



Trade name:	22 EXPRESS
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SECTION 1: Identification

Product identifier: 22 Express.
Other means of identification: 22 Express Liquid Antimicrobial Concentrate.
SDS number: ISK092

Recommended use of the chemical and restrictions on use:

Recommended use: For control of sapstain and mold in freshly cut lumber and timber
Recommended restrictions: Not intended for human consumption.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

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: Gail Watson.
Company Contact Email: 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

Flammable liquid, Category 3

Health hazards

Acute toxicity, Oral, Category 4.
Skin corrosion, Category 1C.
Skin Sensitization, Category 1
Serious eye damage, Category 1.

Environmental hazards

Not adopted under OSHA GHS §1910.1200.

Signal word: DANGER.

Hazard statement(s): Flammable liquid and vapor.
Harmful if swallowed.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Causes serious eye damage.

Hazard symbol(s):



Precautionary statement(s):

Prevention:

Keep away from heat/sparks/open flames/hot surfaces
No smoking.
Keep container tightly closed.
Ground/Bond container and receiving equipment.
Use explosion-proof electrical/ventilating/
lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
Do not eat, drink or smoke when using this product.
Contaminated work clothing should not be allowed out of
the workplace.
Wash hands thoroughly after handling.
Wear protective gloves/protective clothing/eye
protection/face protection.

Response:

If swallowed: Call a poison center/doctor if you feel
unwell.
If swallowed: Rinse mouth. Do NOT induce vomiting.
If on skin (or hair): 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/doctor.
Specific treatment (see supplemental first aid instructions
on this label).
If skin irritation or rash occurs: Get medical advice/

attention.
Wash contaminated clothing before reuse.
In case of fire: Use alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.

Storage: Store in a well-ventilated place. Keep cool.
Store locked up.

Disposal: Dispose of contents/ container to an approved waste disposal plant.

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

Percentage of ingredient(s) of unknown acute toxicity:

5% of the mixture consists of ingredients of unknown acute toxicity (oral).
32% of the mixture consists of ingredients of unknown acute toxicity (inhalation).
33% of the mixture consists of ingredients of unknown acute toxicity (dermal).

SECTION 3: Composition/information on ingredients

Mixture:

Chemical name	CAS#	Concentration (weight %)
Proprietary surfactant	Proprietary	20 - 30%
Ethanol	64-17-5	4 - 8%
Propiconazole	60207-90-1	1 - 3%
Tebuconazole	107534-96-3	< 1%

Note: The balance of the ingredients are not classified as hazardous or are below the concentration limit to be classified as hazardous, under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

SECTION 4: First-aid Measures

Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion:

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. Wash skin with soap or mild detergent and water for at least 15 minutes. Get medical attention if irritation develops or persists.

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: 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: Harmful if swallowed. Causes skin burns and serious eye damage. May cause an allergic skin reaction.

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 (and unsuitable) extinguishing media:

Suitable extinguishing media: Use alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products): None known.

Hazardous combustion products may include: May form carbon oxides, oxides of sulfur and hydrogen sulfide, nitrogen oxides (NO_x), hydrogen chloride gas.

Special protective equipment and precautions for fire-fighters: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

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:

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7: Handling and Storage

Precautions for safe handling: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. 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.

SECTION 8: Exposure controls/personal protection

OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available.

US OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200): Permissible Exposure Limits		
Substance	PEL-TWA (8 hour)	PEL-STEL (15 min)
Proprietary surfactant	Not available	Not available
Ethanol	1000 ppm 1900 mg/m3	Not available
Propiconazole	Not available	Not available
Tebuconazole	Not available	Not available

ACGIH Threshold Limit Values		
Substance	TLV-TWA (8 hour)	TLV-STEL (15 min)
Proprietary surfactant	Not available	Not available
Ethanol	1000 ppm	1000 ppm
Propiconazole	Not available	Not available
Tebuconazole	Not available	Not available

Appropriate engineering controls:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Face shield and safety glasses. Use equipment for eye protection that are tested and approved by NIOSH.

Skin and hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH.

Other: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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:	Liquid.
Form:	Dark Brown Translucent Liquid.
Color:	Very Dark with Red/Amber Undertone.
Odor:	Sweet Alcoholic.
Odor threshold:	Not known.
pH:	2.23
Melting point/freezing point:	Not known.
Initial Boiling point and boiling range:	Not known
Flash point:	43.3°C (110°F)
Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined.
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 determined.
Vapor density:	Not determined.
Relative density (Specific gravity):	1.024
Solubility(ies):	Soluble in water. Soluble in many alcohols and

Glycols.
Partition coefficient (n-octanol/water): Not available.
Auto-ignition temperature: Not known.
Decomposition temperature: Not known.
Viscosity: 100 cPs, Brookfield #2 @ 20 rpm.
Other information:
Bulk density: 8.53 pounds per gallon.

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: Heat, flames and sparks.
Incompatible materials: Alkali metals, Oxidizing agents, Peroxides.
Hazardous decomposition Products: May form carbon oxides, oxides of sulfur and hydrogen sulfide, nitrogen oxides (NO_x), hydrogen chloride gas.

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. Skin sensitizer.

Eye: Corrosive. Causes irreversible eye damage.

Symptoms related to the physical, chemical, and toxicological characteristics:

Harmful if swallowed. Causes skin burns and serious eye damage.

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

May cause an allergic skin reaction.

**Numerical measures of toxicity (such as acute toxicity estimates):
Ingredient Information:**

Substance	Test Type (species)	Value
Proprietary surfactant	LD ₅₀ Oral (Rat)	> 5000 mg/kg
	LD ₅₀ Dermal (Rabbit)	> 5000 mg/kg
	LC ₅₀ Inhalation, Dust	> 1.9 mg/l (4h)
Ethanol	LD ₅₀ Oral (Rat)	10470 mg/kg
	LD ₅₀ Dermal (Rabbit)	15800 mg/kg
	LC ₅₀ Inhalation (Rat)	30000 mg/l (4h)
Propiconazole	LD ₅₀ Oral (Rat)	1517 mg/kg 1700 mg/kg
	LD ₅₀ Dermal (Rat)	> 4000 mg/kg
	LC ₅₀ Inhalation (Rat)	> 1264 mg/m ³ (4h)
Tebuconazole	LD ₅₀ Oral (Rat)	1700 mg/kg
	LD ₅₀ Dermal (Rat)	> 5000 mg/kg
	LC ₅₀ Inhalation (Rat)	> 800 mg/m ³ (4h)

Product Acute Toxicity Estimates:

Oral: Rat - LD₅₀ - >2000mg/kg
Dermal: Rat - LD₅₀ - >2000 mg/kg
Inhalation (4h): Rat - 0.35 mg/L

Skin corrosion/irritation: May be severely irritating to skin. May cause burns.

Serious eye damage/eye irritation: Corrosive to eyes causing irreversible eye damage.

Respiratory sensitization: Based upon information available on the known components, the product is not anticipated to cause respiratory sensitization.

Skin sensitization: Skin sensitizer. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

Germ cell mutagenicity: Based upon information available on the known components, the product is not anticipated to cause germ cell mutagenicity.

Carcinogenicity: No information available on the mixture, however none of the components are listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA.

Reproductive toxicity: Based upon information available on the known components, the product is not suspected of damaging fertility.

**Specific target organ toxicity-
Single exposure:** Based upon information available on the known components, the product is not expected to cause specific target organ toxicity from a single exposure.

**Specific target organ toxicity-
Repeat exposure:** Based upon information available on the known components, the product is not expected to cause specific target organ toxicity from repeated exposure.

Aspiration hazard: Based upon information available on the known components, the product is not anticipated to be an aspiration hazard.

SECTION 12: Ecological information

Ecotoxicity (aquatic and terrestrial, where available):

Product data: No data available.

Ingredient Information:

Substance	Test Type	Species	Value
Proprietary surfactant	LL ₅₀ Cyprinodon variegatus □ (sheepshead minnow)	Fish	>10000 mg/L (96h)
	EC ₅₀ Daphnia Magna (water flea)	Invertebrate	>1000 mg/L (48h)

	EC ₅₀ Pseudokirchnerella subcapitata	Algae	>1000 mg/L (96h)
Ethanol	LC ₅₀ Pimephales promelas (fathead minnow)	Fish	14200 mg/L (48h)
	EC ₅₀ Ceriodaphnia dubia (water flea)	Invertebrate	5012 mg/l (48h)
	LC ₅₀ Chlorella vulgaris (Fresh water algae)	Algae	275 mg/l (72 h)
Propiconazole	LC ₅₀ Oncorhynchus mykiss (rainbow trout)	Fish	0.9 - 1.2 mg/l (96 h)
	EC ₅₀ Daphnia magna (Water flea)	Invertebrate	4.8 mg/l (48 h)
	LC ₅₀ Pseudokirchneriella subcapitata (green algae)	Algae	5 mg/l (72 h)
Tebuconazole	LC ₅₀ Carassius auratus (goldfish)	Fish	8.7 mg/l (96 h)
	EC ₅₀ Daphnia magna (Water flea)	Invertebrate	11.8 mg/l (48 h)
	LC ₅₀ Desmodesmus subspicatus (green algae)	Algae	5.3 mg/l (72 h)

- Persistence and degradability:** Based upon the known components, this product is expected to be readily biodegradable.
- Bioaccumulative potential:** Based upon the known components, this product is expected to have low potential for bioaccumulation.
- Mobility in soil:** Based upon the known components, this product is expected to have moderate mobility in soil.
- Other adverse effects (such as hazardous to the ozone layer):** This material is expected to be toxic to aquatic life.

SECTION 13: Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:

Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging:

Empty remaining contents. Dispose of unused contents and packaging as unused product. Do not re-use empty containers.

SECTION 14: Transport Information

US Department of Transportation Classification (49CFR)

UN number UN 2924
UN proper shipping name Flammable liquid, corrosive, n.o.s. (Ethyl alcohol,
Dodecylbenzenesulfonic acid)
Transport hazard class(es) 3,8
Packing group, if necessary II
ERG #: 132
Bill of lading classification: Preservatives, wood, n.o.i
National Motor Freight
Classification NMFC 161490, sub 2.

Maritime transport IMDG

UN number UN 2924
Proper shipping name Flammable liquid, corrosive, n.o.s. (Ethyl alcohol,
Dodecylbenzenesulfonic acid)
Transport hazard class(es) 3, 8
Packing group, if necessary II

Air transport ICAO-TI and IATA-DGR

UN number UN 2924
UN proper shipping name Flammable liquid, corrosive, n.o.s. (Ethyl alcohol,
Dodecylbenzenesulfonic acid)
Transport hazard class(es) 3, 8
Packing group, if necessary II

Environmental hazards

Marine pollutant: Yes.

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

No further relevant information available.

Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises.

None.

SECTION 15: Regulatory Information

USA:

United States Federal Regulations: This 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 302.4: Dodecyl benzene sulfonic acid (RQ =1000lbs),

CHEMICAL	C.A.S. Number	Weight %	Section 311/312
Proprietary surfactant	Proprietary	20 - 30%	Acute Health Hazard,
Ethanol	64-17-5	4 - 8%	Fire Hazard, Acute Health Hazard, Chronic Health Hazard
Propiconazole	60207-90-1	1 – 3%	Acute Health Hazard
Tebuconazole	107534-96-3	< 1%	Acute Health Hazard, Chronic Health Hazard

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.
Propiconazole

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

STATE REGULATIONS:

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

California Proposition 65: No components are listed on Prop 65.

New Jersey Right to Know: The following components are listed on the New Jersey Right to Know list: 1-(4-Chlorophenyl)-4,4-dimethyl-3-(1,2,4-triazol-1-ylmethyl)pentan-3-ol, Propiconazole, Ethanol

Pennsylvania Right to Know: The following components are listed on the Pennsylvania Right to Know list: 1-(4-Chlorophenyl)-4,4-dimethyl-3-(1,2,4-triazol-1-ylmethyl)pentan-3-ol, Propiconazole, Ethanol

INTERNATIONAL REGULATIONS:

Canadian Regulations

Class B3: Combustible Liquids: Flashpoint of 37.8°C – 93.3°C (100°F - 200°F)

Class D2B: Toxic Material at $\geq 1\%$ Skin Sensitization — Allergic skin reaction.

Class E: Corrosive Material at $\geq 1\%$

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

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.