SAFETY DATA SHEET

ISK BIOCIDES, INC.

SECTION 1: Identification

Product identifier:	NeX-Brite [®]		
Other means of identification:	Iron Stain Inhibitor		
SDS number:	ISK006		
Recommended use:	Lumber Brightener, Deflocculant & Iron Sequesterant for		
	use in lumber anti-sapstain solutions.		
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 (24hours).		

SECTION 2: Hazard(s) identification

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

Physical hazards

Corrosive to metals Category 1

Health hazards

Serious eye damage Category 1 Acute toxicity (oral), Category 4 Skin corrosion, Category 1A Serious eye damage Category 1

Environmental hazards None.

Signal word:

DANGER

Hazard statement(s):

May be corrosive to metals. Harmful if swallowed. Causes severe skin burns and eye damage.

Hazard symbol(s):



Precautionary statement(s) Prevention:	Keep only in original container. Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.
Response:	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep 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. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.
Storage:	Store in corrosive resistant stainless steel container with a resistant inner liner.
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

52% of the mixture consists of ingredient(s) of unknown acute toxicity (oral)56% of the mixture consists of ingredient(s) of unknown acute toxicity (dermal)56% of the mixture consists of ingredient(s) of unknown acute toxicity (inhalation)

SECTION 3: Composition/information on ingredients

Chemical name	Concentration (weight %)	CAS#
1-Hydroxyethylidene 1,1- diphosphonic acid	48.3 - 51.7%	2809-21-4
Phosphonic acid	< 4.2%	13598-36-2

Mixture: 1-Hydroxyethylidene 1,1-diphosphonic acid in Water

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 physician 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. 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: May cause irreversible eye damage, damage to the mouth, throat, esophagus, and stomach tissue. Prolonged or repeated contact may result in severe skin irritation and possible burning. Possible chronic effects include toxicity to bone and blood. Anemia and skin diseases. May decrease the affinity of hemoglobin for oxygen.

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.

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: Thermal decomposition may produce toxic fumes.

Hazardous combustion products may include: Carbon monoxide, carbon dioxide, Phosphine Gas, Oxides of Phosphorus.

Special protective equipment and precautions for fire-fighters: Wear special chemical protective clothing and full protective clothing. 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 protective equipment when handling. Use only with adequate ventilation. Wash thoroughly after handling. Do not get in eyes, on skin, or clothing. Do not swallow.

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). 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 in a secure, well-ventilated area protected 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

US OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200): Permissible Exposure Limits				
Substance PEL-TWA PEL-STEL				
(8 hour) (15 min)				
1-Hydroxyethylidene 1,1-	Not available	Not available		
diphosphonic acid				
Phosphonic acid Not available Not available				

ACGIH Threshold Limit Values			
Substance	TLV-TWA (8 hour)	TLV-STEL (15 min)	
1-Hydroxyethylidene 1,1- diphosphonic acid	Not available	Not available	
Phosphonic acid	Not available	Not available	

Other Exposure Limits: 1-Hydroxyethylidene 1,1-diphosphonic acid: TEEL-0; 10mg/m3. TEEL-1; 30mg/m3. TEEL-2; 50mg/m3. TEEL-3; 500mg/m3. (US DOE Temporary Emergency Exposure Limits (TEELs)). Phosphonic acid: TEEL-0; 1 mg/m3. TEEL-1; 3 mg/m3. TEEL-2; 200 mg/m3. TEEL-3; 500mg/m3. (US DOE Temporary Emergency Exposure Limits (TEELs)).

Appropriate engineering controls: None normally required, use local exhaust if necessary. 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 impervious gloves, such as: Nitrile Rubber, Neoprene, PVA, PVC, or NBR(Buna-N). 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: Impervious boots (nitrile rubber/neoprene/PVC), aprons, hats, or chemical suits should be worn when necessary to prevent skin contact. 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:	Liquid.
Form:	Clear yellow to amber liquid.
Color:	Clear yellow to amber.
Odor:	Faint acidic.
Odor threshold:	Not available.
pH:	1.4-2.4
Melting point/freezing point:	not known.
Initial Boiling point/Boiling Range:	> 212°F

Flash point:	> 200°F TCC.
Evaporation rate:	<1 (nBuAC=1)
Flammability (solid, gas):	Not available
Upper/lower flammability or explosiv	e 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:	< 17
Vapor density:	>1
Relative density (Specific gravity):	1.45
Solubilities (water, other):	Miscible in water.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature:	Not known.
Decomposition temperature:	Not available.
Viscosity:	13.5 seconds #2 zahn cup@70°F (approximately 5
	cPs).
Other information	
Bulk density:	12.1 lbs per gal (Water $@20C = 8.33$).
VOC (Weight %):	0% (none).

SECTION 10: Stability and Reactivity

Reactivity: Stable.

Chemical stability: Stable in normal use.

Possibility of hazardous reactions: Material is not known to polymerize.

Conditions to avoid: High temperatures (Greater than 200°F).

Incompatible materials: Alkalines, Strong oxidants.

Hazardous decomposition Products: Carbon monoxide, carbon dioxide, Phosphine Gas, Oxides of Phosphorus.

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation: Can cause severe irritation and damage to mucosal surfaces. Can cause nasal and respiratory irritation, dizziness, nausea, vomiting, headache, and weakness. Excessive breathing of vapors may result in unconsciousness, and possibly death. May cause irritation to upper respiratory tract as evidenced by sneezing and coughing. **Ingestion:** Can cause severe irritation and damage to mucosal surfaces. Can result in some corrosive action to the mouth, throat, esophagus, and stomach tissue. **Skin:** Prolonged or repeated contact may result in severe skin irritation and possible burning. Possible chronic effects include toxicity to bone and blood. **Eye:** Corrosive. Causes irreversible eye damage.

Symptoms related to the physical, chemical, and toxicological characteristics: Anemia and skin diseases generally aggravated by exposure. May decrease the affinity of hemoglobin for oxygen.

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

Acute toxicity:

Product data:

Ingredient Information:

Substance	Test Type (species)	Value	
	LD ₅₀ Oral (Rat)	2400 mg/kg	
1-Hydroxyethylidene	LD ₅₀ Dermal (Rabbit)	Not available	
1,1-diphosphonic acid	LC ₅₀ Inhalation, Vapor	Not available	
	(Rat)	Not available	
	LD50 Oral (Rat)	1895 mg/kg	
Phosphonic acid	LD50 Dermal (Rat)	> 5000 mg/kg	
	LC50 Inhalation, Dust	$> 2.06 \text{ g/m}^3 (4\text{h})$	
	(Rat)	> 2.00 g/III (4II)	

Product Acute Toxicity Estimates:

This toxicity data is based on studies conducted on primary raw materials. Oral (rat): > 2000 mg/kg Dermal (rabbit): > 10000 mg/kg Inhalation: Not available.

Skin corrosion/irritation:	May be corrosive to skin and cause irritations and burns.
Serious eye damage/eye irritation:	Corrosive to eyes causing serious burns and possible permanent damage.
Respiratory sensitization:	Based upon information available on the known components, the product is not anticipated to be a respiratory sensitizer.
Skin sensitization:	Based upon information available on the known components, the product is not anticipated to be a skin sensitizer.
Germ cell mutagenicity:	Based upon information available on the known components, the product is not anticipated to be a mutagen.
Carcinogenicity:	Based upon information available on the known components, the product is not anticipated to be a carcinogen.

Reproductive toxicity:	Based upon information available on the known components, the product is not anticipated to have 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: None available.

Ingredient Information:

Substance	Test Type	Species	Value
1-	LC ₅₀	Fish	Not available
Hydroxyethylidene	EC ₅₀	Invertebrate	Not available
1,1-diphosphonic	LC ₅₀	Algae	Not available
acid			
Phosphonic acid	LC ₅₀	Fish	Not available
	EC ₅₀	Invertebrate	Not available

Persistence and degradability Bioaccumulative potential Mobility in soil Mobility in general Other adverse effects

Not available. Not available. Not available. Not available. 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 at an approved waste disposal facility in accordance with all Federal, State, and local regulations.

SECTION 14: Transport Information

DOT: UN3265, Corrosive liquid, acidic, organic n.o.s. (contains phosphonic acid), 8, PG III. **IATA:** UN3265, Corrosive liquid, acidic, organic n.o.s. (contains phosphonic acid), 8, PG III. **IMDG:** UN3265, Corrosive liquid, acidic, organic n.o.s. (contains phosphonic acid), 8, PG III.

Special precautions during transport: Not available.

Bill of lading classification: Washing compound, n.o.i. NMFC 48580, sub 3.

SECTION 15: Regulatory Information

USA:

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
1-Hydroxyethylidene 1,1-diphosphonic acid	2809-21-4	48.3 - 51.7%	Acute health hazard.
Phosphonic acid	13598-36-2	< 0.42 %	Acute 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.

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: Chemicals in this product are not on the list.

New Jersey Right to Know: All components are listed.

Pennsylvania Right to Know: All components are listed.

INTERNATIONAL REGULATIONS:

Canadian Regulations Class E: Corrosive 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 10, 2014

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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