UC 149-2

UNION CARBIDE

INTERNAL CORRESPONDENCE

METALS DIVISION

• P.O. BOX 579 - 4625 ROYAL AVE., NIAGARA FALLS, NEW YORK 14302

To (Name) Mr. W. C. Thurber
Division UCC - Metals Division
Location 38th Floor
270 Park Avenue
New York, NY 10017

Date September 22, 1976

Originating Dept. "Calidria" Asbestos

Answering letter date

Copy to Messrs. R. E. Byrne, Jr.
R. F. X. Fusaro
J. L. Myers
File ✓

Subject Material Safety Data Sheet

Suggested revisions in the asbestos Material Safety Data Sheet are attached. An annotated copy of Mr. Raeburn's suggestions is also attached for convenient reference.

Basically, Mr. Raeburn's recommendations have been followed with occasional minor editorial revisions except as follows:

1. Instead of deleting the respirator use table entirely, it has been updated to fit the current regulations and specific references to products have been removed. Acceptable products are referenced to NIOSH approval. This will change from time to time but will not affect the validity of this sheet. I think it will be to our advantage to show in a simple way what type of respirators are acceptable for the various concentration ranges.

2. The idea that contaminated protective clothing should not be removed from the plant premises has been added to "OTHER PROTECTIVE EQUIPMENT".

3. The "no smoking" concept is added under VIII SPECIAL PRECAUTIONS.

H. B. Rhodes

H. B. Rhodes

HBR:dal
Attachments

A20710

CARBIDE Material Safety Data

September 1, 1972
UNION CARBIDE CORPORATION • 4625 ROYAL AVENUE • NIAGARA FALLS, NEW YORK • 14302
TELEPHONE: (716) 278-3378

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

TRADE NAMES: ~~Calidria~~ CALIDRIA Asbestos

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

Asbestos contains no hazardous ingredients. However, the material itself can be hazardous under certain conditions. (See 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: standard (CFR 29, 1910.1001)

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

The 8-hour time-weighted average airborne concentrations of asbestos fibers to which any employee may be exposed shall not exceed 2 fibers, longer than 5 micrometers per cubic centimeter of air, as determined by the membrane filter method at 400-450 X 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, longer than 5 micrometers per cubic centimeter of air as ~~(29 C.F.R. 1910.1001)~~ determined by the method just named.

EFFECTS OF ~~OVER~~ EXPOSURE: CAUTION: Breathing asbestos may cause serious bodily harm.

EMERGENCY AND FIRST AID PROCEDURES: No acute toxicity. Use respirator if airborne asbestos fibers concentration exceeds OSHA limits.

VI. SPILL OR LEAK PROCEDURES

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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Union Carbide Corporation assumes no responsibility and makes no warranty, expressed or implied, representation, promise, or statement as to completeness

upper case, bold Type

VII. SPECIAL PROTECTION INFORMATION

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

RESPIRATORY PROTECTION(1)

The current Occupational Safety and Health Standard CFR29, 1910.1001 contains the following requirements for respiratory protection.

AIRBORNE CONCENTRATION(2)		
8-HOUR EXPOSURE(3)	CEILING CONCENTRATION	MINIMUM REQUIRED MASK TYPE
2 maximum	10 maximum	None required when allowable limits are not exceeded.
20 maximum	100 maximum	~~U.S. Bureau of Mines Schedule 21B.~~ ~~Negative pressure on breathing.~~ ~~Covers nose and mouth.~~ Reusable or single use air purifying respirator
200 maximum	1000 maximum	~~U.S. Bureau of Mines Schedule 21B~~ Powered filter positive pressure.
Over 200	–	~~U.S. Bureau of Mines Schedule 19B~~ Type C positive pressure, air supplied.

(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.

Only masks certified by MOSH as acceptable for the exposures encountered may be used.

(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.

OTHER PROTECTIVE EQUIPMENT:

If ~~time weighted average or~~ the ceiling concentration limits is exceeded, clothing providing whole body covering shall be supplied and its use required. Contaminated protective clothing should not be removed from the plant premises.

VIII. SPECIAL PRECAUTIONS

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~~ Where 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.

d.) IT IS STRONGLY URGED THAT PERSONS WHO WORK WITH ASBESTOS DO NOT SMOKE.

A2072

UNION CARBIDE CORPORATION
270 PARK AVENUE, NEW YORK, N. Y. 10017
LAW DEPARTMENT

RECEIVED
FEB 6 1976

February 5, 1976

Mr. W. C. Thurber
Metals Division
38th Floor

Re: Metals Division - Material Safety
Data Sheet - CALIDRIA Asbestos

Dear Mr. Thurber:

At Bob Fusaro's request, I have reviewed the Material Safety Data Sheet dated September 1, 1972 for Chrysotile Asbestos, as sold by Union Carbide. I have the following comments:

1. Under the heading "TRADE NAMES," the term "Calidria" refers to a trademark. I suggest that this trademark be set in all capital letters, without quotation marks. O.K.

2. Under the heading "HAZARDOUS INGREDIENTS," the words "Not Applicable" should be deleted and the following words substituted therefor:

> Asbestos contains no hazardous ingredients. However, the material itself can be hazardous under certain conditions. (See V below.)

O.K.

3. Under the heading "HEALTH HAZARD DATA," "PERMISSIBLE EXPOSURE TO AIRBORNE CONCENTRATION," the present language should be deleted and the following language substituted therefor:

> Effective July 1, 1976, the following exposure limits under the Occupational Safety and Health Act of 1970 shall apply:

Limits are really under 1910.1001 not the Act itself.

> The 8-hour time-weighted average airborne concentrations of asbestos fibers to which any employee may be exposed shall not exceed 2 fibers, longer than 5 micrometers per cubic centimeter of air, as determined by the membrane filter method at 400-450 X 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 longer than 5 micrometers per cubic centimeter of air ~~as (29 C.F.R. 1910.1001)~~ determined by the method just noted.

Minor change suggested.

A20720

The heading "EFFECTS OF OVEREXPOSURE" should be modified to read "EFFECTS OF EXPOSURE" and the existing language should be deleted and the following language substituted therefor:

O.K.

> CAUTION: Breathing asbestos may cause serious bodily harm.

Under the heading "EMERGENCY AND FIRST AID PROCEDURES," the existing language should be deleted and the following language substituted therefor:

> No acute toxicity. Use respirator if airborne asbestos fibers concentration exceeds OSHA limits.

O.K

4. The disclaimer statement at the bottom of the Safety Data Sheet should be set in upper case bold type.

O.K

5. Under the heading "SPECIAL PROTECTION INFORMATION," "OTHER PROTECTIVE EQUIPMENT," the words "time weighted average or" should be deleted. The sentence will then read as follows:

> If the ceiling concentration limits ~~are~~ is exceeded, clothing providing whole body covering shall be supplied and its use required.

O.K. with minor change shown.

The chart which is printed under the heading "RESPIRATORY PROTECTION" and the accompanying footnotes should be deleted from the Material Safety Data Sheet. This information is subject to frequent change and the Data Sheet is therefore subject to going out of date. The following sentence should be inserted under the heading "RESPIRATORY PROTECTION":

> Proper selection of respirators shall be made according to the guidance of American National Standard Practices for Respiratory Protection Z 88.2-1969, and any subsequent regulations on the selection of respirators enacted by the National Institute for Occupational Safety and Health (NIOSH).

See alternate suggestion on page 3

6. Under the heading "SPECIAL PRECAUTIONS," the first sentence should be modified to read "If ceiling concentration limits are not exceeded..." and the last sentence should be modified to read "When exposure limits may be exceeded..."

O.K.

If you have any questions about the above comments, I will be pleased to discuss this matter further. Also, I can review the new Safety Data Sheet in proof form before it is finally printed, if you wish.

Very truly yours,

Charles F. Raeburn

Charles F. Raeburn

CFR:bl

cc: J. V. Murray
R. F. X. Fusaro/File

A20723

MM²/FILE

TOMOE

Call Report

DATE: September 27, 1979

SUBJECT: Broken SG-100 Bags

COMPANY: Nitto Boseki Co.

INTERVIEWED: Mr. Kanno, Deputy Manager, Tile Production Section
Mr. Tajima

A considerable number of broken bags were found among total 2,250 bags SG-100 delivered under order B-11930. Called upon the factory to check into the problem.

Situation:

Of 2,250 bags, 49 (1,111 kgs) were found broken, the asbestos powder from such bags flying around and piling up on the container floor.

During palletizing operation some more broke and how many more get broken during onward handling was unknown.

Problems:

1. Decreased work efficiency - difficulty in palletization
2. Dusting problem - exposure to asbestos dust (how to dispose of broken bags)

Nittobo's request:

1. Nittobo no longer accepts PE bags, so future delivery be made in paper bags.
2. Unbroken bags be replaced with rigid ones for the delivery made today.
3. Broken bags be returned to the shipper.

Countermeasures:

For the request 2 above, replacement is impossible at this moment, and improvement appears difficult for the next order because of the time limit. (The manager Mr. Tsuda said the situation calls for a discount of at least ¥5 or over, for the drop in the work efficiency much disturbed the production manager.) Tomoe will telex UCC for improvement, and based upon its reply will negotiate again

with Nittobo.

We will comply with request 3 above.

A20723