

Otto Chemie Pvt Ltd

An ISO 9001 : 2015 & GMP Certified Company
Office : No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road,
Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)
Tel : + 91 98200 41841 Email : info@ottokemi.com Web : www.ottokemi.com

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Product identifiers

Product Name : Asbestos, for gooch crucibles
Product Code : A 2635
CAS No: 1332-21-4

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet
Company identification
OTTO CHEMIE PVT LTD
No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road,
Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

1.4. Emergency telephone number
Phone no. : + 91 98200 41841 (10 : 00 am – 06 : 00 pm)

SECTION 2 - HAZARDS IDENTIFICATION

Classification
Carcinogen Category 1A
Organ Damage Category 1
EMERGENCY OVERVIEW

HAZARD

DANGER

Determined by using criteria:

H350 H372

May cause CANCER

Causes damage to organs through prolonged or repeated exposure by inhalation.

PRECAUTIONARY STATEMENTS

Prevention

Do not handle until all safety precautions have been read and understood.

Wash hands thoroughly after handling.

Obtain special instructions before use.

Do not breathe dust/fume/gas/mist/vapours/spray.

Use personal protective equipment as required.

Do not eat, drink or smoke when using this product.

Response

Get medical advice/attention if you feel unwell.

If exposed or concerned: Get medical attention advice.

Storage

Store locked up.

Disposal

Dispose of contents and container in accordance with relevant legislation.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN %
asbestos, white	12001-29-5 >95
Note: some Mn, Fe, Al replacement in unit cell occurs for the various mineral forms	<4

continued...

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SECTION 4 - FIRST AID MEASURES

SWALLOWED

Rinse mouth out with plenty of water.

For advice, contact a Poisons Information Centre or a doctor.

- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious
- Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
- Seek medical advice.

EYE

If this product comes in contact with the eyes:

- Immediately hold eyelids apart and flush the eye continuously with running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
- Transport to hospital or doctor without delay.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

If skin or hair contact occurs:

- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

INHALED

- If dust is inhaled, remove from contaminated area.
- Encourage patient to blow nose to ensure clear breathing passages.
- Ask patient to rinse mouth with water but to not drink water.
- Seek immediate medical attention.

NOTES TO PHYSICIAN

Treat symptomatically.

SECTION 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

There is no restriction on the type of extinguisher which may be used.

FIRE FIGHTING

Alert Fire Brigade and tell them location and nature of hazard.

- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water courses.

Product is not combustible. No special firefighting procedures required.

Use fire fighting procedures suitable for surrounding area.

FIRE INCOMPATIBILITY

No known incompatibility with normal range of industrial materials.
continued...

FIRE FIGHTING MEASURES

Personal Protective Equipment

Gas tight chemical resistant suit.

Limit exposure duration to 1 BA set 30 mins.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES

MINOR SPILLS

Restrict access to area until completion of clean up. Post warning signs.

Clear area of all unprotected personnel and move upwind.

Avoid dust inhalation. SAA approved respiratory protection is essential.

Avoid all personal contact and wear full protective equipment.

Specific asbestos exhaust extraction fan required with High Efficiency

Particulate Air (HEPA) filters.

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Use a wet method or an approved vacuum cleaning system with HEPA filters to pick up spills.

Collect solid residues and seal in drums for disposal.

Label clearly with Asbestos label.

MAJOR SPILLS

Clear area of personnel and move upwind.

Alert Fire Brigade and tell them location and nature of hazard.

Removal of asbestos should be undertaken in accordance with Worksafe recommendations, by registered contractors, and only where a permit has been issued for that particular location.

Restrict access to area until completion of clean up.

Post warning signs:- Asbestos Working Area No Unauthorised Entry- Respiratory Protection Essential.

SAA approved respiratory protection must be worn.

Consider special asbestos exhaust extraction fan required with High Efficiency Particulate Air filter.

Extraction equipment shall be operated continuously whilst removal enclosure is in place.

Thoroughly wet down the spilled material.

Wet removal method preferred- dry removal is less desirable.

Collect all product and residues in suitably labelled and sealed containers.

After clean up decontaminate and launder all protective clothing and equipment before storing and reusing.

EMERGENCY RESPONSE PLANNING GUIDELINES (ERPG)

The maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour WITHOUT experiencing or developing life-threatening health effects is:

asbestos, white 2.5 mg/m³

irreversible or other serious effects or symptoms which could impair an individual's ability to take protective action is:

asbestos, white 0.5 mg/m³

other than mild, transient adverse effects without perceiving a clearly defined odour is:

asbestos, white 0.5 mg/m³

The threshold concentration below which most people will experience no appreciable risk of health effects:

asbestos, white 0.005 mg/m³

continued...

American Industrial Hygiene Association (AIHA)

Ingredients considered according to the following cutoffs

Very Toxic (T+) >= 0.1% Toxic (T) >= 3.0%

R50 >= 0.25% Corrosive (C) >= 5.0%

R51 >= 2.5%

else >= 10%

where percentage is percentage of ingredient found in the mixture

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

SECTION 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

Wear personal protective equipment when handling.

Avoid generating and breathing dust.

Use good occupational work practice.

Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

Avoid all personal contact, including inhalation.

SUITABLE CONTAINER

Containers should comply with recommendations

of Asbestos Code of Practice (Worksafe Australia).

Usual recommendations are to 'double-bag' the asbestos and then put the bags into a metal drum which is clearly labelled as above. However there is no legal restriction on the type of container provided it is dust tight.

Check that containers are clearly labelled with Asbestos label.

STORAGE INCOMPATIBILITY

Segregate from strong acids.

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STORAGE REQUIREMENTS

Observe manufacturer's storing and handling recommendations.

· Check that containers are clearly labelled.

Store in original containers.

Keep containers securely sealed.

Protect containers against physical damage.

Check regularly for spills and leaks.

Store in a cool, dry and well-ventilated area.

Store away from incompatible materials.

Keep locked up.

+: May be stored together

O: May be stored together with specific preventions

X: Must not be stored together

continued...

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

The following materials had no OELs on our records

• asbestos, white: CAS:12001- 29- 5 CAS:1332- 21- 4

MATERIAL DATA

WARNING: All forms of asbestos (including chrysotile) have been listed as

HUMAN CARCINOGENS:

- Human Sufficient Evidence - International Agency for Research on Cancer.

Some jurisdictions require that health surveillance be conducted on

occupationally exposed workers. Such surveillance should emphasise

(i) demography, occupational and medical history and health advice

(ii) physical examination if indicated

(iii) records of personal exposure

PERSONAL PROTECTION

EYE

· Safety glasses.

· Chemical goggles.

· Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].

HANDS/FEET

· Barrier cream and Elbow length PVC gloves or Plastic gloves.

PVC safety gumboots.

RESPIRATOR

Full face respirator with supplied air.

OTHER

Overalls.

Provide special vacuuming facilities for clothes and suitable laundering or disposal arrangements, change areas with dual lockering facilities and showers for use before changing into street clothes.

Keep records to define exposures and retain for at least 20 years. Provide replacement and annual medical examinations for those exposed in the workplace to 8-hr TWA of 0.1 asbestos fibres/cc or greater which are >5 µm in continued...

ASBESTOS FOR GOOCH CRUCIBLES

length. Retain medical records for at least 20 years.

RESPIRATOR

Protection Factor Half- Face Respirator Full- Face Respirator Powered Air Respirator

10 x ES P1 Air- line* - - PAPR- P1 -

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50 x ES Air- line** P2 PAPR- P2

100 x ES - P3 -

Air- line* -

100+ x ES - Air- line** PAPR- P3

* - Negative pressure demand ** - Continuous flow.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required.

For further information consult

your

Occupational Health and Safety Advisor.

ENGINEERING CONTROLS

No data for this material.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

A crystalline, serpentine mineral, or layered, hydrated magnesium silicate in fine fibre form (asbestiform).

It is resistant to heat, but will decompose and alter its microscopic fibre structure above 600 deg.C. Chrysotile dehydroxylates at 600-700 deg.C.

Commercial asbestos consists of fibres of varying length.

PHYSICAL PROPERTIES

Solid.

Does not mix with water.

Sinks in water.

Molecular Weight: 554.2

Melting Range (°C): Not applicable.

Solubility in water (g/L): Immiscible

pH (1% solution): Not applicable.

Volatile Component (%vol): Not applicable.

Relative Vapour Density (air=1): Not applicable.

Lower Explosive Limit (%): Not applicable

Autoignition Temp (°C): Not applicable Decomposition Temp (°C): Not available

State: Divided solid

Boiling Range (°C): Not applicable.

Specific Gravity (water=1): 2.56

pH (as supplied): Not applicable

Vapour Pressure (kPa): Not applicable.

Evaporation Rate: Not applicable

Flash Point (°C): Non combustible

Upper Explosive Limit (%): Not applicable

Viscosity: Not available

SECTION 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:

Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg

Inhalation LC50 Rat: > 50mg/L.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity

to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12 - ECOLOGICAL INFORMATION

Asbestos is non-biodegradable by aquatic organisms. There is no evidence to suggest that asbestos bioaccumulates in aquatic organisms. In soil it does not have an absorptive affinity for the solids normally found in natural water systems.

Drinking Water Standards: No recommended health-based guideline value as not hazardous to human health at concentrations normally found in drinking water (WHO)

Soil Guidelines: none available.

Air Quality Standards: no safe level recommended because of carcinogenic properties.

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SECTION 13 - DISPOSAL CONSIDERATIONS

Consult State Land Waste Management Authority for disposal.
Label all shipping containers as per Code of Practice.
Dispose of according to relevant State regulations.
Bury sealed containers of residue in an authorized landfill.
Do not attempt to open containers nor reuse containers.

SECTION 14 - TRANSPORTATION INFORMATION

Labels Required: MISCELLANEOUS

HAZCHEM: 2X

UNDG:

Dangerous Goods Class: 9 Subrisk:

None

UN Number: 2590

Packing Group

: III

Shipping Name: WHITE ASBESTOS (chrysotile, actinolite, anthophyllite, tremolite)

Air Transport IATA:

ICAO/IATA Class: 9

ICAO/IATA Subrisk:

None

UN/ID Number: 2590

Packing Group:

III

Special provisions: A61

Shipping Name: WHITE ASBESTOS (CHRYSTOLE, ACTINOLITE, ANTHOPHYLLITE, TREMOLITE) †

continued...

Maritime Transport IMDG:

IMDG Class: 9

IMDG Subrisk:

None

UN Number: 2590

Packing Group:

III

EMS Number: F- A, S- A Special provisions: 168

Shipping Name: WHITE ASBESTOS (chrysotile, actinolite, anthophyllite, tremolite)

SECTION 15 - REGULATORY INFORMATION

REGULATIONS

asbestos, white (CAS: 12001-29-5) is found on the following regulatory lists;

WHO Guidelines for Drinking-water Quality - Chemicals for which guideline values have not been established

asbestos, white (CAS: 1332-21-4) is found on the following regulatory lists;

International Agency for Research on Cancer (IARC) Carcinogens

OECD Representative List of High Production Volume (HPV) Chemicals

WHO Guidelines for Drinking-water Quality - Chemicals for which guideline values have not been established

SECTION 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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