

# SAFETY DATA SHEET

1. Identification

Product identifier ACQ Treated Wood

Other means of

identification SDS 220-KPC

**Recommended use** Preservative Treated Wood for various interior and exterior applications.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

**Company name**Koppers Performance Chemicals Inc.
Address
1016 Everee Inn Rd., Griffin, GA 30224

**Telephone number** 770-233-4200

Contact person Regulatory Manager, KPC Inc.

Emergency phone number CHEMTREC: 1-800-424-9300

E-mail KPCmgrsds@koppers.com

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2A

Carcinogenicity Category 1A

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

**OSHA** defined hazards

Label elements

Combustible dust



Signal word Danger

Hazard statement Causes skin irritation. Causes serious eye irritation. May cause cancer by inhalation. May cause

respiratory irritation. May form combustible dust concentrations in air.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and

understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Prevent dust accumulation to minimize explosion hazard. Ground/bond container and receiving equipment. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust. Use only

outdoors or in a well-ventilated area. Wash thoroughly after handling.

Response If exposed or concerned: Get medical advice/attention. If on skin: Wash with plenty of water. If skin

irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. 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 medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. In case of

fire: Use CO2, foam or water spray for extinction.

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

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

None known.

## 3. Composition/information on ingredients

#### **Mixtures**

Chemical name	CAS number	%	
Wood/Wood dust	N/A	> 90	
Monoethanolamine (MEA)	141-43-5	< 6	
Copper complex expressed as Copper oxide	Proprietary	< 2	

# Composition comments

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Depending on the additives applied to the treating solution, this wood may also contain <1 % of mold inhibitors, <1% of a non-hazardous wax emulsion, and <% of a colorant.

This product contains one of the below listed Quaternary Ammonium compounds: Alkyl dimethyl benzyl ammonium chloride CAS No: 68391-01-5 < 2%

Didecyl dimethyl ammonium chloride CAS No: 7173-51-5 < 2%

Didecyl dimethyl ammonium carbonate and Didecyl dimethyl ammonium bicarbonate CAS No:

Proprietary <2%

Certain West Coast species of wood may contain ammonia which replaces some of the MEA: Ammonia (expressed as NH3) CAS No: 1336-21-6 <1%

# 4. First-aid measures

Inhalation

Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately. Some species may cause allergic respiratory reactions with asthma-like symptoms in sensitized individuals.

Skin contact

Remove contaminated clothing. Wash skin thoroughly with soap and water for several minutes. Prolonged contact with treated wood and/or treated wood dust, especially when freshly treated at the plant, may cause irritation to the skin. Abrasive handling or rubbing of the treated wood may increase skin irritation. Some wood species, regardless of treatment, may cause dermatitis or allergic skin reactions in sensitized individuals. In case of rashes, wounds or other skin disorders: Seek medical attention and bring along these instructions.

Eye contact

Do not rub eye. Immediately flush eye(s) with plenty of water. Remove any contact lenses and open eyelids wide apart. If eye irritation persists: Get medical advice/attention.

Ingestion

Rinse mouth thoroughly if dust is ingested. Get medical attention if any discomfort continues.

Most important symptoms/effects, acute and delayed

Wood dust: May cause nasal dryness, irritation and mucostasis. Coughing, wheezing, sneezing, sinusitis and prolonged colds have also been reported. Depending on wood species may cause respiratory sensitization and/or irritation. Symptoms can include irritation, redness, scratching of the cornea, and tearing. May cause eczema-like skin disorders (dermatitis). Airborne treated or untreated wood dust may cause nose, throat, or lung irritation and other respiratory effects.

Indication of immediate medical attention and special treatment needed

Treat symptomatically.

**General information** 

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

Suitable extinguishing media

Carbon dioxide, regular foam, dry chemical, water spray, or water fog.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Depending on moisture content, and more importantly, particle diameter and airborne concentration, wood dust in a contained area may explode in the presence of an ignition source. Wood dust may similarly deflagrate (combustion without detonation like an explosion) if ignited in an open or loosely contained area. An airborne concentration of 40 grams (40,000 mg) of dust per cubic meter of air is often used as the LEL for wood dusts. Reference NFPA Standards- 654 and 664 for guidance.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

Fire-fighting equipment/instructions Use water spray to cool fire exposed surfaces and to protect personnel.

#### 6. Accidental release measures

Personal precautions. protective equipment and emergency procedures

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Avoid generation and spreading of dust. Avoid spread of dust. Avoid inhalation of dust. Provide adequate ventilation. Wear appropriate personal protective equipment (See Section 8).

Methods and materials for containment and cleaning

Sweep or vacuum up spillage and collect in suitable container for disposal. If not possible, gently moisten dust before it is collected with shovel, broom or the like. Containers must be labeled. Although no EPA Waste Numbers are applicable for this product's components, you must test your waste to determine if it meets applicable definitions of hazardous waste and for State requirements. Dispose of waste material according to local, State and Federal regulations. For waste disposal, see Section 13 of the SDS.

**Environmental precautions** For good industrial practice avoid release to the environment.

# 7. Handling and storage

Precautions for safe handling

Avoid working with freshly treated wet wood. If not possible, wear long sleeve shirt, long pants and gloves when working with freshly treated wet wood. Clothing should be removed and replaced if it becomes wet due to contact with freshly treated wood. Avoid prolonged or repeated breathing of dust. Avoid contact with skin and eyes. Do not smoke. Do not burn preserved wood. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Store in tightly closed original container in a dry, cool and well-ventilated place. Store away from incompatible materials (See Section 10).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### **US. OSHA**

Components	Туре	Value	Form
Wood/Wood dust (CAS N/A)	PEL	5 mg/m3	Respirable dust.
,		15 mg/m3	Total fraction.
US. OSHA Table Z-1 Limits	s for Air Contaminants (29 CFR 1910.1000)		
Components	Туре	Value	
Monoethanolamine (MEA) (CAS 141-43-5)	PEL	6 mg/m3	
		3 ppm	
ACGIH			_
Components	Туре	Value	Form
Wood/Wood dust (CAS N/A)	TWA	1 mg/m3	Inhalable fraction.
US. ACGIH Threshold Lim	it Values		
Components	Туре	Value	
Monoethanolamine (MEA) (CAS 141-43-5)	STEL	6 ppm	
	TWA	3 ppm	
U.S. NIOSH: Pocket Gui	ide to Chemical Hazards		
Components	Type	Value	Form
Copper complex expressed as Copper oxide (CAS Proprietary)	TWA	1 mg/m3	Dust and mist.
Monoethanolamine (MEA) (CAS 141-43-5)	STEL	15 mg/m3	
	TWA	6 ppm 8 mg/m3	
Wood/Wood dust (CAS N/A)	TWA	3 ppm 1 mg/m3	Dust
Biological limit values	No biological exposure limits noted for the ingredient(s).		

Appropriate engineering

controls

Provide sufficient general/local exhaust ventilation to maintain inhalation exposures below current

exposure limits and areas below explosive dust concentrations.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields or safety goggles when sawing or cutting.

Skin protection

Hand protection

When handling wood, wear leather or fabric gloves.

Other

Wear normal work clothes and safety shoes.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH-approved respirator if there is a potential for exposure to dust exceeding exposure limits (See 29 CRF 1910.134, respiratory

protection standard).

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

If wood dust contacts the skin, workers should wash the affected areas with soap and water. Clothing contaminated with wood dust should be removed, and provisions should be made for the safe removal of the chemical from the clothing. Persons laundering the clothes should be informed of the hazardous properties of wood dust. A worker who handles wood dust should thoroughly wash hands, forearms, and face with soap and water before eating, using tobacco products, using toilet facilities, applying cosmetics, or taking medication. Workers should not eat, drink, use tobacco products, apply cosmetics, or take medication in areas where wood dust is handled, or processed. Observe any medical surveillance requirements.

# 9. Physical and Chemical Properties

**Appearance** 

Physical state Solid. **Form** Solid. Dust. Color Not available.

Odor Ammoniacal wood odor possible.

Odor threshold Not available. pΗ Not applicable.

Melting point/freezing

point

Not applicable.

Initial boiling point and

boiling range

Not applicable.

**Flash Point** Not available. **Evaporation rate** Not applicable. Combustible dust. Flammability (solid, gas)

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit -

upper (%)

Not available.

**Explosive limit - lower** 

(%)

Not available.

**Explosive limit - upper** 

(%)

Not available.

Vapor pressure Not applicable. Vapor density Not applicable. Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient (n-

octanol/water)

Not available.

**Auto-ignition temperature** 

Decomposition temperature

Not applicable. Not available.

**Viscosity** 

Not applicable.

Other information

Percent volatile Not applicable.

## 10. Stability and reactivity

Reactivity The product is non-reactive under normal conditions of use, storage and transport.

Chemical stability Stable at normal conditions.

Possibility of hazardous

reactions

Hazardous reactions do not occur.

Conditions to avoid Avoid heat, sparks, open flames and other ignition sources. Minimize dust generation and

accumulation. Avoid contact with incompatible materials.

Incompatible materials Strong acids. Alkalies. Oxidizers.

Hazardous decomposition

products

Combustion products may yield irritating and toxic fumes and gases including organic chloride, aldehydes, amines, hydrogen chloride, ammonia, copper compounds, oxygen, boric oxide, oxides of

carbon and nitrogen.

## 11. Toxicological information

Information on likely routes of exposure

Inhalation Wood dust, treated or untreated, is irritating to the nose, throat and lungs. Prolonged or repeated

> inhalation of wood dusts may cause respiratory irritation, recurrent bronchitis and prolonged colds. Some species may cause allergic respiratory reactions with asthma-like symptoms in sensitized individuals. Prolonged exposure to wood dusts by inhalation has been reported to be associated with

nasal and paranasal cancer.

Skin contact Causes skin irritation. Handling may cause splinters. Some wood species, regardless of treatment,

may cause dermatitis or allergic skin reactions in sensitized individuals.

Eye contact Causes serious eve irritation.

Ingestion Not likely, due to the form of the product. However, ingestion of dusts generated during working

operations may cause nausea and vomiting. Certain species of wood and their dusts may contain

natural toxins, which can have adverse effects in humans.

Symptoms related to the physical, chemical and

toxicological characteristics Wood dust: May cause nasal dryness, irritation and mucostasis. Coughing, wheezing, sneezing, sinusitis and prolonged colds have also been reported. Depending on wood species may cause respiratory sensitization and/or irritation. Symptoms can include irritation, redness, scratching of the cornea, and tearing. May cause eczema-like skin disorders (dermatitis). Airborne treated or untreated

wood dust may cause nose, throat, or lung irritation and other respiratory effects.

Information on toxicological effects

Not expected to be acutely toxic. **Acute toxicity** 

**Test Results** Components Species

Monoethanolamine (MEA) (CAS 141-43-5)

Acute Dermal

LD50 Rabbit 1025 mg/kg

Oral

Rat 1715 mg/kg LD50

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

irritation

Causes serious eye irritation.

Respiratory or skin sensitization

**ACGIH Sensitization** 

Wood/Wood dust (CAS Dermal sensitization. Respiratory sensitization.

N/A)

Respiratory sensitization Exposure to wood dusts can result in hypersensitivity.

Skin sensitization Exposure to wood dust can result in the development of contact dermatitis. The primary irritant

dermatitis resulting from skin contact with wood dusts consist of erythema, blistering, and sometimes

erosion and secondary infections occur.

No component of this product present at levels greater than or equal to 0.1% is identified as a Germ cell mutagenicity

mutagen by OSHA.

Carcinogenicity May cause cancer by inhalation.

> Untreated wood dust or saw dust: The International Agency for Research on Cancer (IARC) classifies untreated wood dust as a Group I human carcinogen. The classification is based primarily on IARC's

evaluation of increased risk in the occurrence of adenocarcinomas of the nasal cavities and

paranasal sinuses associated with occupational exposures of untreated wood dust. Epidemiological studies have been reported on carcinogenic risks of employment in the furniture-making industry, the carpentry industry, and the lumber and sawmill industry. IARC has reviewed these studies and reports that there is sufficient evidence that nasal carcinomas have been caused by employment in the furniture-making industry where the excess risk is associated with exposure to untreated wood dust or sawdust from hardwood species. IARC concluded that epidemiological data are not sufficient to make a definite assessment of the carcinogenic risk of employment as a carpenter or worker in a

lumber mill or sawmill.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Wood/Wood dust (CAS N/A) 1 Carcinogenic to humans.

NTP Report on Carcinogens

Wood/Wood dust (CAS N/A) Known To Be Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure

May cause respiratory irritation.

Specific target organ

toxicity - repeated

Not classified.

exposure **Aspiration hazard** 

Not likely, due to the form of the product.

**Chronic effects** 

Chronic exposure to wood dusts can result in pneumonitis, and coughing, wheezing, fever and the

other signs and symptoms associated with chronic bronchitis.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous.

**Test Results** Components Species

Monoethanolamine (MEA) (CAS 141-43-5)

Aquatic

EC50 Selenastrum capricornutum (new name 2.5 mg/l, 48 hours Algae Pseudokirchnerella subca) Crustacea EC50 Daphnia magna 65 mg/l, 48 hours LC50 Cyprinus carpio 349 mg/l, 96 hours Fish

Persistence and No data is available on the degradability of this product. degradability

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Monoethanolamine (MEA) (CAS 141-43-5) -1.31

Mobility in soil The product is insoluble in water

Mobility in general The product is not volatile but may be spread by dust-raising handling.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential,

endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

**Disposal instructions** Dispose in accordance with applicable federal, state, and local regulations. Do not discharge into

drains, water courses or onto the ground.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused products

Dispose in accordance with all applicable regulations. Do not discharge into drains, water courses or

onto the ground.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

## 14. Transport information

DOT Not regulated as dangerous goods. IATA Not regulated as dangerous goods. **IMDG** Not regulated as dangerous goods.

Transport in bulk

Not applicable.

according to Annex II of MARPOL 73/78 and the

**IBC Code** 

## 15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29

CFR 1910.1200.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Copper complex expressed as Copper oxide (CAS Proprietary)

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#### Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories

**Hazard categories** Immediate Hazard - Yes

> Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No. Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

Yes

SARA 313 (TRI reporting)

**CAS** number Chemical name % by wt.

Copper complex expressed as Copper oxide

Proprietary

< 2

#### Other federal regulations

### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water

Not regulated.

Act (SDWA) **US** state regulations

#### US. Massachusetts RTK - Substance List

Monoethanolamine (MEA) (CAS 141-43-5)

#### US. New Jersey Worker and Community Right-to-Know Act

Copper complex expressed as Copper oxide (CAS Proprietary)

Monoethanolamine (MEA) (CAS 141-43-5)

Wood/Wood dust (CAS N/A)

## US. Pennsylvania Worker and Community Right-to-Know Law

Monoethanolamine (MEA) (CAS 141-43-5)

Wood/Wood dust (CAS N/A)

## **US. Rhode Island RTK**

Copper complex expressed as Copper oxide (CAS Proprietary)

#### US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

# US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Wood/Wood dust (CAS N/A)

On inventory (yes/no)\*

Country(s) or region Inventory name

United States & Puerto Toxic Substances Control Act (TSCA) Inventory

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\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

Issue date 21-April-2015
Revision date 01-June-2015

Version # 02

**Further Information** HMIS® is a registered trade and service mark of the NPCA.

E - Safety Glasses, Gloves, Dust Respirator

Copper/Quat at 2:1 ratio

0.15 pcf:

Copper complex expressed as Copper Oxides 0.28% - 0.58%

Quaternary Ammonium Compound 0.14% - 0.29%

0.20 pcf:

Copper complex expressed as Copper Oxides 0.38% - 0.77%

Quaternary Ammonium Compound 0.19% - 0.39%

0.40 pcf:

Copper complex expressed as Copper Oxides 0.75% - 1.54%

Quaternary Ammonium Compound 0.38% - 0.77%

 $0.60 \, \text{pcf}$ 

Copper complex expressed as Copper Oxides 1.13% - 2.32%

Quaternary Ammonium Compound 0.57% - 1.16%

Copper/Quat at 1:1 ratio

0.15 pcf:

Copper complex expressed as Copper Oxides 0.21% - 0.44%

Quaternary Ammonium Compound 0.21% - 0.44%

0.20 pcf:

Copper complex expressed as Copper Oxides 0.28% - 0.58%

Quaternary Ammonium Compound 0.28% - 0.58%

0.40 pcf

Copper complex expressed as Copper Oxides 0.56% - 1.16%

Quaternary Ammonium Compound 0.56% - 1.16%

0.60 pcf:

Copper complex expressed as Copper Oxides 0.85% - 1.74%

Quaternary Ammonium Compound 0.85% - 1.74%

HMIS® ratings Health: 2\*

Flammability: 1 Physical hazard: 0 Personal protection: E

NFPA ratings



Disclaimer

Koppers Performance Chemicals Inc. and Great Southern Wood Preserving, Incorporated cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.