone Red	>180 °C
	Phthalo Green	>220 °C

Decomposition temperature:	Mars Black	>80 °C
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Flash point: N/A.

Ph: 4-11

Solubility: Insoluble in water.

Flammability: N/A.

Extinguishing media: No restriction

10) Stability and Reactivity

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

Chemical stability: The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.

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

Conditions to avoid: Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.

Incompatible materials: Reactive or incompatible with the following materials: oxidizing materials

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced except:

Manganese Violet: Ammonium salts given off during combustion/decomposition.

Alizarin Crimson, Quinacridones x 3, Phthalo Mona Blue, Phthalo Mona Green: Hydrogen chloride (HCL), Oxides of carbon, copper and nitrogen given off during combustion/decomposition.

Coral Red - substances to avoid: strong oxidizing agents, strong bases, strong acids.

Prussian Blue: ammonia, hydrogen cyanide, dicyanogen and nitrous oxides given off during combustion/decomposition.

Ultramarine Products: React with acids releasing hydrogen sulphide gas.

Viridian Green: A small amount (<0.1% as Cr) of reversion to hexavalent chromium may occur if the dry chromium (III) oxide powder is exposed to elevated temperatures.

Carbon Black, Lamp Black: May react exothermically upon contact with strong oxidizers.

Ivory Black: In combustion emits toxic fumes of carbon dioxide/carbon monoxide.

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

11) Toxicological Information

Information on toxicological effects

Acute toxicity	Conclusion/Summary:	Not available.
Irritation/Corrosion	Conclusion/Summary:	Not available.
Sensitization	Conclusion/Summary:	Not available.
Mutagenicity	Conclusion/Summary:	Not available.
Carcinogenicity	Conclusion/Summary:	Not available.
Reproductive toxicity	Conclusion/Summary:	Not available.
Teratogenicity	Conclusion/Summary:	Not available.
Specific target organ toxicity (single exposure)		Not available.
Specific target organ toxicity (repeated exposure)		Not available.
Aspiration hazard		Not available.
Information on the likely routes of exposure		Not available.

Potential acute health effects

Eye contact:	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
Inhalation:	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin contact:	No known significant effects or critical hazards.
Ingestion:	No known significant effects or critical hazards

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact:	Adverse symptoms may include the following: Irritation redness
Inhalation:	Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact:	No specific data.
Ingestion:	May cause discomfort if swallowed.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects:	Not available.
Potential delayed effects:	Not available.

Long term exposure

Potential immediate effects:	Not available.
Potential delayed effects:	Not available.

Potential chronic health effects:	Not available.
Conclusion/Summary:	Not available.
General:	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
Carcinogenicity:	No known significant effects or critical hazards.
Mutagenicity:	General Pigments: No known significant effects or critical hazards. Mars Black: Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
Teratogenicity:	No known significant effects or critical hazards.
Developmental effects:	No known significant effects or critical hazards.
Fertility effects:	No known significant effects or critical hazards.
Other information:	Not available.
Oral Toxicity:	
General Products	LD50 (rat)>10g/Kg
Indian Yellow – Tartrazine	LD50 (rat)>2g/Kg
Alizarin Violet	LD50 (rat)>5g/Kg
Manganese Violet	LD50 (rat)>12.9g/Kg
Alizarin Crimson	LD50 (rat)>2g/Kg
Coral Red	LD50 (rat)>5g/Kg
Quinacridones x 3	LD50 (rat)>2g/Kg
Azure Blue	LD50 (rat)>5g/Kg
Indigo Blue – Genuine	LD50 (rat)>1.2g/Kg
Indigo Blue – Synthetic	LD50 (rat)>5g/Kg
Phthalo Mona Blue	LD50 (rat)>2g/Kg
Prussian	LD50 (rat)>5.1g/Kg
Phthalo (Mona) Green	LD50 (rat)>5g/Kg
Phthalo Turquoise	LD50 (rat)>2g/Kg
Viridian Green	LD50 (rat)>5g/Kg
Carbon Black, Lamp Black	LD50 (rat)>8g/Kg
Mars Black	LD50 (rat)>5g/Kg
Spinel Black	LD50 (rat)>2.2g/Kg
Barium Sulphate	LD50 (rat)>2g/Kg

12) Ecological Information

Toxicity

Conclusion/Summary: Not available.

Persistence and degradability

Conclusion/Summary: Not available.

Bioaccumulative potential

General Products: Not available.

	LogP_{ow}	BCF	Potential
Quinacridone Scarlet	1.56	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}): Not available

Mobility: Not available

Results of PBT and vPvB assessment

PBT: Not available.
P: Not available. B: Not available. T: Not available.

vPvB: Not available.
vP: Not available. vB: Not available.

Other adverse effects

No known significant effects or critical hazards.

Notes

The product is virtually insoluble in water and thus can be separated from water mechanically in suitable effluent treatment plants.

13) Disposal Information

Waste treatment methods

Product

Methods of disposal: The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Examine possibilities for recycling. Return large quantities to the manufacturer.

Manganese violet should not be washed into the drainage system or where there is a risk of contact with strong alkalis.

Hazardous waste: 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 minimized 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

14) Transport Information

Not regulated for transport.

Keep separated from foodstuffs.

15) Regulatory Information

Labelling

This product is not a substance subject to mandatory marking.

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

EU Regulation (EC) No. 1907/2006 (REACH): Not listed

16) Other information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations.

To best of our knowledge the information contain herein is accurate. However, neither the above supplier assumes any liability whatsoever for the accuracy or completeness of the information herein

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist