Material Safety Data

September 1, 1972

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PRODUCT: Chrysotile Asbestos **CHEMICAL FORMULA:** $Mg_6(OH)_8Si_4O_{10}$

TRADE NAMES: "Calidria" Asbestos

PLAINTIFF'S EXHIBIT UC-790

I. PHYSICAL DATA

BOILING POINT AND MELTING POINT: Not Pertinent

SPECIFIC GRAVITY (H_2O = 1): 2.45

VOLATILE CONTENT: Absorbed Water 1 – 4% By Weight. Structural Water Approximately 13% by Weight.

APPEARANCE: Pellets or Fine White Powder. No odor. Very Slight Solubility in Water.

II. HAZARDOUS INGREDIENTS

~~Not Applicable.~~ While asbestos contains no [illegible] in the natural state it can be converted under certain conditions (See Section V below)

III. FIRE AND EXPLOSION HAZARD DATA

Material is not Combustible. No Fire or Explosion Hazard.

IV. REACTIVITY DATA

INERT MATERIAL: No Decomposition or Polymerization Conditions.

V. HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE TO AIRBORNE CONCENTRATION:

The current standard of the Occupational Safety and Health Act of 1970 contains the following exposure limits:

"The 8-hour time-weighted average airborne concentration of asbestos fibers to which employees are exposed shall not exceed 5 fibers per milliliter greater than 5 microns in length, as determined by the membrane filter method at 400-450X magnification (4 millimeter objective) phase contrast illumination. No employee shall be exposed at any time to airborne concentrations of asbestos fibers in excess of 10 fibers per milliliter, longer than 5 microns." (Federal Register – Vol. 37, June 7, 1972, page 11320).

EFFECTS OF OVER EXPOSURE: Prolonged over exposure ~~may~~ can result in lung damage. [illegible] such as asbestosis or lung cancer

EMERGENCY AND FIRST AID PROCEDURES: ~~Not applicable. Material has~~ No acute toxicity. Use respirator if dust [illegible]

VI. STEPS FOR LEAKS OR SPILLS

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Avoid inhalation of dust. Remove spilled material by vacuum cleaner or by water wash.

WASTE DISPOSAL METHOD:

If reasonably foreseeable handling will not produce airborne concentrations in excess of exposure limits, no special procedures are required. When limits are likely to be exceeded, waste and scrap shall be collected and disposed of in impermeable sealed bags or other closed, impermeable containers, suitably labelled.

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VENTILATION:
Local exhaust for each operation is preferable. (See American National Standards Institute booklet, Z9.2 – 1971.) General area exhaust is acceptable. No special considerations.

PROTECTIVE GLOVES: None	EYE PROTECTION: None

OTHER PROTECTIVE EQUIPMENT:
If time weighted average or ceiling concentration limits are exceeded, clothing providing whole body covering shall be supplied and its use required.

RESPIRATORY PROTECTION[1]
The current standard of the Occupational Safety and Health Act of 1970 contains the following guidelines:

AIRBORNE CONCENTRATION[2]			
8-HOUR EXPOSURE[3]	CEILING CONCENTRATION	REQUIRED MASK TYPE	ACCEPTABLE MODEL[4]
5 maximum	10 maximum	None required.	–
50 maximum	100 maximum	U.S. Bureau of Mines Schedule 21B. Negative pressure on breathing. Covers nose and mouth.	Willson Model 1009 with R-520 Filter and M-S-A No. 86432 with Type H, Ultra Filter and others.
500 maximum	1000 maximum	U.S. Bureau of Mines Schedule 21B Powered filter positive pressure.	Personal Environment Systems, Inc. Hood 330 or 351 with 1900 Series filter.
Over 500	–	U.S. Bureau of Mines Schedule 19B Type C positive pressure, air supplied.	Willson GA2H M-S-A Lead-Foe and others.

(1) Allowed only during the time required for installation of engineering controls, when engineering controls are not technically feasible or adequate, and in emergencies. An employee may not be assigned to tasks requiring respirator if his most recent medical examination indicates he will be unable to function normally.

(2) Fibers per milliliter greater than 5 microns in length, as determined by the membrane filter method at 400-450X magnification (4 millimeter objective) phase contrast illumination.

(3) 8-Hour time weighted average.

(4) Examples of masks approved by U.S. Bureau of Mines under the appropriate schedule.

Reference – Federal Register, Volume 37, Pages 11318-11322, June 7, 1972.

If the time weighted average and ceiling concentration limits are not exceeded, no special precautions are required except:

a) Bag damage and dusting should be minimized and dust inhalation avoided.

b) Every place of employment where asbestos fibers are released must be monitored by December 7, 1972 to determine exposure levels.

c) A comprehensive medical examination is required for any employee exposed to airborne fibers within 30 days of first such employment, annually thereafter and on termination of employment.

When exposure limits are exceeded, reference should be made to the regulation for details on caution signs, monitoring, change rooms, protective clothing laundering and record keeping.