

## Safety Data Sheet

Prepared in accordance with Annex II of the REACH regulation EC 1907/2006, Regulation EC 1272/2008 & GHS as amended from time to time

Trade name	: Ultramarine blue		
Pigment code	: Pigment Blue 29	Print date	: 01.01.2021
Version	: 07	Revision date	: 01.01.2021

### 1. Identification of the substance/preparation and the company undertaking

#### 1.1. Product identifier

Product name	Ultramarine Blue (Silicic acid, aluminium sodium salt, sulfurized)
CAS No	57455-37-5   101357-30-6
EC No	611-533-9   309-928-3
C.I No   Name	77007   C.I Pigment blue 29
Registration No	01-2119488928-13-0003

#### 1.2. Relevant Identified uses of the substance or mixture

Applications	Plastic master batch based on LLDPE, LDPE,HDPE, PVC, PP, EVA, PC, PS etc., Engineering polymers, inks, coatings, rubbers etc.,
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#### 1.3. Details of the supplier:

##### Manufacturer

Company Name	Ultramarine & Pigments Ltd
Street	No.556, Vanagaram road
Place	Ambattur, Chennai 600 053, Tamilnadu India
E-mail	<a href="mailto:pigments@ultramarinepigments.net">pigments@ultramarinepigments.net</a> , <a href="mailto:exports@ultramarinepigments.net">exports@ultramarinepigments.net</a>

##### Only Representative

Name	TCL Global B.V.
Street	Saturnusstraat 46-62
Place	2132 HB Hoofddorp, The Netherlands
E-mail	<a href="mailto:reach@ultramarinepigments.net">reach@ultramarinepigments.net</a>

#### 1.4. Emergency Telephone Number:

##### Manufacturer:

Contact Number +91 44 2613 6700 - 04

##### Only Representative

Contact Number +31 - (0)23 - 7993076

### 2. Hazard Identification

#### 2.1. Classification of the substance or mixture:

Classification of the substance according to regulation (EC) 1272/2008/GHS

Not Classified

Classification of the substance according to regulation 67/548/EEC

Not Classified

#### 2.2. Label Elements:

Labeling of the substance according to regulation (EC) 1272/2008 / GHS

This product doesn't require hazard labelling according to GHS criteria

Labeling of the substance according to regulation 67/548/EEC

This product doesn't require hazard labelling according to GHS criteria

#### 2.3. Other Hazards:

This substance is not considered as PBT or vPvB

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### 3. Composition information on ingredients

#### 3.1. Substance

Substance name	-	Silicic acid, aluminum sodium salt, sulfurized
Chemical formula	-	$\text{Na}_{6-x}[(\text{Al}, \text{Si})_{12}\text{O}_{24}]\cdot 2\text{NaS}_y$
Synonyms	-	Ultramarine Blue , Sodium alumino sulfo silicate
Index No	-	C.I No.77007
EC .No	-	309-928-3   611-533-9
CAS .No	-	101357-30-6   57455-37-5
Registration No	-	01-2119488928-13-0003
Concentration	-	Min 98.5 % (w/w)
Impurities	-	No impurities relevant for classification and labeling

### 4. First aid measures

#### 4.1. Description of first aid measures

General info	-	Never give anything by mouth to an unconscious person - If you feel unwell, seek medical advice
Inhalation	-	Remove to fresh air and keep at rest. Monitor respiratory function - If breathing is difficult, give oxygen. If necessary give artificial respiration
Skin Contact	-	Remove contaminated clothing and shoes. Wash with plenty of soap and water
Eye Contact	-	Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists
Ingestion	-	Rinse mouth of victim with plenty of water. <b>Do not</b> induce vomiting. Never give anything by mouth to an unconscious person - Seek medical attention. Movement of the exposed individual - Personal protective equipment for first aid responders is recommended

#### 4.2. Most important symptoms and effects, both acute and delayed

By inhalation	-	Dust or fumes can cause irritation of the nose throat and respiratory tract - Symptoms of exposure may include runny nose, coughing and nose bleeds, depending on severity of exposure - Severe over-exposure can produce lung damage, choking unconsciousness or death.
By skin contact	-	Hazardous in case of skin contact (corrosive, permeate) - The amount of tissue damage depends on length of contact - Skin contact can produce inflammation, irritations and possible burning. Skin inflammation is characterized by itching scaling, reddening or occasionally blistering
By eye contact	-	Eye contact can result in corneal damage or blindness. Inflammation of the eye is characterized by redness, watering and itching
By ingestion	-	Product ingestion causes irritations and possible burning to mouth, throat and stomach
Chronic effects	-	Chronic exposure by inhalation or skin contact can cause allergic sensitization causes liver and kidney effects in laboratory animals

#### 4.3. Indication of any immediate medical attention and special treatment needed

- Symptomatic treatment as required

### 5. Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	-	Carbon dioxide (CO <sub>2</sub> ) foam, dry powder, sand for small fires. For large fires use water jet or alcohol resistant foam
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#### 5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	-	Under fire conditions from (T > 450 °C) SO <sub>2</sub> can be released in presence of air
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**5.3. Advice for firefighter**

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|--|---|--|
| <b>Special precautions for fire-fighters</b> | - | Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain                       |
| <b>Protection of fire-fighters</b>           | - | The fire fighters should wear full protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode |
| <b>Other information</b>                     | - | Do not get water inside containers/bags. Water spray or fog carefully applied to surface of the burning material can be used to extinguish the fire    |
|  | - | Use water spray to prevent dust formation, absorb heat, keep containers cool and protect fire-exposed materials  |
|  | - | Cool water spray to flush spills from ignition source. Exercise caution when fighting any chemical fire  |
|  | - | Avoid firefighting water to enter environment  |

**6. Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

- |                     |   |   |
|---------------------|---|---|
| <b>General info</b> | - | Use protective gloves, safety goggles and protective clothing. Remove ignition sources            |
|                     | - | Do not touch spilled material unless wearing protective clothing. Avoid contact with skin and eye |

**6.2. Environmental precautions**

- |                                  |   |  |
|----------------------------------|---|--|
| <b>Environmental precautions</b> | - | Prevent from entering into watercourses, sewage and confined areas |
|----------------------------------|---|--|

**6.3. Methods and material for containment and cleaning up**

- |                        |   |   |
|------------------------|---|---|
| <b>For cleaning up</b> | - | Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel or broom. Avoid generation and spreading of dust |
|------------------------|---|---|

**6.4. Reference to other sections**

- |                               |   |  |
|-------------------------------|---|--|
| <b>Additional information</b> | - | Section 8 for advice on PPE, Section 13 for advice on disposal |
|-------------------------------|---|--|

**7. Handling and storage****7.1. Precautions for safe handling**

- |                     |   |  |
|---------------------|---|--|
| <b>General info</b> | - | Do not eat, drink or smoke when using the product  |
|                     | - | Good personal hygiene procedures should be implemented   |
|                     | - | Wash hands and any other contaminated areas of the body with soap and water before leaving the work site |
|                     | - | Avoid inhalation, contact with skin and eyes. Do not handle near incompatible materials                  |
|                     | - | Use PPE (personal protective equipment)  |

**7.2. Conditions for safe storage, including any incompatibilities**

- |  |   |  |
|--|---|--|
| <b>Technical measures and storage conditions</b> | - | Store away from strong acids   |
|  | - | Avoid static electricity discharges  |
|  | - | Keep in original container, in a cool dry, well ventilated place. Keep away from food Store locked up, keep out of reach of children |

**8. Exposure controls / Personal protection****8.1. Control Parameters**

- |                                     |   |  |
|-------------------------------------|---|--|
| <b>Occupational exposure limits</b> | - | 10 mg/m <sup>3</sup> , 8 hr TWA (Total dust)     |
|                                     | - | 5 mg/m <sup>3</sup> , 8 hr TWA (Respirable dust) |

**8.2. Exposure Controls**

- |   |   |  |
|---|---|--|
| <b>Appropriate Engineering controls</b> | - | The best protection is to enclose the operation and/or provide local exhaust ventilation at the side of the chemical release |
|   | - | It is recommended that safety shower and eyebath be available near the work area   |

- Compressed air lines used for respiratory protection should be provided with purifier
- Wear adequate and proper personal protective equipment
- Do not eat drink or smoke while using this product. Wash hands before eating, drinking, smoking or going to the toilet
- Take off all the contaminated clothing and wash before reuse

**Personal Protective Equipment**

**(a) Eye/face protection**

- Use protective safety goggles

**(b) Skin protection**

- Use Latex or PVC gloves. Use safety leather shoes with rubber imperable sole, with protective clothing to the body
- Overalls with long sleeves and hood are recommended

**(c) Respiratory protection**

- Full face piece respirator with filter for organic vapours
- In cases of high potential of exposure use a supplied-air respirator, full face piece, operated in positive-pressure mode.

**Environmental Exposure Controls**

- Prevent entry into drains, sewers and watercourses

**9. Physical and Chemical properties**
**9.1. Information on basic physical and chemical properties**

<b>Appearance</b>	- Solid blue powder
<b>Odor</b>	- Odorless
<b>Odor threshold</b>	- Not available
<b>pH (10% Solution,)</b>	- About 8.0
<b>Melting/ freezing point</b>	- > 1000°C
<b>Boiling point</b>	- Not applicable
<b>Flash point</b>	- Not available
<b>Evaporation Rate</b>	- Not available
<b>Flammability</b>	- Non flammable
<b>Upper/Lower flammability</b>	- Not available
<b>Vapor pressure</b>	- Not available
<b>Vapor density</b>	- Not available
<b>Density</b>	- 2.35 g/cm <sup>3</sup> at 25°C
<b>Solubility in water</b>	- Slightly soluble or insoluble in water
<b>Solubility in other solvents</b>	- Not available
<b>Partition Co-efficient</b>	- Not available
<b>Auto-ignition temperature</b>	- Not available
<b>Decomposition temperature</b>	- Not available
<b>Viscosity</b>	- Not applicable (solid)
<b>Explosive properties</b>	- Non explosive
<b>Oxidizing properties</b>	- Not oxidizing
<b>Other information</b>	- Not applicable

**10. Stability and reactivity**
**10.1. Reactivity**

- At temperatures above 400°C in presence of air (SO<sub>2</sub>) sulfur dioxide gas can be released. Hydrogen sulfide gas may be released in contact with strong acids of pH less than 2.0

**10.2. Chemical stability**

- Stable under normal conditions of storage



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**10.3. Possibility of hazardous reactions**

- Hazardous polymerization will not occur

**10.4. Conditions to avoid**

- At temperature above 400°C in the presence of air, Sulfur dioxide (SO<sub>2</sub>) gas can be released

**10.5. Incompatible materials**

- Stable above pH 4.0

**10.6. Hazardous decomposition products**

- (SO<sub>2</sub>) Sulfur dioxide gas and (H<sub>2</sub>S) hydrogen sulfide gas

**11. Toxicological information**

**11.1. Information on toxicological effects**

- (a) Acute toxicity (oral) - LD<sub>50</sub> > 2000 mg/kg
- (b) Acute toxicity (dermal) - LD<sub>50</sub> > 2000mg/kg
- (c) Skin corrosion/irritation - Negative
- (d) Serious eye damage/irritation - Negative
- (e) Respiratory or skin sensitization - Not sensitizing
- (f) Germ cell mutagenicity - No data available
- (g) Carcinogenicity - Non Carcinogenic
- (h) Reproductive toxicity - NOAEL >= 1000 mg/kg bw/day
- (i) STOT-single Exposure - No data available
- (j) STOT-Repeated Exposure - NOAEL >= 300 mg/kg bw/day
- (k) Aspiration toxicity - Not applicable
- General information - No specific health hazards known

**12. Ecological information**

**12.1. Toxicity**

- Short term toxicity to fish - Himedaka (Latipes) : LC<sub>50</sub> (96h) > 90 mg/L
- Long term toxicity to fish - In accordance with REACH regulation 1907/2006, Annex IX, column 2, long – term tests on fish need only be conducted if the outcome of the chemical safety assessment indicates such a need.
- Short term toxicity to aquatic invertebrates - Daphnia magna : EC<sub>50</sub> (48h) > 21mg/L
- Long term toxicity to aquatic invertebrates - Daphnia magna : EC<sub>50</sub> (21 d) = 34mg/L, NOEC (21d) = 26 mg/L
- Toxicity to aquatic algae - Pseudokirchnerella subcapitata : EC<sub>50</sub> (72h) > 99 mg/L, NOEC (72h) > 99 mg/L
- Toxicity to sediment - The physico chemical properties of the substance, together with fugacity modeling, indicate that the substance is not expected to be distributed into sediment. As a result, the risk for this compartment is considered to be low and no information on effects on sediment-dwelling organisms is needed.
- Toxicity to soil macro organisms - Based on the physicochemical properties the substance can be expected to have a low potential for adsorption. Furthermore, based on studies into the weathering of Zeolite A in natural waters by hydrolysis, forming natural alumino silicates (Cook et al., 1982; endpoint record 5.1.2\_003) it can be anticipated that the substance reaching the aquatic and terrestrial compartments will ultimately turn into natural constituents of waters, sediments and soils. Therefore, it is not justified to conduct a short-term toxicity study to soil macro organisms
- Resulting on PNEC's
  - Water - PNEC aqua (freshwater): 0.52 mg/L (Assessment factor 50)
  - Sediment - Koc value not applicable. Based on the physicochemical properties the substance can be expected to have a low potential for adsorption.
  - Soil - Koc value not applicable. Based on the physicochemical properties the substance can be expected to have a low potential for adsorption

**12.2. Persistence and degradability**

- Based on the values described below the substance is not considered as PBT / vPvB
- T<sub>½</sub> <= 40 days in fresh – or estuarine water
- T<sub>½</sub> <= 120 days in fresh – or estuarine sediment

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<b><u>12.3. Bioaccumulative potential</u></b>	- T ½ ≤ 120 days in soil	
	- The substance has low potential for bioaccumulation a (log Kow < 3) as it is an inorganic substance.	
<b><u>12.4. Mobility in soil</u></b>	- BCF < 2000 L/kg	
<b><u>12.5. Results of PBT and vPvB assessment</u></b>	<b>Result</b>	<b>Remarks</b>
<b>Persistence</b>	- T ½ ≤ 40 days in fresh – or estuarine water	The substance has no adsorption potential expected to sediment and soil.
	- T ½ ≤ 120 days in fresh – or estuarine sediment	
	- T ½ ≤ 120 days in soil	
<b>vPvB</b>	- BCF ≤ 2000 L/kg	No vPvB criteria are fulfilled for the substance
	- The substance is not classified as toxic	
<b><u>12.6. Other adverse effects</u></b>	- None	

### 13. Disposal considerations

#### 13.1. Waste treatment methods

##### General information

- Prior to implementing land disposal of waste residue (including waste sludge), consult local legislation for adequate disposal methods.
- Empty containers can retain product residues and shall be disposed in accordance with the provisions proposed for the product.

### 14. Transport information

#### 14.1. UN number

- Not regulated

#### 14.2. UN proper shipping name

- Not regulated

#### 14.3. Transport hazard class

- Not classified as a dangerous good under transport guidelines

#### 14.4. Packing group

- Not regulated

#### 14.5. Environmental hazards

- None

#### 14.6. Special precautions for user

- None

#### 14.7. Transport in bulk according to

- Not applicable

ANNEX II of MARPOL 73/78 and  
the IBC code.

### 15. Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Substances of very high concern

- Pigment blue 29 (Ultramarine blue) is not listed as SVHC so far

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

Restrictions on use

- No restrictions

USFDA

Ultramarine blue is cleared in 21 CFR:

- Part 73 under § 73.50 (color additives approved for use in human food / salt intended for animal feed)
- Part 73 under § 73.2725 (color additives approved for use in cosmetics / externally applied cosmetics including eye area use)
- Part 178 under § 178.3297 (colorants for polymers)
- Part 177 under § 177.2600 (colorants in rubber articles intended for repeated use)

Inventories

The substances is listed in

EINECS

- European Inventory of Existing Commercial Chemical Substances

DSL

- Domestic Substances List (Canada)

AICS

- Australian Inventory of Chemical Substances



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<b>MITI / ENCS</b>	-	Japanese Existing and New Chemical Substances
<b>KTCCCL / MEO / ECL</b>	-	Korean Existing Chemicals List
<b>PICCS</b>	-	Philippines Inventory of Chemicals and Chemical Substances
<b>IECSC</b>	-	Chinese Chemical Inventory of Existing Chemical Substances
<b>NZIoC</b>	-	New-Zealand Inventory of Chemicals
<b>TSCA Section (8b)</b>	-	Toxic Substances Control Act
<b>Swiss ChemO</b>	-	Switzerland Chemical Ordinance
<b>NESCI</b>	-	Taiwan National Existing Chemical Inventory

#### **Chemical Safety Assessment**

A chemical safety assessment has been carried out for this substance. A detailed Chemical Safety Report is available for this substance

<b>SARA Title III Rules</b>	-	Section 302 – Extremely Hazardous Substances: None
	-	Section 304 – CERCLA Hazardous Substances: None
	-	Section 311 / 312 – EPCRA (Hazard classes)
	-	Immediate Toxicity (Acute) : None
	-	Delayed Toxicity (Chronic) : None
	-	Fire Hazard : None
	-	Release of Pressure : None
	-	Reactivity : None (Stable under normal condition)

#### **16. Other Information**

##### **List of Abbreviations used in this SDS**

<b>CAS</b>	-	Chemical Abstracts Service
<b>CLP</b>	-	Classification, Labeling and Packaging Regulation (EC) no 1272/2008
<b>DSD</b>	-	Dangerous Substances Directive 67/548/EEC
<b>DPD</b>	-	Dangerous Preparations Directive 1999/45/EC
<b>EC</b>	-	European Commission
<b>NOAEL</b>	-	No Observed Adverse Effect Level
<b>PBT</b>	-	Persistent, Bio-accumulative and Toxic to reproduction
<b>REACH</b>	-	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation (EC) no 1907/2006
<b>vPvB</b>	-	very Persistent, very Bio-accumulative

##### **Training requirements for workers**

No special training requirements identified

#### **Disclaimer**

The information provided in this safety data sheet is given in good faith and is correct to the best of our knowledge and information at the date of publication. It is designed only as guidance for safe handling, storage, transportation, use and disposal. No warranty is expressed (or) implied