

SAFETY DATA SHEET

Revision Date: 08/28/2026

SECTION 1. IDENTIFICATION

Product Name : COBALT BLUE COBALT TEAL 535
Product Class : Inorganic CI Pigment Blue 28 CPMA# 13-26-2 Cobalt Aluminate Blue Spinel
Material Number : 77346

Manufacturer or Supplier's details

Company :

Emergency telephone : Chemtel (800) 255-3924 or
International (813) 248-0585

Recommended use : Industrial Use Only

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

II Not a hazardous substance or mixture

GHS Label Elements

II Not a hazardous substance or mixture

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : MIXTURE

Chemical nature : COBALT ALUMINATE BLUE CI pigment Blue 28

Chemical Name	CAS-No.	Concentration
Cobalt Aluminate Blue	1345-16-0	>99 %
Spinel CI Constitution # 77346	CPMA 13-26-2	

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

Description of first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for a remove contact lenses. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms continue.
Skin Contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes.
Ingestion	: Wash out mouth with water. Remove victim to fresh air and keep in a position comfortable for breathing. Get medical attention if symptoms occur.

Potential acute health effects

Eye contact	: May cause mechanical irritation (abrasion)
Inhalation	: No known significant effects or critical hazards
Skin Contact	: May cause mechanical irritation (abrasion)

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire. In case of fire use water, foam, dry chemical, Co2 or sand can also be used.
Unsuitable extinguishing media	: Do not use a solid water stream as it may scatter and spread fire
Specific hazards during fire fighting	: Do not allow run-off from fire fighting to enter drains or water streams
Hazardous thermal decomposition products	: The product itself does not burn
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.
Further information	: Standard procedure for chemical fires. Promptly isolate the scene by by removing all persons from the vicinity if there is a fire. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations and guidelines.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective equipment and Emergency procedures	: Avoid dust formation. Ensure adequate ventilation. Use personal protective equipment, See also Section 8. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Avoid breathing dust. Put on appropriate personal protective equipment.
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if product has not been contained.

Methods and materials for containment and cleaning up

: If the spilled material contains dust, approach from upwind and use vacuum with HEPA filtration filters
Dry sweeping is not recommended. Wet sand can be used and product disposed of in a sealed container.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

Protective measures

: Avoid breathing dust. Remove contaminated clothing and protective equipment before entering eating areas. Workers should wash hands before eating or drinking. Eating, drinking and smoking should be prohibited in areas where this material is handled and stored and processed.

Conditions for safe storage

: Keep in a dry, cool and well ventilated place. Follow DOT and local Regulations. This product is not regulated as hazardous material by DOT

SECTION 8. Exposure controls/personal protection

Occupational Exposure Limits

US. OSHA Table Z-1 Permissible Exposure Limts (PEL) for Air Contaminants (29 CPR 1910.1000)

Metals	TYPE	VALUE	Percent	Form
COBALT METAL, DUST AND FUMES (N/A)	PEL	0.1 mg/m3	25 – 35 %	(as Co) Dust

US. ACGIH Threshold Limit Values (TLV)

Metals	TYPE	VALUE	Percent	Form
COBALT METAL, DUST AND FUMES (N/A)	TWA	0.02 mg/m3	25 - 35 %	(as co)

Biological limit values

ACGIH Biological Exposure Indices (BEI)

Metals	Value	Form	Determinant	Specimen
COBALT METAL DUST AND FUMES	15 mg/l	(as Co)	Cobalt	Urine

Appropriate engineering controls

: Use only with adequate ventilation. Apply technical measures to comply with occupational exposure limits.

Personal protection

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products and before eating. Appropriate techniques should be used to remove potentially contaminated clothing. Ensure that eyewash stations are close to the workstation location.

Respiratory protection

: Although no exposure limit has been established for this product, the OSHA PEL for Particulates NOT Otherwise Regulated (PNOR) of 5 mg/m3 – total dust, 5 mg/m3 respirable fraction is recommended. In addition, the ACGIH recommends 0.2 mg/m3 - respirable particles and 0.2 mg/m3 – inhalable particles for Particles (insoluble or poorly soluble) Not Otherwise Specified (PNOS). The following respirator is recommended if airborne concentrations exceed the appropriate standard/guideline. Dust-protection mask if there is a risk of dust formation. NIOSH approved air-purifying particulate respirator with N100 filters.

Skin protection

: Wear suitable protective clothing and gloves

SECTION 9. Physical and Chemical Properties

Appearance	: Powder
Physical State	: Solid
Color	: Blue
Odor	: Odorless
Odor Threshold	: Not available
pH	: 5.0 –7.0 Concentration : 5 %
Melting point/range	: 4,415 oF
Boiling point	: 7,232 oF
Flash point	: Not Applicable
Evaporation rate	: Not Applicable
Self-ignition	: No data available
Upper explosion limit	: Not Applicable
Upper flammability limit	: Not Applicable
Vapor pressure	: Not applicable
Density	: 5.2 g /cm ³ @ 20 oC
Bulk density	: 300 to 1000 kg/m ³
Water Soluble	: Insoluble
Solubility in other solvents	: No data available
Decomposition temperature	: No data available
VOC content	: Not applicable
Oxidizing properties	: Not applicable

SECTION 10. Stability and Reactivity

Chemical stability	: The product is chemically stable
Reactivity	; No specific test data related to reactivity available for this product or its ingredients
Possibility of hazardous reaction	: No dangerous reaction known under conditions of normal use
Conditions to avoid	: Incompatible materials
Incompatible materials	: Incompatible with oxidizing agents and strong acids.
Hazardous decomposition products	: No decomposition if stored and used as directed

SECTION 11. Toxicological information

Information on the likely routes of exposure	: Inhalation , eye contact , skin contact, Ingestion
<u>Potential acute health effects</u>	
Eye contact	: May cause mechanical irritation (abrasion)
Inhalation	: No known significant effects or critical hazards

Skin contact : May cause mechanical irritation (abrasion)
Ingestion : No known significant effects or critical hazards

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data
Inhalation : No specific data
Skin contact : No specific data
Ingestion : No specific data

Acute toxicity
Not classified based on available information

Skin corrosion/irritation
Not classified based on available information

Serious eye damage/eye irritation
Not classified based on available information

Skin sensitization
Not classified based on available information

Respiratory sensitization
Not classified based on available information

Germ cell mutagenicity
Not classified based on available information

Carcinogenicity

IARC IARC has classified insoluble cobalt (II) as not classified as to carcinogenicity to humans (Group 3, Monograph 131)
OSHA No component of this product present at levels greater than or equal to 0.1 % is on OSHA’s list of regulated carcinogens.
NTP No ingredient of this product present at levels greater than or equal to 0.1 % is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity
Not classified based on available information

STOT-single exposure
Not classified based on available information

STOT-repeated exposure
Not classified based on available information

Aspiration toxicity
Not classified based on available information

SECTION 12. Ecological Information

Ecotoxicity

This product has no known ecotoxicological effects.

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Product

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82
Protection of Stratospheric Ozone – CAA Section 602 Class 1
Substances. Remarks: This product neither contains, nor was
manufactured with a Class I or Class II ODS as defined by the
U.S. Clean Air Act Section 602 40 CFR 82, Subpt.A, App.A+B

SECTION 13. Disposal Considerations

Disposal methods

Waste from residues : The generation of waste should be avoided or minimized
wherever possible. This material and its container must be
disposed of in a safe way. Empty containers retain product
residue; observe all precautions for product.
Avoid dispersal of spilled material and runoff and contact with
soil, waterways, drains and sewers.
Waste disposal should be in accordance with existing federal,
state, provincial and/or local environmental controls.

SECTION 14. Transport Information

International Regulations

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied

National Regulations

49 CFR

Not regulated as a dangerous good

Hazard and handling Notes

Not dangerous cargo. Has a slight odor. Keep separated from foodstuffs

SECTION 15. Regulatory information

CERCLA Hazardous Substance List (40 CFR 707, Subpt. D) Not listed

SARA 304 Extremely Hazardous Substances Threshold Planning Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA Title III : 311/312 Hazards : This product is not regulated under Section 311-312 (40 CFR 370)

SARA Title III 313 (TRI Reporting)	CAS Number	% by wt.
Chemical Name COBALT COMPOUND	N/A	100

Other Federal Regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
COBALT COMPOUND (CAS N/A)
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not Regulated

California Prop. 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov

The components of this product are reported in the following inventories:

TSCA (United States)	: On TSCA Inventory
DSL/NDSL (Canada)	: All components of this product are on the Canadian DSL
AICS (Australia)	: On the inventory or in compliance with the inventory
NZIOC (New Zealand)	: On the inventory or in compliance with the inventory
EINECS (European Union)	: On the inventory or in compliance with the inventory
ENCS (Japan)	: On the inventory or in compliance with the inventory
KECA (Korea)	: On the inventory or in compliance with the inventory
PICCS (Philippines)	: On the inventory or in compliance with the inventory
IECSC (China)	: On the inventory or in compliance with the inventory
TCSI (Taiwan)	: On the inventory or in compliance with the inventory
INSQ (Mexico)	: On the inventory or in compliance with the inventory

16. Other Information

Revision Date	August 28, 2026	
HMIS RATING	HEALTH	1
	FLAMMABILITY	0
	REACTIVITY	0
	PERSONAL PROTECTION	E

SOURCES OF KEY DATA USED TO COMPILE THIS SAFETY DATA SHEET:
Manufacturers SDS, OSHA Occupational Chemical Database, Chemidplus Toxnet Databases, NIH Haz-Map Database, TSCA Database, ECHA.

