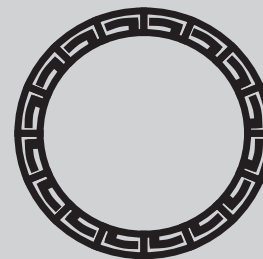


**inorganic dry pigments**  
Material Safety Data Sheet



**KAMA**  
PIGMENTS

## Jaune brilliant

### Product Identification

**Product name** Jaune brilliant  
**Product Code** PS-IN0020

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### Emergency information

**24 HOUR EMERGENCY NUMBER** CHEMTREC - Domestic 800-424-9300 International 703-527-3887

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### Hazards Identification

**Emergency overview** Health injuries are not known or expected under normal use.

**Potential health effects**  
**Routes of exposure** Inhalation. Ingestion.

**Eyes** This product may cause slight irritation to the eyes.

**Skin** This product may cause irritation to the skin.

**Inhalation** Inhalation of dusts may cause respiratory irritation.

**Ingestion** Health injuries are not known or expected under normal use.

**Signs and symptoms** Product dust may be irritating to eyes, skin and respiratory system.

**Potential environmental effects** Ecological injuries are not known or expected under normal use

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### Composition Information

<b>Hazardous Ingredients</b>	<b>%</b>	<b>C.A.S.#</b>
chrome antimony titanium buff rutile	100	68186-90-3*

**Composition comments** This product is the result of high temperature calcination of the component substances. Due to its unique crystalline structure the properties of this finished pigment do not necessarily reflect the properties of the component metals or oxides

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### First Aid

<b>eye contact</b>	Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists
<b>skin contact</b>	Wash the skin immediately with soap and water. Get medical attention if irritation develops or persists
<b>inhalation</b>	Remove to fresh air. If the affected person is not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Call a physician if symptoms develop or persist
<b>ingestion</b>	Never give anything by mouth to an unconscious person. If swallowed, do NOT induce vomiting. Give several glasses of water to dilute contents of stomach and call a physician
<b>General advice</b>	If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance. Where there is a potential for eye exposure to this substance, an eye wash fountain should be provided within the immediate work area for emergency use

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### Fire Fighting Measure

<b>Flammable properties Extinguishing media</b>	The product is not flammable.
<b>Suitable extinguishing media</b>	Use extinguishing agent suitable for type of surrounding fire. Not applicable.
<b>Unsuitable extinguishing media</b>	Not applicable
<b>Protection of firefighters</b> Specific hazards arising from the chemical Protective equipment and precautions for firefighters	None known. Use protective equipment appropriate for surrounding materials.
<b>Fire fighting equipment/instructions</b> <b>Specific methods</b>	Not a fire hazard.
<b>Unusual fire &amp; explosion hazards</b>	Not established. The product is not flammable

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### Accidental Release Measure

<b>Personal precautions</b>	Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust from the spilled material.
<b>Environmental precautions Methods for containment</b>	Do not discharge into drains, water courses or onto the ground. Collect material into appropriate containers for reuse or disposal. Material may also be flushed with water to a wastewater treatment system.
<b>Methods for cleaning up</b>	Avoid dust formation. Clean up promptly by scoop or vacuum. Flush the area with water. Clean up in accordance with all applicable regulations. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Keep formation of airborne dusts to a minimum. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Room temperature - normal conditions. Use care in handling/storage. Store in closed original container in a dry place. Keep in properly labelled containers
<b>Other information</b>	Clean up in accordance with all applicable regulations

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## Handling and Storage

**Handling**

Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Keep formation of airborne dusts to a minimum. When using, do not eat, drink or smoke. Wash hands thoroughly after handling.

**Storage**

Room temperature - normal conditions. Use care in handling/storage. Store in closed original container in a dry place. Keep in properly labelled containers

**Further information**

Keep containers dry and tightly closed to avoid moisture absorption and contamination

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## Exposure Controls/Personal Protection

**Occupational exposure limits****ACGIH**

antimony and compounds  
chromium (III) and compounds

Type	Value	% Metal	Form
TLV	0.5 mg/m <sup>3</sup>	8 - 13%	(as Sb)
TLV	0.5 mg/m <sup>3</sup>	< 10%	(as Cr)

**U.S. - OSHA**

antimony and compounds  
chromium (III) and compounds

PEL	0.5 mg/m <sup>3</sup>	8 - 13%	(as Sb)
PEL	0.5 mg/m <sup>3</sup>	< 10%	(as Cr)

**Engineering controls**

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits

**protective equipment**

## Eye / face protection

Safety glasses with side-shields.

## Skin protection

Normal work clothing (long sleeved shirts and long pants) is recommended.

## Respiratory protection

Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever work place conditions warrant a respirator's use. If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection. MSHA/NIOSH respirators approved for dusts TC-21C or NIOSH approved cartridges for Non-oil aerosols, N95, N99, N100 (42 CFR 84). If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn

## General hygiene considerations

Use personal protective equipment as required. Handle in accordance with good industrial hygiene and safety practice.

## Hand protection

Rubber or plastic gloves. PVC disposable gloves. Use impervious gloves

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**Physical and Chemical Properties**

<b>Appearance</b>	Powder
<b>Physical state</b>	Solid
<b>Form</b>	Powder
<b>Color</b>	yellow
<b>Odor</b>	None
<b>Odor threshold</b>	Not available
<b>pH</b>	8.5
<b>Vapor pressure</b>	Not applicable
<b>Vapor density</b>	Not applicable
<b>Boiling point</b>	Not applicable / Not applicable
<b>Melting point/Freezing point</b>	Not applicable
<b>Solubility (water)</b>	Negligible
<b>Specific gravity</b>	4.6
<b>Relative density</b>	Not available
<b>Flash point</b>	Not applicable
<b>Flammability limits in air, upper, % by volume</b>	Not applicable
<b>Flammability limits in air, lower, % by volume</b>	Not applicable
<b>Auto-ignition temperature</b>	Not applicable
<b>VOC</b>	0 % estimated
<b>Evaporation rate</b>	Not applicable
<b>Viscosity</b>	Not applicable.
<b>Percent volatile</b>	0 % estimated
<b>Decomposition temperature</b>	Not applicable
<b>Flammability (solid, gas)</b>	Not applicable
<b>Loose Packing Density</b>	4.40 lb/gal (0.50 g/cm <sup>3</sup> )

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**Stability and Reactivity**

<b>Chemical stability</b>	Stable under normal temperature conditions and recommended use.
<b>Conditions to avoid</b>	None known
<b>Incompatible materials</b>	None known
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur
<b>Materials to avoid</b>	None known

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**Toxicological Information**

<b>Routes of exposure</b>	Inhalation. Ingestion.
<b>Sensitization</b>	No data available.
<b>Acute effects</b>	May be slightly irritating to skin and eyes. May cause respiratory irritation
<b>Component analysis - LD50</b>	Refer to LD 50 information below
<b>Local effects</b>	Product dust may be irritating to eyes, skin and respiratory system
<b>Chronic effects</b>	No data available
<b>Subchronic effects</b>	No data available
<b>Carcinogenicity</b>	No data available.
<b>Skin corrosion/irritation</b>	Contact with skin may cause irritation.
<b>Epidemiology</b>	No epidemiological data is available for this product.
<b>Mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Reproductive effects</b>	No data available
<b>Teratogenicity</b>	No data available
<b>Symptoms and target organs</b>	Product dust may be irritating to eyes, skin and respiratory system.
<b>Human experience</b>	Product dust may be irritating to eyes, skin and respiratory system.
<b>Further information</b>	<p>This product is the result of high temperature calcination of the component substances. Due to its unique crystalline structure the properties of this finished pigment do not necessarily reflect the properties of the component metals or oxides.</p> <p>Repeated overexposure to this compound may cause eye, skin and respiratory tract irritation. Some compounds of the metals used in the manufacturing of this pigment have demonstrated various toxic properties. However, there is no evidence that this pigment has these toxic characteristics</p>

**Toxicological data****Components**

cobalt aluminate blue spinel (1345-16-0)

**Test Results**

Acute Inhalation LD50 Rat: Not Tested

Acute Oral LD50 Rat: 10000 mg/kg

	<b>Ecological Information</b>
<b>Ecotoxicity</b>	Not expected to be harmful to aquatic organisms
<b>Environmental effects</b>	Not classified as an environmental hazard
<b>Aquatic toxicity</b>	This material is not expected to be harmful to aquatic life
<b>Persistence and degradability</b>	The product is not expected to be biodegradable.
<b>Bioaccumulation / Accumulation</b>	The product does not contain any substances expected to be bioaccumulating
	<b>Disposal Considerations</b>
<b>waste disposal</b>	Dispose of in accordance with Local Authority requirements
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Since emptied containers retain product residue, follow label warnings even after container is emptied
	<b>Transport Information</b>
<b>Land transport</b>	
ADR	Not regulated as dangerous goods
RID	Not regulated as dangerous goods
<b>Sea transport</b>	
IMDG	Not regulated as dangerous goods
<b>Air transport</b>	
ICAO	Not regulated as dangerous goods
IATA	Not regulated as dangerous goods
<b>U.S. D.O.T. Classification</b>	Not regulated as dangerous goods
<b>CANADA Transport of dangerous goods</b>	Not regulated as dangerous goods
	<b>Regulation Information</b>
<b>US federal regulations</b>	All components are on the U.S. EPA TSCA Inventory List. This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. IARC has classified cobalt and cobalt compounds as possibly carcinogenic to humans. (Group 2B, Monograph #52)
<b>SARA 313</b>	No Chemical Safety Assessment has been carried out. THIS PRODUCT CONTAINS A CHEMICAL OR CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OR TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372. THIS INFORMATION MUST BE INCLUDED IN ALL MSDS THAT ARE COPIED AND DISTRIBUTED FOR THIS MATERIAL. 100% COBALT COMPOUND
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>	
Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
Section 302 extremely hazardous substance	No
Section 311 hazardous chemical	Yes

**Inventory status**

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS) 269-052-1	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS) 1-284, 1-543, 1-558	Yes
Korea	Existing Chemicals List (ECL) KE-07865	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

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**Other Information**
**Further information**

HMIS® is a registered trade and service mark of the NPCA.

**HMIS® ratings**

Health: 1\*  
 Flammability: 0  
 Physical hazard: 0  
 Personal protection: E

**Other information**

ACGIH = American Conference of Governmental Industrial Hygienists.  
 OSHA = Occupational Safety and Health Administration.  
 NTP = National Toxicology Program.  
 NIOSH = National Institute of Occupational Safety and Health.  
 CFR = Code of Federal Regulations.

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