

SAFETY DATA SHEET

Issue Date 27-May-2015

Revision Date 16-Dec-2021

Version 4

1. IDENTIFICATION

Product identifier

Product Name

Wolmanized® Heavy Duty™ Wood

Other means of identification

Product Code

20001

Synonyms

CCA Treated Wood

Recommended use of the chemical and restrictions on use

Recommended Use

Treated Wood.

Details of the supplier of the safety data sheet

Supplier Address

Customers and Licensees of:
Arch Wood Protection, Inc.
3941 Bonsal Road
Conley, GA 30288

Manufacturer Address

THUNDERBOLT WOOD TREATING
3400 Patterson Road
Riverbank, CA 95367

Emergency telephone number

Company Phone Number

Emergency Telephone

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 3
Serious eye damage/eye irritation	Category 2B
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3

Label elements

Emergency Overview

Danger

Hazard statements

Causes eye irritation
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
May cause cancer

May cause respiratory irritation
Causes mild skin irritation



Physical state Solid

Odor No information available

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Avoid breathing dust/fume/gas/mist/vapors/spray
In case of inadequate ventilation wear respiratory protection
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
Specific treatment (see First Aid on this label)
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 ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Causes mild skin irritation

Other Information

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Synonyms CCA Treated Wood.

Chemical Name	CAS No.	Weight-%	Trade Secret
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Wood and Wood Dust	NOT ASSIGNED	90 - 100	
Chromic Acid	7738-94-5	0.1 - 1	
Arsenic Acid	7778-39-4	0.1 - 1	
Cupric Oxide	1317-38-0	0.1 - 1	
Lead	7439-92-1	<0.1	

Chromic Acid, Arsenic Acid, and Copper Oxide are present in the preservative used to treat this wood. Actual retention may vary due to differences in wood stock and treatment retention levels. Although the Chrome VI present in the Chromic Acid used to treat this wood is reduced to Chrome III during the treating and fixation processes, some Chrome VI may be present. Due to this, OSHA's Hexavalent Chromium Rule (29 CFR 1910.1026) may apply. The manufacturer of this treated wood has monitoring data indicating the levels will be below the established limits and action levels when used under usual conditions. If unusual circumstances exist, monitoring may be required. A state-run OSHA program may have more stringent limits for wood dust and/or PNOR.

4. FIRST AID MEASURES

Description of first aid measures

General advice	If symptoms persist, call a physician.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Skin contact	Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.
Self-protection of the first aider	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms See Section 11: TOXICOLOGICAL INFORMATION.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Carbon dioxide (CO₂). Water spray or fog.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

In the event of fire and/or explosion do not breathe fumes. May cause sensitization in susceptible persons.

Hazardous combustion products Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NO_x).

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12: ECOLOGICAL INFORMATION.

Methods and material for containment and cleaning up

Methods for containment Cover with plastic sheet to prevent spreading.

Methods for cleaning up Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Do not burn treated wood. Do not use pressure treated chips or sawdust as mulch. Use with local exhaust ventilation. May form combustible dust concentrations in air. Take precautionary measures against static discharges. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Do not breathe dust/mist/vapors/spray.

Conditions for safe storage, including any incompatibilities

Storage Conditions Avoid generation of dust.

Incompatible materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH

Wood and Wood Dust NOT ASSIGNED	1.0 mg/m ³ Inhalable, 0.5 mg/m ³ Inhalable Western Red Cedar	15 mg/m ³ Total Dust 5.0 mg/m ³ Respirable Fraction	-
Chromic Acid 7738-94-5	-	TWA: 5 µg/m ³ (vacated) Ceiling: 0.1 mg/m ³ Ceiling: 0.1 mg/m ³ CrO ₃ applies to any operations or sectors for which the Hexavalent Chromium standard [29 CFR 1910.1026] is stayed or is otherwise not in effect	TWA: 0.0002 mg/m ³ Cr
Arsenic Acid 7778-39-4	TWA: 0.01 mg/m ³ As	TWA: 10 µg/m ³ As	IDLH: 5 mg/m ³ As Ceiling: 0.002 mg/m ³ As 15 min
Cupric Oxide 1317-38-0	TWA: 1 mg/m ³ Cu dust and mist	-	IDLH: 100 mg/m ³ Cu dust and mist TWA: 0.1 mg/m ³ Cu fume TWA: 1 mg/m ³ Cu dust and mist
Lead 7439-92-1	TWA: 0.05 mg/m ³ TWA: 0.05 mg/m ³ Pb	TWA: 50 µg/m ³ TWA: 50 µg/m ³ Pb	IDLH: 100 mg/m ³ IDLH: 100 mg/m ³ Pb TWA: 0.050 mg/m ³ TWA: 0.050 mg/m ³ Pb

NIOSH IDLH *Immediately Dangerous to Life or Health*

Other Information

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls

Showers
Eyewash stations
Ventilation systems. Ventilation: Saw, cut or machine wood outdoors or in well ventilated areas. Due to the explosive potential of dust when suspended in air, precautions should be taken when sawing, sanding, or machining wood or wood products to prevent sparks or other ignition sources. If required, use wet methods and/or explosion suppression systems to reduce generation of dust. Local exhaust ventilation is recommended when sawing, sanding, or machining this product. General dilution ventilation is recommended in processing and storage areas.

Individual protection measures, such as personal protective equipment

Eye/face protection

Use safety glasses with side shields or chemical goggles when sawing or cutting treated or untreated wood.

Skin and body protection

Wear leather gloves. Wear long sleeve shirt, pants, and steel-toed shoes when handling treated or untreated wood.

Respiratory protection

None normally required. When sawing or cutting treated or untreated wood, wear a NIOSH approved N95 or better dust mask.

General Hygiene Considerations

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state
Appearance

Solid
No information available

Odor

No information available

Color Slightly green Odor threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point / freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	Not applicable	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Relative density	No information available	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	WOOD and WOOD DUST :. May cause cancer. May cause sensitization by inhalation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Eye contact	WOOD and WOOD DUST :. Irritating to eyes.
Skin contact	WOOD and WOOD DUST :. May cause irritation. May cause allergic skin reaction.
Ingestion	WOOD and WOOD DUST :. Harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Chromic Acid 7738-94-5	52 mg/kg (RT)	57 mg/kg (RBT)	0.217 mg/L (RT 4h)
Arsenic Acid 7778-39-4	= 141.4 mg/kg (MSE)	= 1,750 mg/kg (RBT)	-
Cupric Oxide 1317-38-0	>2,500 mg/kg (RT)	>3,500 mg/kg (RT)	-
Lead 7439-92-1	>2000 mg/kg (RT)	>2000 mg/kg (RT)	-

Note:
 RT = Rat
 RBT = Rabbit
 MSE = Mouse
 GP = Guinea Pig
 V = Vapour

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Wood and Wood Dust NOT ASSIGNED	X	Group 1	X	X
Chromic Acid 7738-94-5	-	Group 1	Known	X
Arsenic Acid 7778-39-4	A1	Group 1	Known	X
Lead 7439-92-1	A3	Group 2B	Reasonably Anticipated	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Chronic toxicity

Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.

Other adverse effects

Study Abstracts: In Hawaii, where over 45,000 homes have been built almost entirely of CCA-treated wood, a study was conducted by the Pacific Biomedical Center of the University of Hawaii (the Budy-Rashad study) in 1977 to determine any possible effect on

the health of carpenters. The study concluded that exposure to CCA-treated sawdust is not associated with increased risk of total cancer, lung cancer or lymphatic cancer and shows that excess respiratory cancer mortality was not observed in the carpenters.

A study was conducted by the University of Alabama to evaluate the teratogenicity of CCA-impregnated sawdust when exposed to rabbits and mice. Sawdust from CCA-treated wood has been shown not to cause chromosome damage or teratogenic effects in mice fed sawdust nor to cause birth defects in rabbits receiving sawdust applied to their skin. According to a Human Health Risk Assessment conducted by Gradient Corporation in August 2004, potential health risks to workers and residents do not exceed U.S. Environmental Protection Agency acceptable risk limits. Although the arsenic complex (the predominate chemical form of arsenic in CCA-treated wood is chromium III arsenate) is present on the surface of CCA-treated utility poles and in surrounding soils, the arsenic in these poles is chemically bonded to the wood and is not readily absorbed in the body. This risk assessment evaluated exposures to arsenic complex on the surface of CCA treated utility poles and in soil adjacent to the poles. Exposure was evaluated for both hand to mouth contact and skin contact for a child resident age 2-6 and an adult utility pole worker. The assessment results also indicate that the amount of arsenic complex potentially taken into the body from exposures to CCA-treated utility poles and adjacent soils for a child resident is approximately 8 fold less than the intake of naturally occurring inorganic arsenic in food and drinking water at the new federal drinking water standard for arsenic. An adult worker is exposed to over 24 fold less arsenic complex associated with CCA-treated utility poles, compared to intake of inorganic arsenic from food and drinking water.

Carcinogenic status: IARC, the NTP, OSHA and California Proposition 65 do not consistently distinguish among arsenic or chrome species but list inorganic arsenic and chromium and certain chromium compounds as human carcinogens. Cancers in humans have followed from long term consumption of Fowler's Solution, a medicinal trivalent arsenical; inhalations and skin contact with inorganic trivalent arsenical sheep-dust; the combined inhalation of arsenic trioxide (trivalent arsenical), sulfur dioxide, and other particulates from ore smelting in arsenic trioxide production; and occupational exposure to nonwater-soluble hexavalent chromium. Carcinogenicity Data: IARC has classified untreated hardwood and hardwood/softwood mix wood dust as a Group I human carcinogen. The wood dust 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 to untreated wood dust. NTP has classified all untreated wood dust as a carcinogen.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

- ATEmix (oral)
- ATEmix (dermal)
- ATEmix (inhalation-gas)
- ATEmix (inhalation-dust/mist)
- ATEmix (inhalation-vapor)

Numerical measures of toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

Study Abstracts: A technical paper published in the Forest Products Journal (September, 1974) by Levi, Huisingsh and Nesbitt described a study conducted to determine if CCA wood preservative in grapevine support posts might be absorbed by the vines, leaves and/or grapes. This study concluded that "... CCA preservatives are bound in wood, are not readily leached and are not concentrated in plants growing close to the treated wood."

The Springborn Laboratories Environmental Sciences Division in 1993 conducted a sediment exposure study using leachate from CCA treated and untreated marine pilings and exposing *Ampelisca abdita* for a period of 10 days. Survival of the organisms during the 10-day exposure period was the biological endpoint used to establish the effects of exposure. Results indicated that leachate from treated pilings had no adverse effect on organism survival. It was concluded that the primary constituents of the CCA-treated wood piling were not present in the leachate at concentrations which would adversely affect the survival of the organisms.

Testing has been conducted to evaluate the use of treated wood in raised vegetable gardens. Vegetables harvested from gardens in raised bed structures built of CCA-treated wood were compared with vegetables grown in untreated raised bed structures and with vegetables purchased at a local grocery store. Testing revealed that all vegetables contained minuscule amounts of each element in CCA. In some cases, the levels of metals were actually higher in the vegetables grown in untreated bins, and in one case the store-purchased vegetable had the highest level of arsenic. The report concluded that there was "no uptake of the metal constituents into the vegetables."

The Food and Drug Administration's (FDA) "Market Basket Survey" has consistently shown that arsenic in tomatoes is below the analytical level of detection despite the increased usage of arsenically-treated wood for tomato stakes. Moreover, even though CCA-treated wood has been increasingly used in applications such as cattle bunks and stalls and poultry brooders for the last ten years, the FDA survey has shown a decrease in the arsenic content of dairy, meat and poultry products.

A study funded in part by the National Oceanic and Atmospheric Administration (NOAA) and prepared by the Marine Resources Division of the South Carolina Department of Natural Resources in 1995 measured the impact of wood preservative leachate from docks in an estuarine environment. Copper, chromium, arsenic, and polynuclear aromatic hydrocarbons (PAHs) were measured in composite samples of sediments and naturally occurring oyster populations from creeks with high densities of docks, and from nearby reference creeks with no docks. Sediments from all but one site had metal and total PAH concentrations which were below levels reported to cause biological effects, and the oysters showed no significant difference in their physiological condition. Bioassays were also conducted on four common estuarine species and hatchery-reared oysters. The results suggest that wood preservative leachates from dock pilings have no acutely toxic effects on these common species, nor do they affect the survival or growth of juvenile oysters over a six-week period. In some cases, metal leachates may accumulate in sediments and oysters immediately adjacent to pilings, but do not appear to become concentrated in sediments or oysters elsewhere in the same creeks.

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Chromic Acid 7738-94-5	0.99 mg/L EC50 72h (<i>Pseudokirchneriella subcapitata</i>)	33.2 mg/L LC50 96h (<i>Pimephales promelas</i>)	0.035 mg/L EC50 48h (<i>Daphnia magna</i>)
Arsenic Acid 7778-39-4	0.048 mg/L EC50 72h (<i>Scenedesmus obliquus</i>)	28 mg/L LC50 96h (<i>Cyprinodon variegatus</i>)	2 mg/L EC50 96h (<i>Americamysis Bahia</i>)
Cupric Oxide 1317-38-0	-	0.0384 mg/L LC50 96h (<i>Pimephales promelas</i>)	-
Lead 7439-92-1	0.0205 mg/L EC50 72h (<i>Pseudokirchneriella subcapitata</i>)	0.107 mg/L LC50 96h (<i>Oncorhynchus mykiss</i>)	0.07 mg/L EC50 48h (<i>Ceriodaphnia dubia</i>)

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes DO NOT BURN TREATED WOOD. Do not use pressure treated chips or sawdust as mulch. Dispose of in accordance with local, state and federal regulations. This product is exempted as a hazardous waste under any sections of the RCRA regulations as long as the product is being utilized for its intended end use as stated in 40 CFR 261.4 (b) (9). State run hazardous waste programs may be more stringent.

Contaminated packaging No information available.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Chromic Acid 7738-94-5	Toxic Corrosive Ignitable
Cupric Oxide 1317-38-0	Toxic
Lead 7439-92-1	Toxic

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO (air) Not regulated

IATA Not regulated

IMDG Not regulated

RID Not regulated

ADR Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Chromic Acid - 7738-94-5	0.1
Arsenic Acid - 7778-39-4	0.1

SARA 311/312 Hazard Categories

Acute health hazard

Yes

Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Chromic Acid 7738-94-5	10 lb	X	-	-
Arsenic Acid 7778-39-4	-	X	-	-
Cupric Oxide 1317-38-0	-	X	-	-
Lead 7439-92-1	-	X	X	-

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Chromic Acid 7738-94-5	10 lb	-	RQ 10 lb final RQ RQ 4.54 kg final RQ
Arsenic Acid 7778-39-4	1 lb	-	RQ 1 lb final RQ RQ 0.454 kg final RQ
Lead 7439-92-1	10 lb	-	RQ 10 lb final RQ RQ 4.54 kg final RQ

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Wood and Wood Dust - NOT ASSIGNED	Carcinogen
Chromic Acid - 7738-94-5	Carcinogen Developmental Female Reproductive Male Reproductive
Arsenic Acid - 7778-39-4	Carcinogen
Lead - 7439-92-1	Carcinogen Developmental Female Reproductive Male Reproductive

Warning: This wood contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Chromic Acid 7738-94-5	X	X	X

Arsenic Acid 7778-39-4	X	X	X
Cupric Oxide 1317-38-0	X	-	X
Lead 7439-92-1	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number N/A

16. OTHER INFORMATION

Issue Date 27-May-2015

Revision Date 16-Dec-2021

Revision Note

No information available

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet