

Bastion Paint Colour Shift Pearlescent Pigments **Technical Data Sheet (TDS)**

Distributors Name: Bastion Paint cc

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Bastion Paint does not manufacture these pigments. They are purchased from a reputable supplier that supplies all cosmetic certification documents to Bastion Paint.

For Safety Data Sheet please refer to our Pearlescent Pigment Safety Data Sheet (MSDS) which applies to all Bastion Paint Pearlescent Pigments (cosmetic and non-cosmetic).

- *The most relevant safety and health points are also contained in this TDS.*

1. General product properties

Bastion Paint Colour Shift Pearlescent Pigments are all cosmetic quality pigments based on synthetic mica. They are stable products.

Avoid grinding and milling of the pearlescent pigment, the particles might break or the coating layer of the pigment might be damaged when the mechanical stress to the pigments is too high.

Bastion Paint Colour Shift Pearlescent Pigments disperse well without grinding. These pigments can be incorporated easily with simple stirring or mixing. They should not be subject to grinding or high shear mixing so need to be incorporated after any such process steps.

Bastion Paint cannot be held responsible for quality claims related to loss of lustre, brilliance, change in shade or destabilization of your formulation.

1.1. Heavy metals

Heavy metals	Maximum level	Test method
Arsenic (As)	Max. 1 ppm	GTM 009
Lead (Pb)	Max. 10 ppm	GTM 009
Mercury (Hg)	Max. 1 ppm	GTM 009
Cadmium (Cd)	Max. 1 ppm	GTM 009
Zinc (Zn)	Max. 50 ppm	GTM 009
Antimony (Sb)	Max. 2 ppm	GTM 009
Chromium (Cr)	Max. 100 ppm	GTM 009
Barium (Ba)	Max. 50 ppm	GTM 009
Copper (Cu)	Max. 50 ppm	GTM 009
Nickel (Ni)	Max. 200 ppm	GTM 009

Full destruction with microwave, HF and HNO₃ measured with ICP-OES.

1.2. Temperature resistance

Bastion Paint Colour Shift Pearlescent Pigments have a temperature resistance up to 900°C.

1.3 Loss on drying

The loss on drying of Bastion Paint Colour Shift Pearlescent Pigments is 0 - 0,5 % (105°C).

1.4 Total amount of bacteria

The total amount of bacteria in Bastion Paint Colour Shift Pearlescent Pigments is < 100 cfu/g. This is applicable for deliveries in the original boxes only.

1.5 Yeast and Mould

The yeasts and moulds specification in Bastion Paint Colour Shift Pearlescent Pigments is < 100 cfu/g. This is applicable for deliveries in the original boxes only.

1.6 Pathogens

Absence of pathogen microorganisms in Bastion Paint Colour Shift Pearlescent Pigments. This is applicable for deliveries in the original boxes only.

1.7 Lightfastness

All Bastion Paint Colour Shift Pearlescent Pigments have very high lightfastness (UV stable). This makes them suitable for a wide variety of non-cosmetic applications including arts & crafts and industrial applications.

1.8 Shelf life

Bastion Paint Colour Shift Pearlescent Pigments have a shelf life of 10 years. This shelf life is valid for original packaging, stored closed box and dry conditions.

1.9 Non-flammable

Bastion Paint Colour Shift Pearlescent Pigments are not flammable and dusts do not create any explosion risk.

2. Compliance to Regulations

Bastion Paint Colour Shift Pearlescent Pigments are in general approved for cosmetics on the European, USA and Asian markets. They are suitable for lip and eye cosmetic products.

All Bastion Paint Colour Shift Pearlescent Pigments correspond in their purity requirements with the following regulations:

US-regulations:

Food and Drug Administration HHS 21 CFR (US code of Fed. Regulations) part 73

Subpart B: Drugs

- Section 73.1575 Titanium Dioxide

Subpart C: Cosmetics

- Section 73.2575 Titanium Dioxide

Japanese regulations:

Mica JSCI 500492

Titanium dioxide JSCI 002170

EU-regulations:

The raw material is in consistence with the Cosmetic Directive 93/35/EEC (6th modification of directive 76/768/EEC), EC 1223/2009 and to the Decision 98/16. The above named material is not regulated under one of the appendices of directive 93/35/EEC (6th modification of directive 76/768/EEC).

Ingredients used are compliant with the purity criteria as set out in the COMMISSION REGULATION (EU) No 231/2012.

Chinese-regulations:

All Bastion Paint Colour Shift Pearlescent Pigments are in compliance with; National Standard of the People's Republic of China: GB9685-2008 and Ministry of Health of the People's Republic of China Health Bulletin No.23 of 2011.

All Bastion Paint Colour Shift Pearlescent Pigments are in compliance to China Hygienic Standard for Cosmetics 2015.

3. Not containing

Bastion Paint Colour Shift Pearlescent Pigments do not contain Formaldehyde, Phthalates, sulphates, 1-4 dioxane, Alkylphenol, Nonylphenol, Nonoxynol, Phenol, VOC's (volatile organic compounds), Nitrosamines, EDG (glycol esters), gluten, PAH's (polycyclic aromatic hydrocarbons), substances reported under California Safe Cosmetics Act (SB-484), substances mentioned under Cites, Pigments containing CI77510 are free of Cyanide ions.

4. Preservatives, parabens, pesticides, allergens, disinfectants and irradiation

None of Bastion Paint Colour Shift Pearlescent Pigments contain any preservatives, pesticides, parabens allergens and disinfectants. All products are not classified like CMR substances with according REGULATION (EC) No 1272/2008.

None of the products contain any allergens according to EU Directive 76/768/EEC, ANNEX VIII.

Bastion Paint Colour Shift Pearlescent Pigments have not been exposed to radiation.

5. Non-organic products

All products are non-organic. All ingredients used during production do not contain derivatives that come from bovine, ovine or caprine species, stated in the list of Specified Risks Materials, as laid down in Decision 97/534/EC. All products do not contain genetic modified organism as laid down in Decision 90/220/EC.

6. INCI Names

Colour Shift Pearlescent Pigment: Fuchsia to Gold

INCI Name: Mica / Titanium Dioxide / Iron Oxide / Silica

Colour Shift Pearlescent Pigment: Silver-Green to Burgundy

INCI Name: Mica / Titanium Dioxide / Iron Oxide / Silica

Colour Shift Pearlescent Pigment: Blue to Mauve

INCI Name: Mica / Titanium Dioxide / Tin Oxide / Silica

Further information on ingredients

<u>INCI Name</u>	<u>Chemical Formula</u>	<u>Colour Index Number (CI)</u>
Mica	Complex	CI 77019
Titanium Dioxide	TiO ₂	CI 77891
Tin Oxide	SnO ₂ (also called stannic oxide)	CI 77861
Iron Oxide	Fe ₂ O ₃	CI 77492
Silica (silicon dioxide)	SiO ₂	N/A

7. Avoid Breathing Dust

Users must wear suitable PPE to avoid breathing the dust generated by dry pigments. For small scale handling such as home applications, a certified fabric dust mask is sufficient. For large scale handling a dust extraction system must be used together with a certified fabric dust mask

8. Transport information

Bastion Paint Colour Shift Pearlescent Pigments are classified as not dangerous goods in terms of transport regulations.

9. Formulation guidelines Finished Product

These pigments can be incorporated easily with simple stirring or mixing. They should not be subject to grinding or high shear mixing so need to be incorporated after any such process steps.

It is strongly recommended to test Bastion Paint Colour Shift Pearlescent Pigments carefully in your own formulation because they may react differently depending on the type of ingredients used.

10. No child labour

Child labour policy:

- The manufacturer does not tolerate the use of child or forced labour in any of its facilities.
- The manufacturer will not tolerate the exploitation of children, their engagement in unacceptably hazardous work, and the physical punishment, abuse, or involuntary servitude of any worker.
- The manufacturer expects their suppliers and contractors with whom they do business with to uphold the same standards.

11. No animal testing

No animal testing was performed by Bastion Paint, the Manufacturer or any sub-contractors on the products in the complete product range.

TDS Complied by and Revision Date

Name: Brian Quicke

Revision Date: 12 November 2020

Title: Member (BSc Chemistry, honours)

Signature: _____