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: 323 SE Division Pl.
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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Common name and synonyms</th>
<th>CAS-No.</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cobalt Aluminate Blue Spinel</td>
<td>CI Pigment Blue 28</td>
<td>13345-16-0</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>CI Constitution #77346</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CPMA 13-26-2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Metals</th>
<th>Type</th>
<th>Value</th>
<th>Percent</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cobalt metal, dust and fumes</td>
<td>PEL</td>
<td>0.1 mg/m3</td>
<td>23 – 30%</td>
<td>(as Co) dust and fume</td>
</tr>
<tr>
<td>Cobalt metal, dust and fumes</td>
<td>TWA</td>
<td>0.02 mg/m3</td>
<td>23 – 30%</td>
<td>(as Co)</td>
</tr>
<tr>
<td>Cobalt metal, dust and fumes</td>
<td>TWA</td>
<td>0.05 mg/m3</td>
<td>23 – 30%</td>
<td>(as Co) dust and fume</td>
</tr>
</tbody>
</table>

Biological Limit Values

<table>
<thead>
<tr>
<th>Metals</th>
<th>Value</th>
<th>Form</th>
<th>Determinant</th>
<th>Specimen</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cobalt metal, dust and fumes</td>
<td>15 µg/l</td>
<td>(as Co)</td>
<td>Cobalt</td>
<td>Urine</td>
<td>*</td>
</tr>
<tr>
<td>Cobalt metal, dust and fumes</td>
<td>1 µg/l</td>
<td>(as Co)</td>
<td>Cobalt</td>
<td>Blood</td>
<td>*</td>
</tr>
</tbody>
</table>

* 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

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

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>SPECIES</th>
<th>TEST RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>COBALT ALUMINATE BLUE SPINEL</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ACUTE:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation: LD 50</td>
<td>Rat</td>
<td>Not tested</td>
</tr>
<tr>
<td>Oral: LD 50</td>
<td>Rat</td>
<td>&gt; 10000 mg/kg</td>
</tr>
</tbody>
</table>

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 Not available
Annex II of MARPOL 73.78 and
the IBC Code

SECTION 15: REGULATORY INFORMATION
US federal regulations
TSCA Section 12(b) Export Notification (40 CRF 707, Subpt. D) Not regulated.
CERCLA Hazardous Substances List (40 CFR 302.4) Not listed.
Superfund Amendments and Reauthorization Act of 1986 (SARA)
SAFETY DATA SHEET: Gamblin Artist Oil Colors – Cobalt Blue Dry Pigment
REVISED: 2/15/2016

HAZARD CATEGORIES
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)

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS number</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>COBALT COMPOUND</td>
<td>7440-48-4</td>
<td>100</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>COUNTRY(S) OR REGION</th>
<th>INVENTORY NAME</th>
<th>On inventory (yes/no)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (EINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Porto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>
* 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.