SAFETY DATA SHEET

ISK BIOCIDES, INC.

SECTION 1: Identification

Product identifier:	Sta Brite [®] R Brown 242.
Other means of identification:	Sta Brite R Brown.
SDS number:	ISK056.
Recommended use:	Roof Protector for cedar shakes and shingles.
Recommended restrictions:	None known.
Manufacturer/Importer/Supplier/	Distributor information:
Company name:	ISK Biocides, Inc.
Address:	416 East Brooks Road
	Memphis, TN 38109
Telephone:	Office hours (Mon – Fri)
	8:00 – 4:30pm (Central time).
	(901) 344-5350 or (800) 248-7961.
Contact Person:	Anthony Accampo or Mark Richards
E-mail:	SDSInquiry@ibio.com
Emergency phone number:	Chemtrec (800) 424-9300 (24 hours).

SECTION 2: Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Physical hazards No physical hazards for this product.

Health hazards Causes serious eye irritation - Category 2A Carcinogenicity - Category 2

Environmental hazards No environmental hazards for this product

Signal word:

WARNING.

Hazard statement(s):

Serious eye damage/eye irritation. Suspected of causing cancer.

Hazard symbol(s):



Precautionary statement(s):	
Prevention:	Wash hands thoroughly after handling. Do not touch
	eyes.
	Wear eye protection/face protection.
	Obtain, read and follow all safety instructions before use.
	Avoid breathing dust/fume/gas/mist/vapors/spray.
Response:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	If eye irritation persists, get emergency medical help. If exposed or concerned, get medical advice/attention.
Storage:	None
Disposal:	Dispose of contents/container to an approved waste disposal vendor.
Hazard(s) not otherwise Classified (HNOC):	None known.

Percentage of ingredient(s) of unknown acute toxicity:

14.3% of the mixture consists of ingredients of unknown acute toxicity (oral/dermal). 12.5% of the mixture consists of ingredients of unknown acute toxicity (inhalation).

SECTION 3: Composition/information on ingredients

Mixture:

Chemical name	Concentration(weight %)	CAS#
Titanium Dioxide	0.80 - 0.85	13463-67-7
Carbon Black	0.49 - 0.63	1333-86-4
Ethylene Glycol	0.00 - 1.75	107-21-1

SECTION 4: First-aid Measures

Inhalation: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Skin contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. Call a poison control center or doctor for treatment advice.

Eye contact: Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Ingestion: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed: Contains components that are suspected of causing cancer when present as a respirable dust. Can cause severe eye irritation, redness, tearing, blurred vision.

Indication of immediate medical attention and special treatment needed: Have the product container or label with you when calling a poison control center or doctor or going for treatment.

SECTION 5: Fire-fighting measures

Suitable extinguishing media: Non-Combustible. Use suitable extinguishing media for surrounding fire.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: Thermal decomposition may produce toxic fumes.

Hazardous combustion products may include Oxides of Carbon and Nitrogen, plus small amounts of Ammonia.

Special protective equipment and precautions for fire-fighters: Wear MSHA/NIOSH-approved, self-contained breathing apparatus and full protective clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Methods and materials for containment and cleaning up:

SMALL SPILL: Wear appropriate protective clothing (see Section 8). Recover free liquid. Absorb remainder with sand or clay and place in a waste receptacle.

LARGE SPILL: Wear appropriate protective clothing (see Section 8). Large spills are not likely to occur. Restrict access to contaminated area. Stop spill at source. Dike to prevent spreading. Pump liquid to a recovery vessel. Absorb remainder of material with sand or clay and place in a properly labeled waste receptacle. Follow all local, state, and federal regulations for disposal. Do not contaminate water while cleaning equipment or disposing of wastes. Prohibit contamination of streams, lakes, or other bodies of water.

SECTION 7: Handling and Storage

Precautions for safe handling: Observe good personal hygiene practices. Change protective gloves/clothing when signs of contamination appear. Keep out of reach of children.

Conditions for safe storage, including any incompatibles: Store away from food or feed in a secure, well-ventilated area protected from extreme temperatures. Do not transfer to an unmarked container. Keep container closed when not in use. Do not allow to freeze.

SECTION 8: Exposure controls/personal protection

Control Parameters:

Occupational exposure limits:

US OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200): Permissible Exposure Limits			
Substance	PEL-TWA (8 hour)	PEL-STEL (15 min)	
Titanium Dioxide	15 mg/m ³	None available	
Carbon Black	3.5 mg/m^3	None available	
Ethylene Glycol	None available	None available	

ACGIH Threshold Limit Values			
Substance	TLV-TWA (8 hour)	TLV-STEL (15 min)	
Titanium Dioxide	10 mg/m ³	None available	
Carbon Black	3.5 mg/m ³	None available	
Ethylene Glycol	None available	None available	

Other Exposure Limits: Carbon Black NIOSH TWA – 3.50 mg/m³.

(National Institute for Occupational Safety and Health).

Appropriate engineering controls: Ventilate via mechanical methods (general or local exhaust) to maintain exposure below TLV(s), if applicable. Good industrial hygiene practice dictates that indoor work areas should be isolated and provided with adequate local exhaust ventilation.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Wear chemical splash goggles and/or face shield during mixing and when exposed to mist.

Skin and Hand protection: Wear rubber gloves when handling, using, or applying this product. Special precautions should be taken to ensure that material cannot get inside gloves.

Respiratory protection: None normally required if good ventilation is maintained. If TLV for product or any component is exceeded, use a MSHA/NIOSH-approved respirator.

Other: None normally required. Use as necessary to prevent exposure. Safety showers and eyewash stations should be provided in all areas in which this product is stored and/or handled. Persons exposed routinely to this material should shower prior to leaving work each day. Work clothing should be changed daily. Contaminated clothing should be removed and washed thoroughly before re-using.

Thermal hazards: None known.

SECTION 9: Physical and chemical properties

Appearance:			
Physical state:	Dispersion.		
Form:	Reddish Brown Dispersion.		
Color:	Reddish Brown.		
Odor:	Faint amine.		
Odor threshold:	Not available.		
рН:	9.5 - 10.5		
Melting point/freezing point:	Not known.		
Initial Boiling point/Boiling Range:	212 °F.		
Flash point:	> 200 °F.		
Evaporation rate:	<1 (nBuAC=1).		
Flammability (solid, gas):	Not available.		
Upper/lower flammability or explosive limits			
Flammability limit – lower:	Not Determined.		
Flammability limit – upper:	Not Determined.		
Explosive limit – lower:	Not Determined.		
Explosive limit – upper:	Not Determined.		
Vapor pressure:	Not known.		
Vapor density:	> 1 (Air = 1).		
Relative density (Specific gravity):	: 1.31		
Solubilities (water, other):	Disperses.		
Partition coefficient (n-octanol/water)	Not available.		
Auto-ignition temperature:	Not known.		
Decomposition temperature:	Not available.		
Viscosity:	1750 - 3750 cPs Brookfield #3 @ 20 rpm at 70°F.		

Other information:

Bulk density:	11.04 – 11.34 lbs. per gal (weight per gallon cup).
VOC Content:	86 g/L (0.72 lbs./gal)

SECTION 10: Stability and Reactivity

Reactivity: Stable.

Chemical stability: This material is stable under normal handling and storage conditions. **Possibility of hazardous reactions:** Material is not known to polymerize.

Conditions to avoid: Temperatures below freezing, 32F/0C.

Incompatible materials: Acid, Strong oxidants.

Hazardous decomposition Products: Oxides of Carbon and Nitrogen, plus small amounts of Ammonia.

SECTION 11: Toxicological information

Information on likely routes of exposure:

Inhalation: Can cause nasal and respiratory irritation, dizziness, nausea, vomiting, headache, and weakness.

Ingestion: Can cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Skin: May cause skin irritation or rash on prolonged or repeated contact.

Eye: Can cause severe irritation, redness, tearing, blurred vision. Can cause irreversible damage on prolonged contact.

Symptoms related to the physical, chemical, and toxicological characteristics: Some of the components are suspected of causing cancer when present as a respirable dust.

Delayed and immediate effects and chronic effects from short or long-term exposure:

Some of the components are suspected of causing cancer when present as a respirable dust.

Acute toxicity:

Ingredient Information:

Substance	Test Type (species)	Value
	LD ₅₀ Oral	> 10000 mg/kg
Titanium Dioxide	LD ₅₀ Dermal	>10000 mg/kg
	LC ₅₀ Inhalation	No data available
	LD50 Oral (Rat)	> 8000 mg/kg
Carbon Black	LD50 Dermal (Rabbit)	> 3000 mg/kg
	LC50 Inhalation, (Rat)	No data available

Product Acute Toxicity Estimates:

Oral: Rat - $LD_{50} > 5000 \text{ mg/kg}$. Dermal: Rabbit - $LD_{50} > 2000 \text{ mg/kg}$ but < 20000 mg/kg. Inhalation: Rat - $LC_{50} > 20.0 \text{ mg/L}$.

Skin corrosion/irritation:	Based upon information available on the known components, the product may cause skin irritation or rash on prolonged or repeated contact.
Serious eye damage/eye irritation:	Based upon information available on the known components, the product can cause severe irritation, redness, tearing and blurred vision.
Respiratory sensitization:	Based upon information available on the known components, the product is not anticipated to cause respiratory sensitization.
Skin sensitization:	Based upon information available on the known components, the product is not anticipated to cause skin sensitization.
Germ cell mutagenicity:	Based upon information available on the known components, the product is not anticipated to be a mutagen.
Carcinogenicity:	Titanium Dioxide and Carbon black are all suspected to be a human carcinogen when present as airborne, unbound particles of respirable size.
Reproductive toxicity:	Based upon information available on the known components, the product is not anticipated to cause reproductive toxicity.
Specific target organ toxicity- Single exposure:	Based upon information available on the known components, the product is not anticipated to cause specific target organ toxicity after single exposure.
Specific target organ toxicity- Repeat exposure:	Based upon information available on the known components, the product is not anticipated to cause specific target organ toxicity after repeated or prolonged exposure.
Aspiration hazard:	Based upon information available on the known components, the product is not anticipated to be an aspiration hazard.
Further information:	Not available.

SECTION 12: Ecological information

Ecotoxicity

Product data:

No data available.

Ingredient Information:

Substance	Test Type	Species	Value
	LC ₅₀ other fish	Fish	> 1000 mg/l - 96 h
Titanium dioxide	EC ₅₀ Daphnia magna (Water flea)	Invertebrate	> 1000 mg/l - 48h
	LC50	Algae	No data available
	LC ₅₀ Danio rerio (zebra fish)	Fish	> 1000 mg/l - 96 h
Carbon black	EC ₅₀ Daphnia magna (Water flea)	Invertebrate	> 5600 mg/l - 24 h
	LC ₅₀ Desmodesmus subspicatus (green algae)	Algae	> 10000 mg/l - 72h

Persistence and degradability:	Not available.
Bioaccumulative potential:	Not available.
Mobility in soil:	Not available.
Mobility in general:	Not available.
Other adverse effects:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: Disposal considerations

Disposal instructions:

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Do not reuse empty container. Triple rinse container (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

SECTION 14: Transport Information

DOT: Not regulated under DOT. **IATA:** Not regulated under IATA. **IMDG:** Not regulated under IMDG.

Special precautions during transport: Not available.

Bill of lading classification: Paint and related material, n.o.i., NMFC 149980, sub 6.

SECTION 15: Regulatory Information

USA:

United States Federal Regulations: This SDS complies with the OSHA, 29 CFR 1910.1200. The product is hazardous under OSHA.

SARA Superfund and Reauthorization Act of 1986 Title III sections 302, 311, 312 and 313:

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

CERCLA/Superfund, 40 CFR 117, 302: Not listed.

CHEMICAL	C.A.S. Number	Weight %	Section 311/312
Titanium Dioxide (nanoparticles range in size from 1 to 150 nm).	13463-67-7	0.80 - 0.85	Chronic Health Hazard
Carbon Black	1333-86-4	0.49 - 0.63	Chronic Health Hazard

Section 313 – List of Toxic Chemicals (40CFC 372): This product does not contain the chemicals (at level of 1% or greater) found on the 313 list of Toxic Chemicals.

Federal Water Pollution Control Act, Clean Water Act, 40 CFR 401.15 (formerly section 307) 40 CFR 116 (formerly section 311): This product does not contain listed chemicals.

STATE REGULATIONS:

This SDS contains specific health and safety data is applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

California Proposition 65: WARNING! This product contains a chemical known to the State of California to cause cancer: Titanium dioxide, nanoparticles range in size from 1 to 150 nm, Carbon black (airborne, unbound particles of respirable size) is effective February 21. 2003.

New Jersey Right to Know: The following components are listed on the New Jersey Right to Know list: Titanium dioxide, nanoparticles range in size from 1 to 150 nm, Carbon black.

Pennsylvania Right to Know: The following components are listed on the Pennsylvania Right to Know list: Titanium dioxide, nanoparticles range in size from 1 to 150 nm, Carbon black.

Massachusetts Right to Know: The following components are listed on the Massachusetts Right to Know list: Titanium dioxide, nanoparticles range in size from 1 to 150 nm, Carbon black.

INTERNATIONAL REGULATIONS:

<u>Canadian Regulations</u> CLASS D2A - Very Toxic Material Causing Other Toxic Effects. CLASS D2B - Very Toxic Material Causing Other Toxic Effects.

Canadian Controlled Products Regulations (WHMIS): This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the SDS contains all the information required by the *Controlled Products Regulations*.

SECTION 16: Other Information

Revision Date: August 16th, 2023

The information in this Safety Data Sheet is provided in good faith and is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance and is not to be considered a warranty or quality specification. User is responsible to evaluate all available information when using product for any particular use, including, if necessary, conducting any tests needed to determine the suitability of the product for a particular use. User is also responsible for compliance with all Federal, State, Provincial and Local laws and regulations. ISK Biocides, Inc. assumes no responsibility for injury, damage or loss resulting from the use of the material. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE, INCLUDING THAT THE INFORMATION OR PRODUCT MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS, ARE MADE HEREUNDER WITH RESPECT TO THE INFORMATION OR THE PRODUCT TO WHICH THE INFORMATION REFERS.

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