

# Safety Data Sheet

DATE PREPARED 4/28/2015

UPDATED 3/21/2016

## STANDARD K-26, 554

### 6339 COBALT ZINC ALUMINATE BLUE SPINEL

HMIS Classification:

Health 2\*  
Flammability 0  
Reactivity 0  
Personal Protection See Section 8



MANUFACTURERS OF CERAMIC COLORS

#### 1.1 Product identifier

**Product name** COBALT ZINC ALUMINATE BLUE SPINEL

Cobalt Zinc Aluminate Blue Spinel, an inorganic pigment, is a reaction product of high temperature calcination in which Cobalt (II) Oxide, Zinc (II) Oxide, and Aluminum (III) Oxide in varying amounts are homogeneously and ionically interdiffused to form a crystalline matrix of spinel.

Its composition may include any one or a combination of the modifiers Li<sub>2</sub>O, MgO, SiO<sub>2</sub>, SnO or TiO<sub>2</sub>

**Product number** 6339 ROYAL BLUE

**EC no.** 269-049-5

**CAS no.** 68186-87-8

**Index no.** C.I. 77347

#### 1.4 Supplier's details

**Name** Mason Color Works Inc.  
**Address** 250 East Second Street  
East Liverpool, Ohio 43920  
USA

**Telephone** 330 385 4400

**Fax** 330 385 4488

## SECTION 2: Hazard Identification

Signal Word: WARNING

GHS classification in accordance with OSHA (29 CFR 1910.1200)

H303: May be harmful if swallowed

H313: May be harmful in contact with skin

H317: May cause an allergic skin reaction

H333: May be harmful if inhaled

H335: May cause respiratory irritation

Not a hazardous substance

P261: Avoid breathing dust.

P262: Do not get in eyes, on skin.

P264: Wash hands thoroughly after handling.



## SECTION 3: Composition/information on ingredients

COBALT ZINC ALUMINATE BLUE SPINEL C.I. Pigment Blue 72 100%

**EC no.** 269-049-5

**CAS no.** 68186-87-8

**Index no.** C.I. 77347

**Formula** (Co,Zn)Al<sub>2</sub>O<sub>4</sub>

## SECTION 4: First-aid measures

- Contact with skin:** Wash with plenty of water and soap.
- Contact with eyes:** Wash immediately with water for at least 10 minutes.
- Swallowing:** Induce vomiting. SEEK A MEDICAL EXAMINATION IMMEDIATELY and present the safety-data sheet.  
A suspension of activated charcoal in water, or liquid paraffin may be administered.
- Inhalation:** Ventilate the premises.  
The patient is to be removed immediately from the contaminated premises and made to rest in a well ventilated area.  
Should the patient feel unwell, OBTAIN MEDICAL ATTENTION

## SECTION 5: Fire-fighting measures

- Recommended extinguishers: Water, CO2, Foam, Chemical powders, according to the materials involved in the fire.
- Extinguishers not to be used: None in particular.
- Risks arising from combustion: Avoid inhaling the fumes.
- Protective equipment: Use protection for the respiratory tract.

## SECTION 6: Accidental release measures

- Measures for personal safety: Use gloves and protective clothing. In the event of particulates aerosols use respiratory protection.
- Environmental measures: . Keep away from drains, surface- and ground-water and soil
- Cleaning methods: Limit leakages with earth or sand. If the product has escaped into a water course, into the drainage system, or has contaminated the ground or vegetation, notify the competent authorities. Remove the waste materials with a suitable device (for instance a suction pump) and dispose. After the product has been recovered, rinse the area and materials involved with water.

## SECTION 7: Handling and storage

- Handling precautions: Wear suitable gloves, glasses and face protection. Avoid contact and inhalation of the vapours/powders. Do not eat or drink while working.
- Incompatible materials: None in particular.
- Storage conditions: Always keep the containers tightly closed.
- Instructions as regards storage premises: Adequately ventilated premises.

## SECTION 8: Exposure controls / personal protection

	ACGIH-TLVs	OSHA PELs	NOISHA RELs
Cobalt, Metal, Dust & Fume (as Co)	0.02 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup>	N/A
Aluminum (as Al), Metal (Total Dust)	10 mg/mg <sup>3</sup> (total)	15 mg/m <sup>3</sup> (total)	N/A
Zinc oxide(as Zn) (Total Dust)	10 mg/m <sup>3</sup>	10 mg/m <sup>3</sup> (total) 5 mg/m <sup>3</sup> (respirable)	5 mg/m <sup>3</sup>

- Precautionary measures: Give adequate ventilation to the premises where the product is stored and/or handled.
- Respiratory protection: Use suitable respiratory protection.
- Protection for hands: Not needed for normal use.
- Eye protection: Not needed for normal use.
- Protection for skin: No special precaution must be adopted for normal use.

## SECTION 9: Physical and chemical properties

Appearance/form	Blue/Powder
Odor	None
SPECIFIC GRAVITY	4.49
pH	6.6
Melting point/freezing point	<1000 C
Initial boiling point and boiling range	NA
Flash point	NA
Evaporation rate	NA
Flammability (solid, gas)	none
Upper/lower flammability limits	NA
Upper/lower explosive limits	NA
Vapor pressure	NA
Vapor density	NA
Relative density	NA
Solubility(ies)	insoluble
Partition coefficient: n-octanol/water	NA
Auto-ignition temperature	NA
Decomposition temperature	NA
Viscosity	NA
Explosive properties	none
Oxidizing properties	none

## SECTION 10: Stability and reactivity

Chemical stability	STABLE
Possibility of hazardous reactions	WILL NOT OCCUR
Incompatible materials	NONE
Hazardous decomposition products	N/A

## SECTION 11: Toxicological information

ORAL	LD50 (male rats) > 10000 mg/kg
INHALATION	LC50 (rats; 4 hours) > >5.06 mg/L air
SKIN	N/A
NON IRRITATING TO THE SKIN	
NON IRRITATING TO THE EYES	

THIS PIGMENT IS NOT LISTED IN THE NATIONAL TOXICOLOGY PROGRAM (NTP) REPORT ON CARCINOGENS.  
IT IS NOT LISTED AS A POTENTIAL CARCINOGEN IN THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER(IARC) MONOGRAPHS.  
IT IS NOT FOUND TO BE A CARCINOGEN BY THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION(OSHA)

## SECTION 12: Ecological information

ECOTOXICITY	NO DATA
DEGRADABILITY	NO DATA
MOBILITY	NO DATA
BIOACCUMULATIVE	NO DATA

## SECTION 13: Disposal considerations

Disposal of the product	Contain spillage and scoop or vacuum. Avoid making dust put in appropriate container for disposal. Waste disposal method in accordance with Federal, State and Local Laws.
Disposal of contaminated packaging	Dispose of as unused product.
Waste treatment	MUST BE PROCESSED THROUGH IN-HOUSE TREATMENT
Sewage disposal	AVOID CITY DRAINS

## SECTION 14: Transport information

14.1 UN Number	None
14.2 UN Proper Shipping Name	None
14.3 Transport hazard class(es)	None
14.4 Packing group	None
14.5 Environmental hazards	None
14.6 Special precautions for user	None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	None

## SECTION 15: Regulatory information

Attention all Retailers of Mason Stains

**ALL retailers of this product are REQUIRED by law to supply their customers with a copy of material safety data sheet with initial purchase.**

**\*\*\*SARA 313**

This product contains certain oxides and compounds which are subject to reporting requirements of Superfund Amendment and Reauthorization Act (**SARA**) of 1986, Section 313 of the Emergency Planning and Community Right to Know Act and of 40 CFR, Part 372.

**The information contained in this MSDS must be provided to every employee who is exposed to this product in any way. We recommend the user reads and understands the contents herein before using this material.**

**PLEASE KEEP ON FILE FOR FUTURE REFERENCE. DO NOT THROW AWAY! MSDS'S ARE REQUIRED FOR FIRST SHIPMENT, AND WILL BE SENT AGAIN WHEN REVISED UPON YOUR NEXT ORDER OF PRODUCT OR BY REQUEST.**

Disclaimer

## SECTION 16: REFERENCE INFORMATION

CPMA CLASSIFICATION AND CHEMICAL DESCRIPTIONS OF THE COMPLEX INORGANIC COLOR PIGMENTS  
Fourth Edition - January 2013 Update

<https://www.osha.gov/index.html>

<http://chem.sis.nlm.nih.gov/chemidplus>

*13th Report on Carcinogens* on October 2, 2014.

<http://monographs.iarc.fr/ENG/Classification/index.php>