

CT #0629-1
7/25/85

Material Safety Data Sheet

CertainTeed

CertainTeed Corporation
P.O. Box 860
Valley Forge, PA 19482
(215) 341-7000

Date Prepared 7/25/85 Supersedes MSDS Asbestos Cement Pipe-Asbestos & Silica MSDS's Dated 3/4/83

Product Identification (Label Name) Asbestos Cement Pipe and Fittings

Chemical Name N/A

CAS No. N/A

Common Name(s) A/C Pipe & Fittings

Fluid-Tite® Pipe & Fittings

1. INGREDIENTS

Chemical Name (CAS No.)	Common Name	Exposure Limits	%
Asbestos (1332-21-4)		<u>OSHA PEL</u> 2 Fibers > 5um/cc (8 HR TWA) 10 Fibers > 5um/cc (Ceiling)	10-20
		<u>ACGIH TLV</u> Chrysotile - 2 Fibers > 5 um/cc Crocidolite - 0.2 Fibers > 5 um/cc	
Quartz (14808-60-7)	Crystalline Silica	<u>OSHA PEL</u> Respirable Dust - 250 MPPCF % SiO ₂ + 5 10 mg/M ³ % SiO ₂ + 2 Total Dust - 30 mg/M ³ % SiO ₂ + 2 <u>ACGIH TLV</u> Respirable Dust - 300 MPPCF % QUARTZ + 10 10 mg/M ³ % RESPIRABLE QUARTZ + 2 Total Dust - 30 mg/M ³ % QUARTZ + 3	< 5

2. PHYSICAL DATA

Boiling Point N/A

% Volatile By Volume N/A

Melt Point N/A

Vapor Density (Air = 1) N/A

% Solubility (H₂O) Negligible

Specific Gravity 2.35

Vapor Pressure N/A

Appearance Cement Gray-Colored Pipe and Fittings

Odor None

CTD007307

PLAINTIFF'S EXHIBIT

CT-843

3. FIRE AND EXPLOSION HAZARD DATA

Flash Point & Method N/A

Flammable Limits

LEL N/A UEL N/A

Extinguishing Media Use that which is appropriate for surrounding fire. This material is noncombustible.

Special Fire Fighting Procedures None

Unusual Fire and Explosion Hazard None

4. HEALTH EFFECTS

Primary Routes of Entry Inhalation, skin and eye contact

Carcinogens Asbestos IARC Human/Animal NTP Human/Animal OSHA 29CFR1910.1001

Health effects from storing and handling asbestos cement pipe and fittings should not be a problem if industry recommended work practices are used. (See section 11 for information on industry work practices). Failure to follow these practices may result in the airborne release of the entrapped asbestos fibers and silica dust ingredients. Exposure to the ingredient dust and fiber may cause the following health effects:

Acute Effects: Inhalation of dust from cutting/grinding may cause irritation and coughing. Skin contact with dusts may cause irritation and itching. Direct eye contact with dust may cause redness and irritation.

Chronic Effects: Inhalation: Excessive exposure to silica and asbestos dust causes a disabling scarring of the lungs, or pneumoconiosis, called "silicosis" and "asbestosis," which gradually reduces lung capacity and efficiency. Main symptoms include coughing, decreased vital capacity, basal rales, cyanosis, cor pulmonale, clubbing of the fingers, anorexia, weakness and weight loss. Radiologic studies may show diffuse increase in lung opacities and pleural calcifications.

Asbestos is classified as a human carcinogen by the IARC and NTP and is regulated by OSHA as a human carcinogen. Asbestos-exposed workers show an increased incidence of pleural or peritoneal mesothelioma and high rates of respiratory cancer. The incidence of pulmonary fibrosis and lung cancer in asbestos-exposed workers is greatly increased by smoking. Reports associating cancer to other body organs exist, although the evidence is not clear.

Eye Contact: Prolonged exposure to asbestos may cause conjunctivitis.

Skin Contact: Prolonged exposure to asbestos may cause asbestos warts and dermatitis, usually confined to the hands and forearm.

CTD007308

5. EMERGENCY AND FIRST AID PROCEDURES

Avoid the generation of dust from cutting or grinding.

First Aid

Eye Contact: Flush well with running water for at least 15 minutes. Get medical help if irritation persists.

Skin Contact: Cleanse with soap and warm water. Get medical attention if irritation persists.

Upper Respiratory: Remove from exposure. If irritation persists, get medical help.

6. PHYSICAL HAZARDS

None

7. SPECIAL PROTECTION INFORMATION

When industry recommended work practices are followed, special protection measures should not be required. (See Section 11)

Respiratory Protection: Not required if industry recommended work practices are followed. If dust is not controlled, use respirators approved by the Bureau of Mines, Department of the Interior, or NIOSH.

Reusable or Single Use Air Purifying Respirator: When the ceiling or the 8 hour TWA airborne concentration of asbestos and/or silica are expected to exceed no more than 10 times those limits.

Full Faced Piece Air Purifying Respirator or a Powered Air Purifying Respirator: When ceiling or 8 hour TWA concentration are reasonably expected to exceed 10 times, but not 100 times, those limits.

Type "C" Supplied Air Respirators, Continuous Flow, or Pressure-Demand Class: When the exposures can reasonably be expected to exceed 100 times the 8 hour TWA or ceiling concentrations.

Special Clothing: When airborne exposures exceed ceiling level, coveralls or similar whole body clothing, head coverings, gloves, dust coverings.

Eye Protection: Goggles or safety glasses to prevent dust in eyes.

8. REACTIVITY

This is a stable material.

9. STORAGE INFORMATION

See Section 11

10. SPILL, LEAK, AND DISPOSAL INFORMATION

Steps to be Taken in Case Material is Released or Spilled: Pipe fragments and installation debris must be handled in a manner which avoids airborne dispersion of asbestos or silica dust. Use wet or vacuum method for cleanup. Avoid inhalation of dusts.

Waste Disposal Method

Dispose in accordance with federal, state, and local regulations.

11. ADDITIONAL COMMENTS

Always use industry recommended work practices when handling or performing field operations with asbestos cement pipe.

See Manufacturers' Installation Manual, American Waterworks Association Manual M-16, or Asbestos Cement Pipe Producers Association Publications for detailed information on industry recommended work practices.

See also the Occupational Safety and Health Administration Regulation 29CFR1910.1001 which regulates workplace exposure to asbestos dust and any state or local workplace codes regulating asbestos exposure.

Do not cut or bevel asbestos cement pipe or fittings with abrasive disc saws or abrasive disc sanders.

CTD007310

MSDS CT-0629-1
7/25/85
A-C PIPE + FITTINGS

CertainTeed Corporation
Pipe & Plastics Group
P.O. Box 860
Valley Forge, PA 19482
(215) 341-7000

CertainTeed 

November 26, 1985

Dear Distributor,

Material Safety Data Sheet
Asbestos-Cement Pipe and Fittings

The OSHA Hazard Communication Standard, 29 CFR Part 1910.1200, requires that we, as a manufacturer, provide to you the enclosed Material Safety Data Sheets (M.S.D.S.) for our asbestos-cement pipe and fittings products. In turn, as a distributor you are required to provide, upon initial shipment of the product, a M.S.D.S. to your customers.

Should you require a further supply of these data sheets, please order through your CertainTeed Regional Sales Office, form number 01-08-0020 8/85.

In the meantime, should you have any questions, please feel free to contact us.

Sincerely,



Darwin R. Hall
Manager, Health and Safety
Pipe and Plastics Group

cc: Regional Manager

DRH/kab

CTD007311

CertainTeed Corporation
Pipe & Plastics Group
P.O. Box 860
Valley Forge, PA 19482
(215) 341-7000

CertainTeed 

REWRITTEN

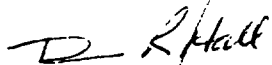
Dear Customer:

Material Safety Data Sheet
Asbestos-Cement Pipe and Fittings

To comply with the OSHA Hazard Communication Standard, 29 CFR Part 1910.1200, adopted November 25, 1983, we wish to provide you with the enclosed Material Safety Data Sheet (M.S.D.S.) for our asbestos-cement pipe and fittings.

If, after reviewing it, you have any questions, please feel free to contact us for further clarification.

Sincerely,



Darwin R. Hall
Manager, Health and Safety

DRH:ap
Enc.

CTD007312

Material Safety Data Sheet

CertainTeed

CertainTeed Corporation
P.O. Box 860
Valley Forge, PA 19482
(215) 341-7000

Date Prepared 7/25/85 Supersedes MSDS Asbestos Cement Pipe-Asbestos & Silica MSDS's Dated 3/4/83

Product Identification (Label Name) Asbestos Cement Pipe and Fittings

Chemical Name N/A

CAS No. N/A

Common Name(s) A/C Pipe & Fittings

Fluid-Tite® Pipe & Fittings

1. INGREDIENTS

Chemical Name (CAS No.)	Common Name	Exposure Limits	%
Asbestos (1332-21-4)		<u>OSHA PEL</u> 2 Fibers > 5um/cc (8 HR TWA) 10 Fibers > 5um/cc (Ceiling)	10-20
		<u>ACGIH TLV</u> Chrysotile - 2 Fibers > 5 um/cc Crocidolite - 0.2 Fibers > 5 um/cc	
Quartz (14808-60-7)	Crystalline Silica	<u>OSHA PEL</u> Respirable Dust - 250 MPPCF % SiO ₂ + 5 10 mg/M ³ % SiO ₂ + 2 Total Dust - 30 mg/M ³ % SiO ₂ + 2 <u>ACGIH TLV</u> Respirable Dust - 300 MPPCF % QUARTZ + 10 10 mg/M ³ % RESPIRABLE QUARTZ + 2 Total Dust - 30 mg/M ³ % QUARTZ + 3	< 5

2. PHYSICAL DATA

Boiling Point N/A	% Volatile By Volume N/A	Melt Point N/A
Vapor Density (Air = 1) N/A	% Solubility (H ₂ O) Negligible	Specific Gravity 2.35
Vapor Pressure N/A	Appearance Cement Gray-Colored Pipe and Fittings	CTD007313
Odor None		

3. FIRE AND EXPLOSION HAZARD DATA

Flash Point & Method N/A

Flammable Limits

LEL N/A UEL N/A

Extinguishing Media Use that which is appropriate for surrounding fire. This material is noncombustible.

Special Fire Fighting Procedures None

Unusual Fire and Explosion Hazard None

4. HEALTH EFFECTS

Primary Routes of Entry Inhalation, skin and eye contact

Carcinogens	Asbestos	IARC	Human/Animal	NTP	Human/Animal	OSHA	29CFR1910.1001
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Health effects from storing and handling asbestos cement pipe and fittings should not be a problem if industry recommended work practices are used. (See section 11 for information on industry work practices). Failure to follow these practices may result in the airborne release of the entrapped asbestos fibers and silica dust ingredients. Exposure to the ingredient dust and fiber may cause the following health effects:

Acute Effects: Inhalation of dust from cutting/grinding may cause irritation and coughing. Skin contact with dusts may cause irritation and itching. Direct eye contact with dust may cause redness and irritation.

Chronic Effects: Inhalation: Excessive exposure to silica and asbestos dust causes a disabling scarring of the lungs, or pneumoconiosis, called "silicosis" and "asbestosis," which gradually reduces lung capacity and efficiency. Main symptoms include coughing, decreased vital capacity, basal rales, cyanosis, cor pulmonale, clubbing of the fingers, anorexia, weakness and weight loss. Radiologic studies may show diffuse increase in lung opacities and pleural calcifications.

Asbestos is classified as a human carcinogen by the IARC and NTP and is regulated by OSHA as a human carcinogen. Asbestos-exposed workers show an increased incidence of pleural or peritoneal mesothelioma and high rates of respiratory cancer. The incidence of pulmonary fibrosis and lung cancer in asbestos-exposed workers is greatly increased by smoking. Reports associating cancer to other body organs exist, although the evidence is not clear.

Eye Contact: Prolonged exposure to asbestos may cause conjunctivitis.

Skin Contact: Prolonged exposure to asbestos may cause asbestos warts and dermatitis, usually confined to the hands and forearm.

CTD007314

5. EMERGENCY AND FIRST AID PROCEDURES

Avoid the generation of dust from cutting or grinding.

First Aid

Eye Contact: Flush well with running water for at least 15 minutes. Get medical help if irritation persists.

Skin Contact: Cleanse with soap and warm water. Get medical attention if irritation persists.

Upper Respiratory: Remove from exposure. If irritation persists, get medical help.

6. PHYSICAL HAZARDS

None

7. SPECIAL PROTECTION INFORMATION

When industry recommended work practices are followed, special protection measures should not be required. (See Section 11)

Respiratory Protection: Not required if industry recommended work practices are followed. If dust is not controlled, use respirators approved by the Bureau of Mines, Department of the Interior, or NIOSH.

Reuseable or Single Use Air Purifying Respirator: When the ceiling or the 8 hour TWA airborne concentration of asbestos and/or silica are expected to exceed no more than 10 times those limits.

Full Faced Piece Air Purifying Respirator or a Powered Air Purifying Respirator: When ceiling or 8 hour TWA concentration are reasonably expected to exceed 10 times, but not 100 times, those limits.

Type "C" Supplied Air Respirators, Continuous Flow, or Pressure-Demand Class: When the exposures can reasonably be expected to exceed 100 times the 8 hour TWA or ceiling concentrations.

Special Clothing: When airborne exposures exceed ceiling level, coveralls or similar whole body clothing, head coverings, gloves, dust coverings.

Eye Protection: Goggles or safety glasses to prevent dust in eyes.

8. REACTIVITY

This is a stable material.

9. STORAGE INFORMATION

See Section 11

10. SPILL, LEAK, AND DISPOSAL INFORMATION

Steps to be Taken in Case Material is Released or Spilled: Pipe fragments and installation debris must be handled in a manner which avoids airborne dispersion of asbestos or silica dust. Use wet or vacuum method for cleanup. Avoid inhalation of dusts.

Waste Disposal Method

Dispose in accordance with federal, state, and local regulations.

11. ADDITIONAL COMMENTS

Always use industry recommended work practices when handling or performing field operations with asbestos cement pipe.

See Manufacturers' Installation Manual, American Waterworks Association Manual M-16, or Asbestos Cement Pipe Producers Association Publications for detailed information on industry recommended work practices.

See also the Occupational Safety and Health Administration Regulation 29CFR1910.1001 which regulates workplace exposure to asbestos dust and any state or local workplace codes regulating asbestos exposure.

Do not cut or bevel asbestos cement pipe or fittings with abrasive disc saws or abrasive disc sanders.

CTD007316

CertainTeed

To SEE BELOW	Mail Code SEE BELOW	From <i>O. H. Kittilstad</i> O. H. Kittilstad	Mail Code 1125/4	Ext. 7505
Subject A/C Pipe MSDS			Date July 22, 1985	

John, attached is a draft of the A/C Pipe MSDS for your review, comment and/or approval.

After approval of the final wording and this is agreeable to your Group, I will have Corporate Communications put the form to type setting, have a form number assigned and will send it to the print shop for publication. You will have to provide me with the number of copies you want printed. P&PG will be charged with the printing costs.

For your information, Tom Dougherty, C. Pontz, J. Baker and Dr. Mellon had no adverse comments on the previous draft.

OHK/tmf

Attachment

CIRC & RET to JLM.

I would appreciate your comments.

*OK 8/15/85
D.H. okay D. Hall 7/30/85
B.F. 1/4*

RECEIVED

JUL 31 1985

P. & P. G.
SALES

file note

*Contacted Kittilstad & order
1,000 copies. This quantity
was based on info from L.C.*

*JLM.
8/14/85*

CTD007317

Material Safety Data Sheet

CertainTeed

CertainTeed Corporation
P.O. Box 860
Valley Forge, PA 19482
(215) 341-7000

Date Prepared **7/25/85**Supersedes MSDS **ASBESTOS CEMENT PIPE-ASBESTOS & SILICA MSDS'S**Dated **2/7/83**Product Identification (Label Name) **ASBESTOS CEMENT PIPE AND FITTINGS**Chemical Name(s) **N/A**CAS No. **N/A**Common Name(s) **A/C PIPE & FITTINGS****FLUID-TITE[®] PIPE & FITTINGS**

1. INGREDIENTS

Chemical Name
(CAS No.)

Common Name

Exposure Limits

%

ASBESTOS
(1332-21-4)**CRYSTALLINE SILICA****OSHA PEL****2 FIBERS > 5UM/CC (8 HR TWA)****10-20****10 FIBERS > 5UM/CC (CEILING)****ACGIH TLV****CHRYSTOTILE-2 FIBERS > 5UM/CC****CROCIDOLITE-0.2 FIBERS > 5UM/CC****QUARTZ**
(14808-60-7)**OSHA PEL****RESPIRABLE DUST- 250MPPCF****< 5****% SiO₂ +3****10 MG/M³****% SiO₂ +2****TOTAL DUST- 30MG/M³****% SiO₂ +2****ACGIH TLV****RESPIRABLE DUST- 300MPPCF****% QUARTZ+10****10MG/M³****% RESPIRABLE QUARTZ+2****TOTAL DUST- 30MG/M³****% QUARTZ+3**

2. PHYSICAL DATA

Boiling Point **N/A**% Volatile By Volume **N/A**Melt Point **N/A**Vapor Density (Air = 1) **N/A**% Solubility (H₂O) **NEGLECTIBLE**Specific Gravity **2.35**Vapor Pressure **N/A**Appearance **CEMENT GRAY COLORED PIPE AND FITTINGS**Odor **NONE**

CTD007318

FIRE AND EXPLOSION HAZARD DATA

Point & Method N/A

Flammable Limits

N/A

UEL

N/A

Extinguishing Media USE THAT WHICH IS APPROPRIATE FOR SURROUNDING FIRE. THIS MATERIAL IS NONCOMBUSTIBLE.

Special Fire Fighting Procedures NONE

Usual Fire and Explosion Hazard NONE

4. HEALTH EFFECTS

Primary Routes of Entry INHALATION, SKIN AND EYE CONTACT

Carcinogens ASBESTOS

IARC HUMAN/ANIMAL

NTP HUMAN/ANIMAL

OSHA 29CFR1910.1001

HEALTH EFFECTS FROM STORING AND HANDLING ASBESTOS CEMENT PIPE AND FITTINGS SHOULD NOT BE A PROBLEM IF INDUSTRY RECOMMENDED WORK PRACTICES ARE USED. (SEE SECTION 11 FOR INFORMATION ON INDUSTRY WORK PRACTICES). FAILURE TO FOLLOW THESE PRACTICES MAY RESULT IN THE AIRBORNE RELEASE OF THE ENTRAPPED ASBESTOS FIBERS AND SILICA DUST INGREDIENTS. EXPOSURE TO THE INGREDIENT DUST AND FIBER MAY CAUSE THE FOLLOWING HEALTH EFFECTS:

ACUTE EFFECTS: INHALATION OF DUST FROM CUTTING/GRINDING MAY CAUSE IRRITATION AND COUGHING. SKIN CONTACT WITH DUSTS MAY CAUSE IRRITATION AND ITCHING. DIRECT EYE CONTACT WITH DUST MAY CAUSE REDNESS AND IRRITATION.

CHRONIC EFFECTS: INHALATION: EXCESSIVE EXPOSURE TO SILICA AND ASBESTOS DUST CAUSES A DISABLING SCARRING OF THE LUNGS, OR PNEUMOCONIOSIS, CALLED "SILICOSIS" AND "ASBESTOSIS", WHICH GRADUALLY REDUCES LUNG CAPACITY AND EFFICIENCY. MAIN SYMPTOMS INCLUDE COUGHING, DECREASED VITAL CAPACITY, BASAL RALES, CYANOSIS, COR PULMONALE, CLUBBING OF THE FINGERS, ANOREXIA, WEAKNESS AND WEIGHT LOSS. RADIOLOGIC STUDIES MAY SHOW DIFFUSE INCREASE IN LUNG OPACITIES AND PLEURAL CALCIFICATIONS.

ASBESTOS IS CLASSIFIED AS A HUMAN CARCINOGEN BY THE IARC AND NTP AND IS REGULATED BY OSHA AS A HUMAN CARCINOGEN. ASBESTOS-EXPOSED WORKERS SHOW AN INCREASED INCIDENCE OF PLEURAL OR PERITONEAL MESOTHELIOMA AND HIGH RATES OF RESPIRATORY CANCER. THE INCIDENCE OF PULMONARY FIBROSIS AND LUNG CANCER IN ASBESTOS-EXPOSED WORKERS IS GREATLY INCREASED BY SMOKING. REPORTS ASSOCIATING CANCER TO OTHER BODY ORGANS EXIST, ALTHOUGH THE EVIDENCE IS NOT CLEAR.

EYE CONTACT: PROLONGED EXPOSURE TO ASBESTOS MAY CAUSE CONJUNCTIVITIS.

SKIN CONTACT: PROLONGED EXPOSURE TO ASBESTOS MAY CAUSE ASBESTOS WARTS AND DERMATITIS, USUALLY CONFINED TO THE HANDS AND FOREARM.

CTD007319

5. EMERGENCY AND FIRST AID PROCEDURES

AVOID THE GENERATION OF DUST FROM CUTTING OR GRINDING.

FIRST AID

EYE CONTACT: FLUSH WELL WITH RUNNING WATER FOR AT LEAST 15 MINUTES. GET MEDICAL HELP IF IRRITATION PERSISTS.

SKIN CONTACT: CLEANSE WITH SOAP AND WARM WATER. GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

UPPER RESPIRATORY: REMOVE FROM EXPOSURE. IF IRRITATION PERSISTS, GET MEDICAL HELP.

6. PHYSICAL HAZARDS

NONE

7. SPECIAL PROTECTION INFORMATION

WHEN INDUSTRY RECOMMENDED WORK PRACTICES ARE FOLLOWED, SPECIAL PROTECTION MEASURES SHOULD NOT BE REQUIRED. (SEE SECTION 11)

RESPIRATORY PROTECTION: NOT REQUIRED IF INDUSTRY RECOMMENDED WORK PRACTICES ARE FOLLOWED. IF DUST IS NOT CONTROLLED, USE RESPIRATORS APPROVED BY THE BUREAU OF MINES, DEPARTMENT OF THE INTERIOR, OR NIOSH.

REUSEABLE OR SINGLE USE AIR PURIFYING RESPIRATOR: WHEN THE CEILING OR THE 8 HOUR TWA AIRBORNE CONCENTRATION OF ASBESTOS AND/OR SILICA ARE EXPECTED TO EXCEED NO MORE THAN 10 TIMES THOSE LIMITS.

FULL FACED PIECE AIR PURIFYING RESPIRATOR OR A POWERED AIR PURIFYING RESPIRATOR: WHEN CEILING OR 8 HOUR TWA CONCENTRATION ARE REASONABLY EXPECTED TO EXCEED 10 TIMES, BUT NOT 100 TIMES, THOSE LIMITS.

TYPE "C" SUPPLIED AIR RESPIRATORS, CONTINUOUS FLOW, OR PRESSURE-DEMAND CLASS: WHEN THE EXPOSURES CAN REASONABLY BE EXPECTED TO EXCEED 100 TIMES THE 8 HOUR TWA OR CEILING CONCENTRATIONS.

SPECIAL CLOTHING: WHEN AIRBORNE EXPOSURES EXCEED CEILING LEVEL, COVERALLS OR SIMILAR WHOLE BODY CLOTHING, HEAD COVERINGS, GLOVES, DUST COVERINGS.

EYE PROTECTION: GOGGLES OR SAFETY GLASSES TO PREVENT DUST IN EYES.

8. REACTIVITY

THIS IS A STABLE MATERIAL

9. STORAGE INFORMATION

SEE SECTION 11

10. SPILL, LEAK AND DISPOSAL INFORMATION

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: PIPE FRAGMENTS AND INSTALLATION DEBRIS MUST BE HANDLED IN A MANNER WHICH AVOIDS AIRBORNE DISPERSION OF ASBESTOS OR SILICA DUST. USE WET OR VACUUM METHOD FOR CLEANUP. AVOID INHALATION OF DUSTS.

Waste Disposal Method

DISPOSE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.

11. ADDITIONAL COMMENTS

ALWAYS USE INDUSTRY RECOMMENDED WORK PRACTICES WHEN HANDLING OR PERFORMING FIELD OPERATIONS WITH ASBESTOS CEMENT PIPE.

SEE MANUFACTURERS' INSTALLATION MANUAL, AMERICAN WATERWORKS ASSOCIATION MANUAL M-16, OR ASBESTOS CEMENT PIPE PRODUCERS ASSOCIATION PUBLICATIONS FOR DETAILED INFORMATION ON INDUSTRY RECOMMENDED WORK PRACTICES.

SEE ALSO THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATION 29CFR1910.1001 WHICH REGULATES WORKPLACE EXPOSURE TO ASBESTOS DUST AND ANY STATE OR LOCAL WORKPLACE CODES REGULATING ASBESTOS EXPOSURE.

DO NOT CUT OR BEVEL ASBESTOS CEMENT PIPE OR FITTINGS WITH ABRASIVE DISC SAWS OR ABRASIVE DISC SANDERS.

CTD007321

CertainTeed

To See Distribution	Mail Code	From <i>O. H. Kittilstad</i> O. H. Kittilstad	Mail Code 1125/4	Ext. 7505
Subject MSDS's FOR A/C PIPE AND FITTINGS - CALIFORNIA LETTER			Date June 17, 1985	

TO: ~~John H. Kelly~~ ~~2125/2B~~
T. Dougherty 1125/1
C. Pontz 1125/1
L. J. Mellon, M. D. 1125/4
J. Baker 2125/2B

The attached letter from the California Division of Occupational Safety and Health cites inadequacies in our current MSDS's for asbestos cement pipe, specifically a lack of Chemical Abstract Service (CAS) numbers for the hazardous ingredients, and first aid procedures were not addressed.

Asbestos (CAS 1332-21-4) and silica (CAS 7631-86-9) are on the California list of hazardous substances.

As you recall, we submitted two MSDS's for A/C pipe products in 1983, i.e., one for asbestos and one for silica. We could have prepared one MSDS for A/C pipe products and included all necessary information. I suggest we do that now, since this recourse is necessary to meet the Federal Hazard Communication Standard.

I have drafted an MSDS for A/C pipe and fittings products (copy attached), which I believe will meet both the Cal. OSHA and Federal standard. You will note I have included Portland cement in the ingredients section. This is necessary under the Federal standard because Portland cement is cited in the ACGIH TLV list which automatically makes it a hazard substance by the Federal standard. John, as we discussed on June 13, 1985, I will need the per cent of Portland cement in the final product. (Note: I know of no need to include ingredient per cent on the MSDS by either the Federal or California standard. Likewise, I am not aware of a requirement for citing the actual per cent in other state laws, although it may exist. I have included it in this draft, since we did it in the prior submissions. If it is not proprietary, I suggest we include it.)

I would appreciate the recipients of this memo providing me their comments as soon as possible to meet the deadline in the Cal. OSHA letter.

OHK/lh

Attachments

RECEIVED JUN 19 1985

CTD007322

CertainTeed

CERTAINTeed CORPORATION

ADDRESS P. O. BOX 860, VALLEY FORGE, PA 19482

EMERGENCY TELEPHONE NUMBER (215) 341-7000

DATE PREPARED 6/20/85

SUPERSEDES MSDS

DATED 2/7/83

Material Safety Data Sheet

SUBSTANCE IDENTIFICATION (LABEL NAME)

ASBESTOS CEMENT PIPE AND FITTINGS PRODUCTS

CHEMICAL NAME(S)

N/A

calcium silicate hydrates

CAS NO.

N/A

COMMON NAME(S)

A/C PIPE AND FITTINGS

1. INGREDIENTS

	TLV	%
ASBESTOS (CAS 1332-21-4)	OSHA PEL (8 HR TWA) 2 FIBERS > 5 U M/CC 10 FIBERS > 5 U M/CC CEILING ACGIH TLV CHRYSTOTILE: 2 FIBERS > 5 U M/CC CROCIDOLITE: 0.2 FIBERS > 5 U M/CC	10-20
SILICA (CAS 14808-60-7)	OSHA PEL RESPIRABLE DUST; 250 MPPCF/(% S O ₂ + 5) OR 10 MG/M ³ TOTAL DUST: 30 MG/M ³ / (% S O ₂ + 2)	5% OR LESS
PORTLAND CEMENT (CAS 65997-15-1)	OSHA PEL 50 MPPCF ACGIH TLV 30 MPPCF	Trace

2. PHYSICAL DATA

BOILING POINT N/A	ODOR NONE	MELT POINT N/A	SPECIFIC GRAVITY 3.15-2.0 (2)
VAPOR DENSITY (AIR = 1) N/A	% VOLATILE BY VOLUME N/A	APPEARANCE CEMENT GRAY COLORED PIPE AND FITTINGS	
VAPOR PRESSURE N/A	% SOLUBILITY (H ₂ O) NEGLIGIBLE		

CTD007323

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT & METHOD

N/A

FLAMMABLE LIMITS

LEL

N/A

UEL

N/A

EXTINGUISHING MEDIA USE THAT WHICH IS APPROPRIATE FOR SURROUNDING FIRE. THIS MATERIAL IS NON-COMBUSTIBLE.

SPECIAL FIRE FIGHTING PROCEDURES

NONE

UNUSUAL FIRE AND EXPLOSION HAZARDS

NONE

4. PHYSIOLOGICAL EFFECTS

HEALTH EFFECTS FROM STORING AND HANDLING ASBESTOS CEMENT PIPE AND FITTINGS SHOULD NOT BE A PROBLEM IF INDUSTRY RECOMMENDED WORK PRACTICES ARE USED. (SEE SECTION 11 FOR INFORMATION ON INDUSTRY WORK PRACTICES). FAILURE TO FOLLOW THESE PRACTICES MAY RESULT IN THE AIRBORNE RELEASE OF THE ENTRAPPED ASBESTOS FIBERS AND SILICA DUST INGREDIENTS, EXPOSURE TO THE INGREDIENT DUST AND FIBER MAY CAUSE THE FOLLOWING HEALTH EFFECTS.

Intake
PRIMARY ROUTES OF EXPOSURE: INHALATION, SKIN AND EYE CONTACT.

ACUTE EFFECTS: INHALATION OF DUST FROM CUTTING/GRINDING MAY CAUSE IRRITATION AND COUGHING. SKIN CONTACT WITH DUSTS MAY CAUSE IRRITATION AND ITCHING. DIRECT EYE CONTACT WITH DUST MAY CAUSE REDNESS AND IRRITATION.

CHRONIC EFFECTS: INHALATION/ EXCESSIVE EXPOSURE TO SILICA AND ASBESTOS DUSTS CAUSES A DISABLING SCARRING OF THE LUNGS, OR PNEUMOCONIOSIS, CALLED "SILICOSIS" AND "ASBESTOSIS," WHICH GRADUALLY REDUCES LUNG CAPACITY AND EFFICIENCY. MAIN SYMPTOMS INCLUDE CHEST PAIN, COUGHING, DECREASED VITAL CAPACITY, BASAL RALES, CYANOSIS, COR PULMONALE, CLUBBING OF THE FINGERS, ANOREXIA, WEAKNESS AND WEIGHT LOSS. RADIOLOGIC STUDIES MAY SHOW DIFFUSE INCREASE IN LUNG CAPACITY AND PLEURAL CALCIFICATION.

ASBESTOS IS CLASSIFIED AS A HUMAN CARCINOGEN BY THE IARC AND NTP AND IS REGULATED BY OSHA AS A HUMAN CARCINOGEN. ASBESTOS-EXPOSED WORKERS SHOW AN INCREASED INCIDENCE OF PLEURAL OR PERITONEAL MESOTHELIOMA AND HIGH RATES OF RESPIRATORY CANCER. THE INCIDENCE OF PULMONARY FIBROSIS AND LUNG CANCER IN ASBESTOS-EXPOSED WORKERS IS GREATLY INCREASED BY SMOKING. REPORTS ASSOCIATING CANCER TO OTHER BODY ORGANS EXIST, ALTHOUGH THE EVIDENCE IS NOT CLEAR.

EYE CONTACT: PROLONGED EXPOSURE TO ASBESTOS MAY CAUSE CONJUNCTIVITIS.

SKIN CONTACT: PROLONGED EXPOSURE TO ASBESTOS MAY CAUSE ASBESTOS WARTS AND DERMATITIS, USUALLY CONFINED TO THE HANDS AND FOREARM.

CTD007324

8. CHEMICAL REACTIVITY

THIS IS A STABLE MATERIAL.

9. STORAGE INFORMATION

SEE SECTION 11.

10. SPILL, LEAK, AND DISPOSAL INFORMATION

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED PIPE FRAGMENTS AND INSTALLATION DEBRIS MUST BE HANDLED IN A MANNER WHICH AVOIDS AIRBORNE DISPERSION OF ASBESTOS OR SILICA DUST. USE WET OR VACUUM METHOD FOR CLEANUP. AVOID INHALATION OF DUSTS.

WASTE DISPOSAL METHOD

DISPOSE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.

11. ADDITIONAL COMMENTS

ALWAYS USE INDUSTRY RECOMMENDED WORK PRACTICES WHEN HANDLING OR PERFORMING FIELD OPERATIONS WITH ASBESTOS CEMENT PIPE.

SEE MANUFACTURERS' INSTALLATION MANUAL, AMERICAN WATERWORKS ASSOCIATION MANUAL M-16, OR ASBESTOS CEMENT PIPE PRODUCERS ASSOCIATION PUBLICATIONS FOR DETAILED INFORMATION ON INDUSTRY RECOMMENDED WORK PRACTICES.

SEE ALSO THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATION 29 CFR.1910.1001 WHICH REGULATES WORKPLACE EXPOSURE TO ASBESTOS DUST AND ANY STATE OR LOCAL WORKPLACE CODES REGULATING ASBESTOS EXPOSURE.

DO NOT CUT OR BEVEL ASBESTOS CEMENT PIPE OR FITTINGS WITH ABRASIVE DISC SAWS OR ABRASIVE DISC SANDERS.

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5. EMERGENCY AND FIRST AID PROCEDURES

AVOID THE GENERATION OF DUST FROM CUTTING OR GRINDING.

FIRST AID

EYE CONTACT FLUSH WELL WITH RUNNING WATER FOR AT LEAST 15 MINUTES. GET MEDICAL HELP IF IRRITATION PERSISTS.

SKIN CONTACT CLEANSE WITH SOAP AND WARM WATER. GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

UPPER RESPIRATORY REMOVE FROM EXPOSURE. IF IRRITATION PERSISTS, GET MEDICAL HELP.

6. PHYSICAL HAZARDS

NONE

7. SPECIAL PROTECTION INFORMATION

WHEN INDUSTRY RECOMMENDED WORK PRACTICES ARE FOLLOWED, SPECIAL PROTECTION MEASURES SHOULD NOT BE REQUIRED. (SEE SECTION 11)

RESPIRATORY PROTECTION: NOT REQUIRED IF INDUSTRY RECOMMENDED WORK PRACTICES ARE FOLLOWED. IF DUST IS NOT CONTROLLED, USE RESPIRATORS APPROVED BY THE BUREAU OF MINES, DEPARTMENT OF THE INTERIOR, OR NIOSH.

REUSEABLE OR SINGLE USE AIR PURIFYING RESPIRATOR: WHEN THE CEILING OR THE 8 HOUR TWA AIRBORNE CONCENTRATION OF ASBESTOS AND/OR SILICA ARE EXPECTED TO EXCEED 10 TIMES THOSE LIMITS.

FULL FACED PIECE AIR PURIFYING RESPIRATOR OR A POWERED AIR PURIFYING RESPIRATOR: WHEN CEILING OR 8 HOUR TWA CONCENTRATION ARE REASONABLY EXPECTED TO EXCEED 10 TIMES, BUT NOT 100 TIMES, THOSE LIMITS.

TYPE "C" SUPPLIED AIR RESPIRATORS, CONTINUOUS FLOW, OR PRESSURE-DEMAND CLASS: WHEN THE EXPOSURES CAN REASONABLY BE EXPECTED TO EXCEED 100 TIMES THE 8 HOUR TWA OR CEILING CONCENTRATIONS.

SPECIAL CLOTHING: WHEN AIRBORNE EXPOSURES EXCEED CEILING LEVEL, COVERALLS OR SIMILAR WHOLE BODY CLOTHING, HEAD COVERINGS, GLOVES, DUST COVERINGS.

EYE PROTECTION: GOGGLES OR SAFETY GLASSES TO PREVENT DUST IN EYES.

DEPARTMENT OF INDUSTRIAL RELATIONS

DIVISION OF OCCUPATIONAL SAFETY AND HEALTH

325 GOLDEN GATE AVENUE
SAN FRANCISCOADDRESS REPLY TO:
P.O. BOX 603
SAN FRANCISCO, CA 94101

June 4, 1985

CERTAINTED CORPORATION
P.O. BOX 860
VALLEY FORGE PA 19482
Attention: Mr Owen H. Kittilstad
Director, Health and Safety

CORP. HEALTH & SAFETY

JUN 10 1985

RECEIVED

Dear Mr Kittilstad,

As you may already know Cal/OSHA has been indexing and reviewing its file of Material Safety Data Sheets (MSDSs) received from manufacturers such as yourself. We have just completed the first phase of our review process and found that some of your MSDSs do not contain all of the information which is required by California's Labor Code (LC) Section 6391. Attached is a copy of LC Section 6391 and a list of your MSDSs (by product/trade name) that are missing some required information.

Within 15 working days of receipt of this letter please review the attached list and revise each MSDS accordingly. If there are any requirements that are not applicable to a specifically listed product, please so indicate by placing an N/A in the appropriate space of your revised MSDS.

Please be aware that after we complete the first phase of our MSDS review process we will review your MSDS again during the second phase of our review process. At that time we will not only verify that your MSDS meet the minimum information requirements of LC Section 6391 but also verify the accuracy of the information you provide. So to avoid further compliance activity, you should revise all incomplete or inaccurate entries in your MSDS at this time.

Once you have made the required corrections please mail a copy of your revised MSDS(s) for products identified in the attached list to:

Cal/OSHA Right to Know Unit
1625 Shattuck Ave., Room 302
Berkeley, CA 94709
Attn: MSDS Review Coordinator

All other MSDS submittals not pertaining to this review should be sent to our regular San Francisco address. If you have any questions in regard to meeting these requirements, feel free to contact our Right to Know Unit at (415) 540-3037.

Sincerely,


Frank R. Ciofalo, Ph.D.
Acting Deputy Chief for Health

enc:

CTD007327



LIST OF REJECTED MATERIAL SAFETY DATA SHEETS
WITH DESCRIPTION OF OMISSIONS

CERTAINTEED CORPORATION

P.O. BOX 860

VALLEY FORGE PA 19482

ASBESTOS/CEMENT PIPE

CAL/OSHA REF. NO. 003454

CAS NUMBERS WERE NOT SPECIFIED FOR ALL HAZARDOUS
INGREDIENTS. REFERENCE SHOULD BE MADE TO THE
CAL/OSHA DIRECTORS LIST.

FIRST AID PROCEDURES WERE NOT ADDRESSED.

ASBESTOS CEMENT PIPE

CAL/OSHA REF. NO. 003455

CAS NUMBERS WERE NOT SPECIFIED FOR ALL HAZARDOUS
INGREDIENTS. REFERENCE SHOULD BE MADE TO THE
CAL/OSHA DIRECTORS LIST.

FIRST AID PROCEDURES WERE NOT ADDRESSED.

ASBESTOS/CEMENT PIPE

CAL/OSHA REF. NO. 003456

CAS NUMBERS WERE NOT SPECIFIED FOR ALL HAZARDOUS
INGREDIENTS. REFERENCE SHOULD BE MADE TO THE
CAL/OSHA DIRECTORS LIST.

FIRST AID PROCEDURES WERE NOT ADDRESSED.

ASBESTOS CEMENT PIPE

CAL/OSHA REF. NO. 003457

CAS NUMBERS WERE NOT SPECIFIED FOR ALL HAZARDOUS
INGREDIENTS. REFERENCE SHOULD BE MADE TO THE
CAL/OSHA DIRECTORS LIST.

FIRST AID PROCEDURES WERE NOT ADDRESSED.

CTD007328

LIST OF REJECTED MATERIAL SAFETY DATA SHEETS
WITH DESCRIPTION OF OMISSIONS

CERTAINTEED CORPORATION

P.O. BOX 860

VALLEY FORGE PA 19482

FIBER GLASS

CAL/OSHA REF. NO. 003450

CAS NUMBERS WERE NOT SPECIFIED FOR ALL HAZARDOUS
INGREDIENTS. REFERENCE SHOULD BE MADE TO THE
CAL/OSHA DIRECTORS LIST.

CHRONIC HEALTH EFFECTS INFORMATION WAS NOT ADDRESSED.

CTD007329

CertainTeed

Date	To	Location and mail code
June 19, 1985	Mr. O. Kittilstad	VF CORP #4
Subject	From	Location and mail code
MSDS'S FOR A/C PIPE AND FITTINGS - CALIFORNIA	T. A. Dougherty/c	VF CORP #1

cc: Mr. J. P. McGinley - BB P&PG #2126
Mr. C. M. Pontz - VF CORP #1
Dr. L. J. Mellon - VF CORP #4
Mr. J. F. Baker - BB P&PG #2126

As you requested, I have reviewed your proposed MSDS for A/C pipe and fittings and I have no problems with it.

I have no suggestions for change.

RECEIVED JUN 24 1985