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SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Revision Date 08/31/2015 Version 1.2

SECTION 1.Identification

Product identifier

Product name	Blue Sparks

Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Cosmetic raw material

Details of the supplier of the safety data sheet

Company	TKB TRADING, LLC 1101 9th Avenue Oakland, CA 94606 Tel: 510-922-9027 www.tkbtrading.com

SECTION 2. Hazards identification

GHS-Labeling

Not a dangerous substance according to GHS.

Other hazards

None known.

SECTION 3. Composition/information on ingredients

Chemical nature	Calcium aluminum borosilicate coated with: titanium dioxide silicon dioxide tin oxide

Hazardous ingredients

Chemical Name (Concentration)
CAS-No.
glass (>= 50 % - < 70 %)
65997-17-3

Exact percentages are being withheld as a trade secret.
titanium(IV) oxide (>= 10 % - < 30 %)
13463-67-7

Exact percentages are being withheld as a trade secret.
silicon dioxide (>= 1 % - < 5 %)
7631-86-9
Exact percentages are being withheld as a trade secret.

SECTION 4. First aid measures

Description of first-aid measures

Inhalation
After inhalation: fresh air.

Skin contact
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

Eye contact
After eye contact: rinse out with plenty of water.

Ingestion
After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture

Not combustible.
Ambient fire may liberate hazardous vapors.

Advice for firefighters

Special protective equipment for fire-fighters
In the event of fire, wear self-contained breathing apparatus.

Further information
none

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment see section 8.

Environmental precautions

No special precautionary measures necessary.

Methods and materials for containment and cleaning up

Observe possible material restrictions (see sections 7 and 10).
Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

SECTION 7. Handling and storage

Precautions for safe handling

Observe label precautions.

Conditions for safe storage, including any incompatibilities

Tightly closed. Dry.

Storage temperature: no restrictions.

SECTION 8. Exposure controls/personal protection

Exposure limit(s)

Ingredients

Basis	Value	Threshold limits	Remarks
General threshold limit value for dust			
Z1A	Time Weighted Average (TWA):	5 mg/m³	Form of exposure: Respirable fraction.
	Time Weighted Average (TWA):	15 mg/m³	Form of exposure: Total dust.
	Time Weighted Average (TWA):	50millions of particles per cubic foot of air	Form of exposure: Total dust.
	Time Weighted Average (TWA):	15millions of particles per cubic foot of air	Form of exposure: Respirable fraction.
	Time Weighted Average (TWA):	15 mg/m³	Form of exposure: Total dust.
	Time Weighted Average (TWA):	5 mg/m³	Form of exposure: Respirable fraction.
OSHA_TRANS	PEL:	5 mg/m³	Form of exposure: Respirable fraction.
	PEL:	15 mg/m³	Form of exposure: Total dust.
ACGIH	Time Weighted Average (TWA):	10 mg/m³	Form of exposure: Inhalable particles.
	Time Weighted Average (TWA):	3 mg/m³	Form of exposure: Respirable particles.
glass 65997-17-3			
NIOSH/GUIDE	Recommended exposure limit (REL):	5 mg/m³	Form of exposure: fibers, total dust
	Recommended exposure limit (REL):	5 mg/m³	Form of exposure: Fiber, total
	Recommended exposure limit (REL):	3fibers/cm3	Form of exposure: Fiber.
	Recommended exposure limit (REL):	3fibers/cm3	Form of exposure: Dust.
ACGIH	Time Weighted Average (TWA):	5 mg/m³	Form of exposure: Inhalable fraction.
	Time Weighted Average (TWA):	1fibers/cm3	F: Respirable fibers: length > 5 micrometers; aspect ration >= 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination. Form of exposure: Fiber.
	Time Weighted Average (TWA):	1fibers/cm3	F: Respirable fibers: length > 5 micrometers; aspect ration >= 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination. Form of exposure: Fiber.
	Time Weighted Average (TWA):	1fibers/cm3	F: Respirable fibers: length > 5 micrometers; aspect ration >= 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination. Form of exposure: Fiber.

	Time Weighted Average (TWA):	1fibers/cm3	F: Respirable fibers: length > 5 micrometers; aspect ration >= 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination. Form of exposure: Fiber.
	Time Weighted Average (TWA):	1fibers/cm3	F: Respirable fibers: length > 5 micrometers; aspect ration >= 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination. Form of exposure: Fiber.
	Time Weighted Average (TWA):	0.2fibers/cm3	F: Respirable fibers: length > 5 micrometers; aspect ration >= 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination. Form of exposure: Fiber.

titanium(IV) oxide 13463-67-7

ACGIH	Time Weighted Average (TWA):	10 mg/m³	
OSHA_TRANS	PEL:	15 mg/m³	Form of exposure: Total dust.
Z1A	Time Weighted Average (TWA):	10 mg/m³	Form of exposure: Total dust.

silicon dioxide 7631-86-9

NIOSH/GUIDE	Recommended exposure limit (REL):	6 mg/m³	
Z1A	Time Weighted Average (TWA):	6 mg/m³	
	Time Weighted Average (TWA):	20millions of particles per cubic foot of air	
	Time Weighted Average (TWA):	0.8 mg/m³	The exposure limit is calculated from the equation, 80/(%SiO2), using a value of 100% SiO2. Lower values of % SiO2 will give higher exposure limits.

Engineering measures
Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Individual protection measures
Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

Hygiene measures
Change contaminated clothing. Wash hands after working with substance.

Eye/face protection
Safety glasses

Hand protection
Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Respiratory protection
required when dusts are generated.
Recommended Filter type: NIOSH-certified respirator with P95 particulate filter
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are performed according to the instructions of the producer. These measures have to be properly documented.

SECTION 9. Physical and chemical properties

Physical state	powder
Color	light yellow
Odor	odorless
Odor Threshold	Not applicable
pH	8.0 - 11.0 at 100 g/l 20 °C (20 °C) (slurry)
Melting point	No information available.
Boiling point	No information available.
Flash point	Not applicable
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapor pressure	No information available.
Relative vapor density	No information available.
Density	2.6 - 2.8 g/cm3 at 20 °C (20 °C)
Relative density	No information available.
Water solubility	at 20 °C (20 °C) practically insoluble
Partition coefficient: n-octanol/water	No information available.

Autoignition temperature	No information available.
Decomposition temperature	No information available.
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
Oxidizing properties	none
Bulk density	250 - 310 kg/m3
Particle size	Particle size 20.0 - 200 µm Mean particle size 75.0 - 95.0 µm

SECTION 10. Stability and reactivity

Reactivity
See below

Chemical stability
The product is chemically stable under standard ambient conditions (room temperature) .

Possibility of hazardous reactions
no information available

Conditions to avoid
no information available

Incompatible materials
no information available

Hazardous decomposition products
no information available

SECTION 11. Toxicological information

Information on toxicological effects

Likely route of exposure
Inhalation, Eye contact, Skin contact, Ingestion

Target Organs
Respiratory system
Eyes

Specific target organ systemic toxicity - single exposure
The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ systemic toxicity - repeated exposure
The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard
Regarding the available data the classification criteria are not fulfilled.

Carcinogenicity

IARC	Group 2B: Possibly carcinogenic to humans	
	titanium(IV) oxide	13463-67-7
	glass	65997-17-3
OSHA	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.	
NTP	Anticipated carcinogen.	
	glass	65997-17-3
ACGIH	Confirmed animal carcinogen with unknown relevance to humans.	
	glass	65997-17-3

Further information
Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.
Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.
Handle in accordance with good industrial hygiene and safety practice.

Ingredients

glass
No information available.

titanium(IV) oxide
Acute oral toxicity
LD50 Rat: > 10,000 mg/kg (External MSDS)

Skin irritation
Rabbit
Result: No skin irritation
(IUCLID)

Eye irritation
Rabbit
Result: No eye irritation
(IUCLID)

silicon dioxide
Acute dermal toxicity
Rabbit: > 5,000 mg/kg (IUCLID)

Skin irritation
Rabbit
Result: No irritation
OECD Test Guideline 404

Eye irritation
Rabbit
Result: No eye irritation
OECD Test Guideline 405

Sensitization
Sensitization test: Guinea pig
Result: negative
(IUCLID)

Germ cell mutagenicity
Genotoxicity in vitro
Ames test
Salmonella typhimurium
Result: negative
(IUCLID)

Mutagenicity (mammal cell test): chromosome aberration.
Result: negative
(IUCLID)

SECTION 12. Ecological information

Ecotoxicity

No information available.

Persistence and degradability

No information available.

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Ingredients

glass
No information available.

titanium(IV) oxide

Toxicity to fish
LC0 Leuciscus idus (Golden orfe): > 1,000 mg/l(External MSDS)

Toxicity to bacteria
EC0 Pseudomonas fluorescens: > 5,000 mg/l(External MSDS)

silicon dioxide

Toxicity to daphnia and other aquatic invertebrates
EC0 Daphnia magna (Water flea): >= 10,000 mg/l; 24 h
OECD Test Guideline 202

Toxicity to algae
IC50 Pseudokirchneriella subcapitata (green algae): 440 mg/l; 72 h (IUCLID)

NOEC Pseudokirchneriella subcapitata (green algae): 60 mg/l; 72 h (IUCLID)

SECTION 13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14. Transport information

Land transport (DOT)

Not classified as dangerous in the meaning of transport regulations.

Air transport (IATA)

Not classified as dangerous in the meaning of transport regulations.

Sea transport (IMDG)

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. Regulatory information

United States of America

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

US State Regulations

Massachusetts Right To Know

Ingredients
glass
titanium(IV) oxide
silicon dioxide

Pennsylvania Right To Know

Ingredients
glass

titanium(IV) oxide
silicon dioxide

New Jersey Right To Know

Ingredients
glass
titanium(IV) oxide
silicon dioxide

California Prop 65 Components
WARNING: this product contains a chemical known in the State of California to cause cancer.

Ingredients
titanium(IV) oxide

Notification status

TSCA:	All components of the product are listed in the TSCA-inventory.
DSL:	All components of this product are on the Canadian DSL

SECTION 16. Other information

Training advice
Provide adequate information, instruction and training for operators.

Labeling
Precautionary Statements
Prevention
P260 Do not breathe dust.

Key or legend to abbreviations and acronyms used in the safety data sheet
Used abbreviations and acronyms can be looked up at www.wikipedia.org.

Revision Date08/31/2015

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.