

SAFETY DATA SHEET

ISK BIOCIDES, INC.

SECTION 1: Identification

Product identifier: PQ-8®.
Other means of identification: PQ-8 Liquid Antimicrobial Concentrate.
SDS number: ISK016
Recommended use: For control of sapstain and mold in freshly cut lumber and timber.
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:

Flammable liquid, Category 3.

Health hazards:

Acute toxicity (oral), Category 4.

Acute toxicity (inhalation - vapor), Category 1.

Skin corrosion, Category 1B.

Serious eye damage, Category 1.

Environmental hazards:

Acute aquatic toxicity, Category 1.

Chronic aquatic toxicity, Category 1.

Signal word: DANGER

Hazard statement(s): Flammable liquid and vapor.
Harmful if swallowed.
Causes severe skin burns and eye damage.
Fatal if inhaled.

Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

Hazard symbol(s):



Precautionary statement(s):

Prevention:

Keep away from heat/sparks/open flames/hot surfaces –
No smoking.
Keep container tightly closed.
Use explosion-proof
electrical/ventilating/light/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye
protection/face protection.
Wear respiratory 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 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 instructions on this
label).
Rinse mouth.
Wash contaminated clothing before reuse.
In case of fire: Use suitable media for extinction.
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:
56% of the mixture consists of ingredients of unknown acute toxicity (oral/dermal/inhalation).

SECTION 3: Composition/information on ingredients

Mixture:

Chemical name	Concentration (weight %)	CAS#
Copper 8-Quinolinolate	5.1 - 5.7	10380-28-6
Ethanol	9.6 – 10.2	64-17-5
Methanol	0.6 – 2.2	67-56-1
Isopropanol	0 – 1.8	67-63-0
C10-16-alkylbenzene sulfonic acid	33.0 – 35.0	68584-22-5
Benzene, C10-16-Alkyl derivatives.	0.32 – 0.38	68648-87-3

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: Causes irreversible eye damage. Can cause severe irritation and damage to mucosal surfaces. Can cause gastrointestinal irritation, nausea, vomiting, and diarrhea. Can cause nasal and respiratory irritation, dizziness, nausea, vomiting, headache, and weakness. Excessive breathing of vapors may result in unconsciousness, and possibly death. Prolonged or repeated contact may result in severe skin irritation and possible burning. Prolonged exposure may result in material being absorbed in harmful amounts. Non-sensitizer.

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: Alcohol foam, carbon dioxide, dry chemical.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: Fumes and vapors may contain sulfur dioxide. Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by ignition sources at locations distant from the material handling point.

Hazardous combustion products may include: Carbon monoxide, Carbon dioxide, Sulfur compounds.

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 breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

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. Neutralize carefully with lime, sodium carbonate, or sodium bicarbonate.

LARGE SPILL: Wear appropriate protective clothing (see Section 8). Eliminate all ignition sources. Restrict access to contaminated area. Stop spill at source. Dike to prevent spreading. Pump liquid to a recovery vessel. Neutralize carefully with lime, sodium carbonate, or sodium bicarbonate. 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. Persons performing this work should wear adequate personal protective equipment and clothing. 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.

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. Do not store or use in vicinity of sparks, open flame, or other ignition sources. (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 (8 hour)	PEL-STEL (15 min)
Copper 8-Quinolinolate	None available	None available
Ethanol	1000 ppm (1900 mg/m ³)	None available
Methanol	200 ppm (260 mg/m ³)	None available
Isopropanol	400 ppm (980 mg/m ³)	None available
C10-16-alkylbenzene sulfonic acid	None available	None available
Benzene, C10-16-Alkyl derivatives.	None available	None available

ACGIH Threshold Limit Values		
Substance	TLV-TWA (8 hour)	TLV-STEL (15 min)
Copper 8-Quinolinolate	None available	None available

Ethanol	1000 ppm (1900 mg/m ³)	None available
Methanol	200 ppm (260 mg/m ³)	250 ppm (325 mg/m ³)
Isopropanol	400 ppm (980 mg/m ³)	500 ppm (1225 mg/m ³)
C10-16-alkylbenzene sulfonic acid	None available	None available
Benzene, C10-16-Alkyl derivatives.	None available	None available

Other Exposure Limits: Ethanol NIOSH TWA – 1000ppm (1900mg/m³)
(National Institute for Occupational Safety and Health).

Methanol NIOSH TWA – 200ppm (260mg/m³) STEL 250 ppm (325 mg/m³), (National Institute for Occupational Safety and Health).

Isopropanol NIOSH TWA – 400ppm (980mg/m³) STEL 500 ppm (1225 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 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: If TLV for product or any component is exceeded, use a MSHA/NIOSH-approved respirator.

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 orange liquid.
Color: Clear orange.

Odor:

Alcoholic.

Odor threshold:

Not known.

pH:

1.0 – 2.0

Melting point/freezing point:

Not known.

Initial Boiling point/Boiling Range:

Not known.

Flash point:

101 °F PMCC.

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:

< 50 mm Hg.

Vapor density:

> 1 (air = 1).

Relative density (Specific gravity):

1.01 – 1.07

Solubilities (water, other):

Soluble.

Partition coefficient (n-octanol/water):

Not available.

Auto-ignition temperature:

Not known.

Decomposition temperature:

Not available.

Viscosity:

70 - 120 cPs Brookfield #1 @ 20 rpm at 70°F.

Other information:

Bulk density: 8.45 – 8.85 lbs per gal (weight per gallon cup).

VOC: 195 g/L – 1.62 lbs/gal – 18.2 weight %

SECTION 10: Stability and Reactivity

Reactivity: Stable.

Chemical stability: This material is stable under normal handling and storage conditions.

Possibility of hazardous reactions: Thermal decomposition may produce toxic fumes.

Material is not known to polymerize.

Conditions to avoid: None known.

Incompatible materials: Alkalines, Strong oxidants.

Hazardous decomposition Products: Carbon monoxide, Carbon dioxide, Sulfur compounds.

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.

Ingestion: Can cause severe irritation and damage to mucosal surfaces. Can cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Skin: Prolonged or repeated contact may result in severe skin irritation and possible burning. Prolonged exposure may result in material being absorbed in harmful amounts. Non-sensitizer.

Eye: Corrosive. Causes irreversible eye damage.

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
Copper 8-Quinolinolate	LD ₅₀ Oral (Rat)	9930 mg/kg
	LD ₅₀ Dermal (Rabbit)	> 2000 mg/kg
	LC ₅₀ Inhalation (Rat)	820 mg/m ³
Ethanol	LD ₅₀ Oral (Rat)	7060 mg/kg
	LD ₅₀ Dermal (Rabbit)	Not available
	LC ₅₀ Inhalation, Vapor (Rat) 10h	20000 ppm
Methanol	LD ₅₀ Oral (Rat)	1187 - 2769 mg/kg
	LD ₅₀ Dermal (Rabbit)	17100 mg/kg
	LC ₅₀ Inhalation, Vapor (Rat)	4 h - 128.2 mg/l 6 h - 87.6 mg/l
Isopropanol	LD ₅₀ Oral (Rat)	5045 mg/kg
	LD ₅₀ Dermal (Rabbit)	12800 mg/kg
	LC ₅₀ Inhalation, Vapor (Rat)	16000 ppm
C10-16-alkylbenzene sulfonic acid	LD ₅₀ Oral (Rat)	> 2000 mg/kg
	LD ₅₀ Dermal (Rabbit)	> 2000 mg/kg
	LC ₅₀ Inhalation, (Rat)	Not available
	LD ₅₀ Oral (Rat)	>15800 mg/kg

Benzene, C10-16- Alkyl derivatives.	LD50 Dermal (Rabbit)	5010 mg/kg
	LC50 Inhalation, (Rat)	Not available

Product Acute Toxicity Estimates:

Oral: Rat - LD₅₀ – 1330 mg/kg.
Dermal: Rat - LD₅₀ - > 2020 mg/kg.
Inhalation (4h): Rat - LC₅₀ – 0.11 mg/l.

- Skin corrosion/irritation:** Primary skin irritation rabbit: Corrosive. Can cause severe irritation and possible burning.
- Serious eye damage/eye irritation:** Primary eye irritation rabbit: Corrosive. Causes irreversible eye damage.
- Respiratory sensitization:** Based upon information available on the known components, the product is not anticipated to cause respiratory sensitization.
- Skin sensitization:** Dermal Sensitization: Not a sensitizer.
- Germ cell mutagenicity:** Based upon information available on the known components, the product is not anticipated to cause germ cell mutagenicity.
- Carcinogenicity:** Based upon information available on the known components, the product is not anticipated to be carcinogenic.
- Reproductive toxicity:** Based upon information available on the known components, the product contains a component known to cause birth defects or other reproductive harm (Methanol).
- Specific target organ toxicity-
Single exposure:** Based upon information available on the known components, the product may cause specific target organ toxicity after a 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
Copper 8-Quinolinolate	LC ₅₀ Oncorhynchus mykiss (rainbow trout)	Fish	140ug/L – 48h
	EC ₅₀ Daphnia magna (Water flea)	Invertebrate	163 ppb – 48h
	LC ₅₀	Algae	Not available
Ethanol	LC ₅₀	Fish	Not available
	EC ₅₀	Invertebrate	Not available
	LC ₅₀	Algae	Not available
Methanol	LC ₅₀ Lepomis macrochirus (Bluegill)	Fish	15400 mg/l - 96 h
	EC ₅₀ Daphnia magna (Water flea)	Invertebrate	> 10000 mg/l - 48 h
	LC ₅₀ Scenedesmus capricornutum (fresh water algae)	Algae	22000 mg/l - 96 h
Isopropanol	LC ₅₀ Pimephales promelas (fathead minnow)	Fish	9640 mg/l - 96 h
	EC ₅₀ Daphnia magna (Water flea)	Invertebrate	5102 mg/l - 24 h
	LC ₅₀ Desmodesmus subspicatus (green algae)	Algae	> 2000 mg/l - 72 h
	LC ₅₀	Fish	Not available

C10-16-alkylbenzene sulfonic acid	EC ₅₀ Ceriodaphnia dubia (Water flea)	Invertebrate	5.65 mg/l – 48h
	LC ₅₀	Algae	Not available
Benzene, C10-16-Alkyl derivatives.	LC ₅₀	Fish	Not available
	EC ₅₀	Invertebrate	Not available
	LC ₅₀	Algae	Not 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:

PESTICIDE DISPOSAL METHODS: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use 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.

CONTAINER DISPOSAL: Do not reuse empty container. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or, puncture and dispose of in a sanitary landfill, or, incinerate in accordance with Federal, State or local authorities.

SECTION 14: Transport Information

DOT: UN2924, Flammable liquid, corrosive, n.o.s. (Ethyl alcohol, Dodecylbenzenesulfonic acid), 3 (8) PG III.
IATA: UN2924, Flammable liquid, corrosive, n.o.s. (Ethyl alcohol, Dodecylbenzenesulfonic acid), 3 (8) PG III.
IMDG: UN2924, Flammable liquid, corrosive, n.o.s. (Ethyl alcohol, Dodecylbenzenesulfonic acid), 3 (8) PG III.

Emergency Response Guide: ERG #132 FLAMMABLE LIQUIDS – CORROSIVE.

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:

DANGER.

Combustible.

Harmful if swallowed.

Harmful if inhaled.

Harmful if absorbed through the skin.

Corrosive. Causes skin burns.

Corrosive. Causes irreversible eye damage.

This pesticide is toxic to fish, aquatic invertebrates, oysters and shrimp.

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:

The following components are subject to reporting levels established by SARA Title III, Section 302: None.

CHEMICAL	C.A.S. Number	Weight %	Section 311/312
Copper 8-Quinolinolate	10380-28-6	5.1 - 5.7	Fire Hazard.
Ethanol	64-17-5	9.6 – 10.2	Fire Hazard, Acute Health Hazard, Chronic Health Hazard.
Methanol	67-56-1	0.6 – 2.2	Fire Hazard, Acute Health Hazard, Chronic Health Hazard.
Isopropanol	67-63-0	0 – 1.8	Fire Hazard, Acute Health Hazard, Chronic Health Hazard.
C10-16-alkylbenzene sulfonic acid	68584-22-5	33.0 – 35.0	Not listed.
Benzene, C10-16-Alkyl derivatives.	68648-87-3	0.32 – 0.38	Not listed.

Section 313 – List of Toxic Chemicals (40CFR 372): This product contains the following components (at level of 1% or greater) found on the 313 list of Toxic Chemicals. Copper 8-Quinolinolate (listed under copper compounds), Methanol, Isopropanol.

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

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 birth defects or other reproductive harm. Methanol.

New Jersey Right to Know: The following components are listed on the New Jersey Right to Know list: Copper 8-Quinolinolate (listed under copper compounds), Ethanol, Methanol, Isopropanol, Benzene, C10-16-Alkyl derivatives (as Petroleum oil).

Pennsylvania Right to Know: The following components are listed on the Pennsylvania Right to Know list: Ethanol, Methanol, Isopropanol, C10-16-Alkyl derivatives (as Mineral oil mist).

INTERNATIONAL REGULATIONS:

Canadian Regulations Class B3: Combustible Liquids. Class D1A: Very toxic material causing immediate and serious 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 10th, 2023

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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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