



SAFETY DATA SHEET

1. Identification

Product identifier Borate Treated Wood

Other means of identification

SDS number 09-KPC

Recommended use Preservative Treated Wood for interior/weather protected exterior uses.

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 Telephone Number CHEMTREC 1-800-424-9300

E-mail KPCmgrsds@koppers.com

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Carcinogenicity Category 1
Reproductive toxicity Category 1B

OSHA defined hazards Combustible dust

Label elements



Signal word Danger

Hazard statement May cause cancer by inhalation. May damage fertility or the unborn child by ingestion. 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.

Response If exposed or concerned: Get medical advice/attention. In case of fire: Use CO₂, foam or water spray for extinction.

Storage Store locked up.

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

Hazard(s) not otherwise classified (HNOC) None known.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Wood	N/A	90-98
Disodium Octaborate Tetrahydrate	12280-03-4	1.25-7.5

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.

4. First-aid measures

Inhalation Move to fresh air. If breathing is difficult, give oxygen. Get medical attention if discomfort persists.

Skin contact Flush skin with water.

Eye contact Immediately flush eye(s) with plenty of water. Do not rub eye. If irritation persists get medical attention.

Ingestion Get medical attention if any discomfort occurs.

Most important symptoms/effects, acute and delayed Dust may cause eye, skin and respiratory tract irritation.

Indication of immediate medical attention and special treatment needed Treat symptomatically.

General information First aid personnel must be aware of own risk during rescue.

5. Fire-fighting measures

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

Unsuitable extinguishing media None.

Specific hazards arising from the chemical Wood dust is flammable and may explode in the presence of an ignition source. The presence of the borate wood preservative (known fire-retardant chemical) in treated wood dust may reduce the flammability hazard to some extent.

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 Provide adequate ventilation. Avoid inhalation of dust. Wear appropriate personal protective equipment (See Section 8).

Methods and materials for containment and cleaning up Saw dust: Sweep or vacuum up spillage and collect in suitable container for disposal. Treated wood should not be burned in open fires or in stoves, fireplaces or residential boilers because toxic chemicals may be produced as part of the smoke and ashes. Treated wood from commercial or industrial use (e.g., construction sites) may be burned only in commercial or industrial incinerators or boilers in accordance with state and federal regulations.

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

7. Handling and storage

Precautions for safe handling Avoid prolonged or repeated breathing of dust. Avoid prolonged or repeated contact with skin. Wear appropriate personal protective equipment. Change contaminated clothing. Sawing/machining treated wood should be performed outdoors or where adequate ventilation is present to avoid accumulations of treated wood dust. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

Conditions for safe storage, including any incompatibilities Protect against physical damage. The material should be kept off the ground. Store in a cool, dry place. Keep away from heat, sparks and open flame.

8. Exposure controls/personal protection

Occupational exposure limits

U.S. - OSHA

Components

Components	Type	Value	Form
Disodium Octaborate Tetrahydrate (CAS 12280-03-4)	PEL	5 mg/m ³	Respirable dust.
		15 mg/m ³	Total Dust.
Wood (CAS N/A)	PEL	5 mg/m ³	Respirable dust.
		15 mg/m ³	Total fraction.

ACGIH

Components

Components	Type	Value	Form
Wood (CAS N/A)	TWA	1 mg/m ³	Inhalable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components

Components	Type	Value	Form
Wood (CAS N/A)	TWA	1 mg/m ³	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

Other

gloves. Wear normal work clothes and safety

Respiratory protection

shoes.

Thermal hazards

Not necessary under normal conditions. Wear respirator if there is dust from machining

General hygiene considerations

operation. Wear appropriate thermal protective clothing, when necessary.

If preservatives/sawdust accumulate on clothes, launder before reuse. Wash work clothes separately from other household clothing.

9. Physical and chemical properties

Appearance

Physical state

Solid.

Form

Solid. Chips. Dust.

Color

Not available.

Odor

May have a slight scented odor.

Odor threshold

Not available.

pH

Not available.

Melting point/freezing point

Not available.

Initial boiling point and boiling range

Not available.

Flash point

Not available.

Evaporation rate

Not available.

Flammability (solid, gas)

Not available.

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 available.

Vapor density

Not available.

Relative density

0.4 - 0.8 (Water = 1)

Solubility(ies)

Borate Treated Wood

SDS US

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Solubility (water)	< 0.1
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Percent volatile	0 %
VOC (Weight %)	0 %

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	Open flame.
Incompatible materials	Oxidizing agents. Drying oils.
Hazardous decomposition products	During combustion: Carbon oxides. Aliphatic aldehydes. Resin acids. Polycyclic aromatic hydrocarbons (PAHs).

11. Toxicological information

Information on likely routes of exposure

Inhalation	Airborne treated or untreated wood dust may cause nose, throat, or lung irritation and other respiratory effects. Breathing excessive amounts of wood dust (primarily hardwood) has been associated with nasal cancer in some industries. Various species of untreated wood dust can elicit allergic respiratory response in sensitized persons.
Skin contact	Handling may cause splinters. Dust may irritate skin. Some wood species may cause allergic dermatitis in certain individuals.
Eye contact	Dust may irritate the eyes.
Ingestion	Not likely, due to the form of the product. However, ingestion of dusts generated during working operations may cause nausea and vomiting.

Symptoms related to the physical, chemical and toxicological characteristics	Dust may cause eye, skin and respiratory tract irritation.
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Information on toxicological effects

Acute toxicity	Not expected to be acutely toxic. Airborne treated or untreated wood dust may cause nose, throat, or lung irritation and other respiratory effects. Breathing excessive amounts of wood dust (primarily hardwood) has been associated with nasal cancer in some industries. Various species of untreated wood dust can elicit allergic respiratory response in sensitized persons. Epidemiological studies of workers in the woodtreating industry have shown no significant health effects due to occupational exposure to pentachlorophenol preservative. May be absorbed through the skin including mucous membranes and eye either by airborne mist, or more particularly, by direct contact.		
Skin corrosion/irritation	Dust may irritate skin.		
Serious eye damage/eye irritation	Dust may irritate the eyes.		
Respiratory or skin sensitization			
ACGIH Sensitization			
Wood (CAS N/A)	<table> <tr> <td>Dermal sensitization</td> </tr> <tr> <td>Respiratory sensitization</td> </tr> </table>	Dermal sensitization	Respiratory sensitization
Dermal sensitization			
Respiratory sensitization			
Respiratory sensitization	May cause inhalation hypersensitivity (occupational asthma) in sensitive individuals.		
Skin sensitization	May cause allergic skin disorders in sensitive individuals.		
Germ cell mutagenicity	Not classified.		
Carcinogenicity	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 (CAS N/A)

1 Carcinogenic to humans.

NTP Report on Carcinogens

Wood (CAS N/A)

Known To Be Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity	May damage fertility or the unborn child by ingestion.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not classified.

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	
Mobility in soil	The product is not mobile in soil.
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	Do not discharge into drains, water courses or onto the ground. Dispose in accordance with all applicable regulations.
Local disposal regulations	Dispose of in accordance with local regulations.
Hazardous waste code	Not regulated.
Waste from residues / unused products	Do not discharge into drains, water courses or onto the ground. Dispose in accordance with all applicable regulations.
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 according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
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15. Regulatory information

US federal regulations

This product is hazardous according to OSHA 29 CFR 1910.1200.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - No Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No
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SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312	Yes
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Hazardous chemical**SARA 313 (TRI reporting)**

Not regulated.

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 Act (SDWA)

Not regulated.

US state regulations**US. Massachusetts RTK - Substance List**

Not regulated

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

Disodium Octaborate Tetrahydrate (CAS 12280-03-4)

Wood (CAS N/A)

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

Wood (CAS N/A)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

WARNING: This product contains chemical(s) known to the State of California to cause cancer.

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

Wood (CAS N/A)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*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	25-April-2015
Revision date	01-June-2015
Version #	02
HMIS® ratings	Health: 1* Flammability: 1 Physical hazard: 0

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.