

# SAFETY DATA SHEET

ISK BIOCIDES, INC.

## SECTION 1: Identification

**Product identifier:** Tuff-Brite®.  
**Other means of identification:** None.  
**SDS number:** ISK009  
**Recommended use:** Control of sapstain and mold in freshly cut lumber and timbers.  
**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)  
7:00 – 4:30pm (Central time).  
(901) 344-5350 or (800) 248-7961.  
**Contact Person:** Anthony Accampo or Gail Watson  
**E-mail:** SDSInquiry@iskbiocides.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*

None.

### *Health hazards*

Acute toxicity, Inhalation Category 2.  
Serious eye damage Category 1.  
Skin sensitization Category 1.  
Carcinogenicity Category 2.  
Specific target organ toxicity, Single Exposure Category 3 Respiratory system.

### *Environmental hazards*

Acute aquatic toxicity Category 1.  
Chronic aquatic toxicity Category 1.

**Signal word:** **DANGER**

**Hazard statement(s):** May cause an allergic skin reaction.  
Causes serious eye damage.  
Fatal if inhaled.  
May cause respiratory irritation.

Suspected of causing cancer.  
Very toxic to aquatic life.  
Very toxic to aquatic life with long lasting effects.

**Hazard symbol(s):**



**Precautionary statement(s):**

**Prevention:**

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.  
Use only outdoors or in a well-ventilated area.  
Contaminated work clothing should not be allowed out of the workplace.  
Avoid release to the environment.  
Wear protective gloves/ eye protection/ face protection.  
Wear respiratory protection.

**Response:**

IF ON SKIN: Wash with plenty of soap and water.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER or doctor/ physician.  
Specific treatment is urgent (see supplemental first aid instructions on this label).  
If skin irritation or rash occurs: Get medical advice/ attention.  
Wash contaminated clothing before reuse.  
Collect spillage.

**Storage:**

Store in a well-ventilated place. Keep container tightly closed.

**Disposal:**

Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations.

**Hazard(s) not otherwise Classified (HNOC):** None known.

**Percentage of ingredient(s) of unknown acute toxicity:**  
48 % of the mixture consists of ingredients of unknown acute toxicity (oral/dermal).  
6 % of the mixture consists of ingredients of unknown acute toxicity (inhalation).

**SECTION 3: Composition/information on ingredients**

**Mixture:**

<b>Chemical name</b>	<b>Concentration (weight %)</b>	<b>CAS#</b>
Solvent naphtha (petroleum, medium aliphatic)	0.5 – 1%	64742-88-7
Chlorothalonil	40 - 45%	1897-45-6
Proprietary Component	1 – 10%	Proprietary

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld under trade secret rights.

**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 physician 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 physician for treatment advice.

**Ingestion:** Immediately call a poison control center or doctor. Rinse mouth with water. Do not induce vomiting unless told to do so by a poison control center or physician. 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:** Can cause eye damage, reversible corneal, iridal and conjunctival effects. May cause irritation to the respiratory tract. Can cause gastrointestinal irritation, nausea, vomiting, and diarrhea. Can result in some corrosive action to the mouth, throat, esophagus, and stomach tissue. Repeated or excessive dermal exposure may cause marked skin irritation. On overexposed skin, may cause moderate irritation, redness, and a flaky rash may result.

**Indication of immediate medical attention and special treatment needed:** If any symptoms described above are noted, contact a physician and give them this SDS sheet. Topical steroids have been effective in treatment of skin irritation.

#### **SECTION 5: Fire-fighting measures**

**Suitable extinguishing media:** Use water spray, dry chemical, foam, or carbon dioxide to extinguish flames. Use water spray to cool fire exposed containers. Water or foam may cause some foam and frothing.

**Unsuitable extinguishing media:** None known.

**Specific hazards arising from the chemical:** Fumes and vapors may contain hydrogen chloride and oxides of nitrogen.

*Hazardous combustion products may include:* Carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen chloride gas.

**Special protective equipment and precautions for fire-fighters:** Wear special chemical protective clothing and positive pressure self-contained breathing apparatus. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Decontaminate or discard any clothing that may contain chemical residue.

#### **SECTION 6: Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:**

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**Methods and materials for containment and cleaning up:**

**SMALL SPILL:** Wear appropriate protective clothing (see Section 8). Recover free material. Absorb remainder with sand or clay and place into drums. The floor may be slippery, avoid falls. Follow all local, state, and federal regulations for disposal. Do not discharge into lakes and streams.

**LARGE SPILL:** Wear appropriate protective clothing (see Section 8). 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. Avoid getting this material into contact with your skin and eyes. Use this product with adequate ventilation. Read and follow the directions on the product label; they are the best guide to using this product in the most effective way, and give the necessary safety precautions to protect your health.

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**Conditions for safe storage, including any incompatibles:** Store away from food or feed in a secure, well-ventilated area. Protect from extreme temperatures. Do not transfer to an unmarked container. Keep container closed when not in use. (See Section 10 for incompatibles).

## SECTION 8: Exposure controls/personal protection

### Control Parameters:

### Occupational exposure limits:

<b>US OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200): Permissible Exposure Limits</b>		
<b>Substance</b>	<b>PEL-TWA (8 hour)</b>	<b>PEL-STEL (15 min)</b>
Solvent naphtha (petroleum, medium aliphatic)	100 ppm (525 mg/m <sup>3</sup> )	Not available
Chlorothalonil	Not available	Not available
Proprietary Component	Not available	Not available

<b>ACGIH Threshold Limit Values</b>		
<b>Substance</b>	<b>TLV-TWA (8 hour)</b>	<b>TLV-STEL (15 min)</b>
Solvent naphtha (petroleum, medium aliphatic)	100 ppm	Not available
Chlorothalonil	Not available	Not available
Proprietary Component	Not available	Not available

**Other Exposure Limits:** Not available.

**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 goggles or face shield.

**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:** Airborne concentrations should be kept at the lowest possible levels. If vapor, mist or dust is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown.

**Other:** Wear long-sleeved shirts, long pants, and rubber boots or disposable coveralls when handling this product. The clothing should be changed daily. 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.

**Thermal hazards:** None known.

## SECTION 9: Physical and chemical properties

### Appearance:

**Physical state:** Flowable suspension.  
**Form:** Light off white flowable liquid.  
**Color:** Off white.

**Odor:** Slightly pungent.

**Odor threshold:** Not available.

**pH:** 6.4 – 7.4

**Melting point/freezing point:** Not known.

**Initial Boiling point/Boiling Range:** > 212°F.

**Flash point:** Not applicable. Will not flash.

**Evaporation rate:** > 1 (nBuAC=1)

**Flammability (solid, gas):** Not available.

### Upper/lower flammability or explosive limits

**Flammability limit – lower:** Non-combustible. Limits Not Applicable.

**Flammability limit – upper:** Non-combustible. Limits Not Applicable.

**Explosive limit – lower:** Non-combustible. Limits Not Applicable.

**Explosive limit – upper:** Non-combustible. Limits Not Applicable.

**Vapor pressure:** > 1

**Vapor density:** > 1

**Relative density (Specific gravity):** 1.20

**Solubilities (water, other):** Dispersible.

**Partition coefficient (n-octanol/water):** Not available.

**Auto-ignition temperature:** Not known.

**Decomposition temperature:** Not available.

**Viscosity:** 2250 -3250 cPs Brookfield #3 @ 20 rpm at 70°F.

### Other information:

**Bulk density:** 10 (weight per gallon cup) lbs per gal.

**VOC:** 113 g/L – 0.94 lbs/gal – 9.19 % weight

## 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:** None known.

**Incompatible materials:** None known.

**Hazardous decomposition Products:** Hydrogen chloride, Ethyl sulfide, Diethyl sulfide, and Nitrogen oxides.

## SECTION 11: Toxicological information

### Information on likely routes of exposure:

**Inhalation:** May cause irritation to the respiratory tract.

**Ingestion:** Can cause gastrointestinal irritation, nausea, vomiting, and diarrhea. Can result in some corrosive action to the mouth, throat, esophagus, and stomach tissue.

**Skin:** Repeated or excessive dermal exposure may cause marked skin irritation. On overexposed skin, may cause moderate irritation, redness, and a flaky rash may result.

**Eye:** Corrosive. Reversible corneal, iridal and conjunctival effects.

**Symptoms related to the physical, chemical, and toxicological characteristics:** None known.

**Delayed and immediate effects and chronic effects from short or long-term exposure:** None known.

### Acute toxicity:

#### Ingredient Information:

Substance	Test Type (species)	Value
Solvent naphtha (petroleum, medium aliphatic)	LD <sub>50</sub> Oral (Rat)	> 5000 mg/kg
	LD <sub>50</sub> Dermal (Rabbit)	> 2000 mg/kg
	LC <sub>50</sub> Inhalation, Vapor (Rat)	>5.5 mg/l (4h)
Chlorothalonil	LD <sub>50</sub> Oral (Rat)	10000 mg/kg
	LD <sub>50</sub> Dermal (Rabbit)	> 2000 mg/kg
	LC <sub>50</sub> Inhalation, (Rat)	220 mg/m <sup>3</sup> (4h)
Proprietary Component	LD <sub>50</sub> Oral (Rat)	Not available
	LD <sub>50</sub> Dermal (Rabbit)	Not available
	LC <sub>50</sub> Inhalation, (Rat)	Not available

#### Product Acute Toxicity Estimates:

Oral: Rat - LD<sub>50</sub> - 4200 mg/kg.

Dermal: Rabbit - LD<sub>50</sub> - > 2,000 and < 20000 mg/kg.

Inhalation: Rat -LC<sub>50</sub> - > 0.20 but < 2.1 mg/L.

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<b>Skin corrosion/irritation:</b>	May cause irritation to skin.
<b>Serious eye damage/eye irritation:</b>	Irritant to eyes causing Reversible corneal, iridal and conjunctival effects.
<b>Respiratory sensitization:</b>	Based upon information available on the known components, the product is not anticipated to cause respiratory sensitization.
<b>Skin sensitization:</b>	Based upon information available on the known components, the product may cause skin sensitization.
<b>Germ cell mutagenicity:</b>	Based upon information available on the known components, the product is not anticipated to be a mutagen.
<b>Carcinogenicity:</b>	Chlorothalonil is listed as a carcinogen or potential carcinogen by California Proposition 65 and the US National Toxicology Program (NTP).
<b>Reproductive toxicity:</b>	Based upon information available on the known components, the product is not anticipated to have reproductive toxicity.
<b>Specific target organ toxicity- Single exposure:</b>	Based upon information available on the known components, the product may cause specific target organ toxicity to the respiratory system after a single exposure.
<b>Specific target organ toxicity- Repeat exposure:</b>	Based upon information available on the known components, the product is not anticipated to cause specific target organ toxicity after repeated or prolonged exposure.
<b>Aspiration hazard:</b>	Based upon information available on the known components, the product is not anticipated to be an aspiration hazard.
<b>Further information:</b>	Not available.



**SECTION 12: Ecological information**

**Ecotoxicity**

**Product data:** No data available.

**Ingredient Information:**

Substance	Test Type	Species	Value
Solvent naphtha (petroleum, medium aliphatic)	LC <sub>50</sub> Freshwater Fish	Fish	800 mg/l – 96 h
	EC <sub>50</sub> Daphnia magna (Water flea)	Invertebrate	100 mg/l – 48 h
	EC <sub>50</sub> Selenastrum capricornutum	Algae	450 mg/l – 96 h
Chlorothalonil	LC <sub>50</sub> Oncorhynchus mykiss (rainbow trout)	Fish	0.012 mg/l - 96 h
	EC <sub>50</sub> Daphnia magna (Water flea)	Invertebrate	0.06 mg/l - 48 h
	EC <sub>50</sub> Desmodesmus subspicatus (green algae)	Algae	0.6 mg/l - 72 h
Proprietary Component	LC <sub>50</sub>	Fish	No data available
	EC <sub>50</sub>	Invertebrate	No data available
	LC <sub>50</sub>	Algae	No data available

**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:**

If these wastes cannot be disposed of according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance. Open dumping is prohibited. Pesticide wastes are acutely hazardous. 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:** UN 2810 Toxic Liquid, Organic, N.O.S (contains Tetrachloroisophthalonitrile), 6.1, PG III.

**IATA:** UN 2810 Toxic Liquid, Organic, N.O.S (contains Tetrachloroisophthalonitrile), 6.1, PG III.

**IMDG:** UN 2810 Toxic Liquid, Organic, N.O.S (contains Tetrachloroisophthalonitrile), 6.1, PG III.

**Special precautions during transport:** Not available.

**Bill of lading classification** = Preservatives, wood, n.o.i NMFC 161490, sub 2

## SECTION 15: Regulatory Information

### USA:

**FIFRA:** Pesticide Registration:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals.

Following is the hazard information as required on the pesticide label:

**WARNING**

May be fatal if inhaled.

Harmful if swallowed.

Harmful if absorbed through skin.

Causes moderate eye irritation.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

This pesticide is toxic to fish, aquatic vertebrates & invertebrates, marine/estuarine organisms and wildlife.

**United States Federal Regulations:** SDS complies with the OSHA, 29 CFR 1910.1200.

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

Section 302 – None of the chemicals are EPCRA hazards.

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

CHEMICAL	C.A.S. Number	Weight %	Section 311/312
Solvent naphtha (petroleum, medium aliphatic)	64742-88-7	0.5 – 1%	Fire Hazard, Acute Health Hazard
Chlorothalonil	1897-45-6	40 – 45%	Acute Health Hazard, Chronic

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			Health Hazard
Proprietary Component	Proprietary	1 – 10%	Acute Health Hazard

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

**Toxic Substance Control Act (TSCA):** All substances are TSCA listed.

**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. Chlorothalonil.

**New Jersey Right to Know:** The following components are listed on the New Jersey Right to Know list: Chlorothalonil.

**Pennsylvania Right to Know:** The following components are listed on the Pennsylvania Right to Know list: Chlorothalonil.

**Massachusetts Right to Know:** The following components are listed on the Massachusetts Right to Know list: Chlorothalonil.

### INTERNATIONAL REGULATIONS:

**Canadian Regulations** Class D1B: Toxic material.

**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 25, 2014.

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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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