



SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: Cobalt Blue Dry Pigment
Product Description: pigment/colorant
Intended Use: Fine art painting and decorative coatings

COMPANY

Company Name: Gamblin Artists Colors
Company Address: 2734 SE Raymond St.
Portland, OR 97202
USA
Company Phone: 503-235-1945
Emergency Phone: Local Emergency Room

SECTION 2: HAZARDS IDENTIFICATION

GHS LABELING

GHS Classification: Not classified as hazardous

Physical Hazards: Not classified

Environmental hazards: Not classified

OSHA defined hazards: Not classified

Label elements

Hazard symbol: None.

Signal word: Not assigned

Hazard statement: Not assigned

Precautionary statement

Prevention: Not assigned

Response: Not assigned

Storage: Not assigned

Disposal: Not assigned

Hazard(s) not otherwise classified (HNOC)

Not assigned

Supplemental information: Not assigned

Substance(s) formed under the condition of use

Not assigned

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Common name and synonyms	CAS-No.	(%)
Cobalt Aluminate Blue Spinel	CI Pigment Blue 28 CI Constitution #77346	13345-16-0	100
	CPMA 13-26-2		

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.

SECTION 4: FIRST AID MEASURES

Eyes: Hold eyelids apart and flush with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.

Skin: Wash skin with soap and water. Get medical attention if irritation persists after washing.

Inhalation: 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.

Ingestion: 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.

Most important symptoms/effects, acute and delayed
Contact with eyes may cause irritation. Inhalation of dusts may cause respiratory irritation. Contact with skin may cause irritation.

General Information The type of protective equipment must be selected according to the concentration and amount of dangerous substance at the specific workplace. If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance. No special protective equipment required. 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.

SECTION 5: FIRE FIGHTING MEASURES

FIRE FIGHTING

Extinguishing Media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable Extinguishing Media:
Not applicable.

Specific hazards arising from the chemical:
None known.

Special protective equipment and precautions for firefighters:
Use protective equipment appropriate for surrounding materials.

Fire-fighting equipment/instructions:
Not a fire hazard.

Specific methods: Not established.

General fire hazards: This product is not flammable.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, protective equipment and emergency procedures:

Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust from the spilled material.

Methods and materials for containment and for clean up:

Avoid dust formation. Following product recovery, flush area with water. Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into closed container.

Environmental Precautions:

Do not discharge into drains, water courses or onto the ground.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling:

Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Keep formation of airborne dust to a minimum. Do not eat, drink or smoke when using the product. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

Cautions for Safe Storage:

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

US. ACGIH Threshold Limit Values

Metals	Type	Value	Percent	Form
Cobalt metal, dust and fumes	PEL	0.1 mg/m ³	23 – 30%	(as Co) dust and fume
Cobalt metal, dust and fumes	TWA	0.02 mg/m ³	23 – 30%	(as Co)
Cobalt metal, dust and fumes	TWA	0.05 mg/m ³	23 – 30%	(as Co) dust and fume

Biological Limit Values

Metals	Value	Form	Determinant	Specimen	Sampling Time
Cobalt metal, dust and fumes	15 µg/l	(as Co)	Cobalt	Urine	*
	1 µg/l	(as Co)	Cobalt	Blood	*

* For sampling details, please see the source document.

APPROPRIATE ENGINEERING CONTROLS

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

INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT

EYE PROTECTION

Safety glasses with side-shields.

SKIN PROTECTION

HAND PROTECTION

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

OTHER

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

RESPIRATORY PROTECTION

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. 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 respirator protection. MSHA/NIOSH respirators approved for dusts TC-21C or NIOSH approved cartridges for Non-oil aerosols, N95, N99, N100 (42 CFR 84).

THERMAL HAZARDS	Not applicable
GENERAL HYGIENE CONSIDERATIONS	Use personal protective equipment as required. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Powder
PHYSICAL STATE:	Solid
FORM:	Powder
COLOR:	Blue
ODOR:	Odorless
ODOR THRESHOLD:	Not available
pH	6.2
MELTING POINT	Not applicable
INITIAL BOILING POINT AND BOILING RANGE	Not applicable
FLASH POINT	Not applicable
EVAPORATION RATE	Not applicable
FLAMMABILITY (SOLID, GAS)	Not applicable
UPPER/LOWER FLAMMABILITY OR EXPOSURE LIMITS	
Flammability limit – lower %	Not applicable
Flammability limit – upper %	Not applicable
Explosive limit – lower %	Not available
Explosive limit – upper %	Not available
VAPOR PRESSURE	Not applicable
VAPOR DENSITY	Not applicable
RELATIVE DENSITY:	Not available
SOLUBILITY (water):	Negligible
PARTITION COEFFICIENT (n-octanol/water)	Not applicable
AUTO-IGNITION TEMPERATURE	Not applicable
DECOMPOSITION TEMPERATURE	Not applicable
VISCOSITY	Not applicable
SPECIFIC GRAVITY	4.3
LOOSE PACKING DENSITY	Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	Not available
Chemical stability:	Stable under normal temperature conditions and recommended use
Possibility of hazardous reactions	Hazardous Polymerization does not occur
Conditions to Avoid:	Not known.
Incompatible materials:	None known
Hazardous Decomposition Products:	No hazardous decomposition products are known.

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON LIKELY ROUTES OF EXPOSURE

INGESTION	No adverse effects due to ingestion are expected
INHALATION	May cause irritation to the respiratory system
SKIN CONTACT	Contact with skin may cause irritation
EYE CONTACT	May irritate eyes

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:

Product dust may be irritating to eyes, skin and respiratory system

INFORMATION ON TOXICOLOGICAL EFFECTS:

ACUTE TOXICITY: May cause respiratory irritation. May be slightly irritating to skin and eyes.

COMPONENTS	SPECIES	TEST RESULT
COBALT ALUMINATE BLUE SPINEL (CAS 1345-16-0)		
ACUTE:		
Inhalation: LD 50	Rat	Not tested
Oral: LD 50	Rat	> 10000 mg/kg

SKIN CORROSION/IRRITATION	Contact with skin may cause irritation
SERIOUS EYE DAMAGE/EYE IRRITATION	May irritate eyes.
RESPIRATORY OR SKIN SENSITIZATION	
RESPIRATORY SENSITIZATION	No data available
SKIN SENSITIZATION	No data available
GERM CELL MUTAGENICITY	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic
CARCINOGENICITY	
IARC Monographs, Overall Evaluation of Carcinogenicity	
COBALT COMPOUND (CAS 7440-48-4)	2B Possibly carcinogenic to humans
REPRODUCTIVE TOXICITY	No data available
SPECIFIC TARGET ORGIN TOXICITY – SINGLE EXPOSURE	No data available
SPECIFIC TARGET ORGIN TOXICITY – REPEATED EXPOSURE	No data available
ASPIRATION HAZARD	No data available
CHRONIC EFFECTS	No data available

FURTHER INFORMATION

Repeated overexposure to this compound may cause eye, skin and respiratory tract irritation. Some compounds of the metals used in the manufacturing of this material have demonstrated various toxic properties. However, there is no evidence that this material has these toxic characteristics. This product is the result of high temperature calcination of the component substances. Due to its unique crystalline structure the properties of this finished material do not necessarily reflect the properties of the component metal or oxides.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY	Not expected to be harmful to aquatic organisms.
PERSISTENCE AND DEGRADABILITY	This product is not expected to be biodegradable
BIOACCUMULATIVE POTENTIAL	This product does not contain any substances expected to be bio-accumulating.
MOBILITY IN SOIL	No data available
MOBILITY IN GENERAL	No data available
OTHER ADVERSE EFFECTS	None known

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL INFORMATION

All wastes must be handled in accordance with local, state and federal regulations.

HAZARDOUS WASTE CODE Not regulated

WASTE FROM RESIDUES/UNUSED PRODUCTS

Dispose of in accordance with local regulations

CONTAMINATED PACKAGING

Since emptied containers retain product residue, follow label warnings even after container is emptied.

SECTION 14: TRANSPORT INFORMATION

DOT	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73.78 and the IBC Code	Not available

SECTION 15: REGULATORY INFORMATION

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substances List (40 CFR 302.4)

Not listed.

US OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

HAZARD CATAGORIES Immediate hazard – Yes
 Delayed hazard – Yes
 Fire hazard – No
 Pressure hazard – No
 Reactivity hazard – No

SARA 302 Extremely hazardous substance No

SARA 311/312 hazardous chemical Yes

SARA 313 (TRI reporting)

CHEMICAL NAME	CAS number	% by weight
COBALT COMPOUND	7440-48-4	100

OTHER FEDERAL REGULATIONS

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

COBALT COMPOUND (CAS 7440-48-4)

Clean Air Act (CAA) Section 112 Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated

US state regulations

US. Massachusetts RTK – Substance List

COBALT COMPOUND (CAS 7440-48-4)

US. New Jersey Worker and Community Right-to-Know Act

COBALT COMPOUND (CAS 7440-48-4) 500 LBS

US. Pennsylvania RTK – Hazardous Substances

COBALT COMPOUND (CAS 7440-48-4)

US. Rhode Island RTK

COBALT COMPOUND (CAS 7440-48-4)

US. California Proposition 65

Not listed

INTERNATIONAL INVENTORIES

COUNTRY(S) OR REGION	INVENTORY NAME	On inventory (yes/no)
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)	Yes
Europe	European List of Notified Chemical Substances (EINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Porto 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).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

SECTION 16: OTHER INFORMATION

The information and recommendations contained herein are, to the best of Gamblin's knowledge and belief, accurate and reliable, but it is not warranted to be. You can contact Gamblin to ensure that this document is the most current available. The information and recommendations are offered for the user's consideration and examination. It is the user's responsibility to satisfy itself that the product is suitable for the intended use and it is the user's responsibility to carefully read the product label and follow instructions for safe use of the product.
