

U.S. DEPARTMENT OF LABOR  
Occupational Safety and Health Administration

Form Approved  
OMB No. 44-R1387

# MATERIAL SAFETY DATA SHEET

**PLAINTIFF'S  
EXHIBIT**

Required under USDL Safety and Health Regulations for Ship Repairing  
Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

ASA-239

## SECTION I

|                                                           |                                                         |                                                                      |
|-----------------------------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------|
| MANUFACTURER'S NAME                                       |                                                         | EMERGENCY TELEPHONE NO.<br>(801) 262-2459<br>(801) 943-1754 (nights) |
| ADDRESS (Number, Street, City, State and ZIP Code)        |                                                         |                                                                      |
| CHEMICAL NAME AND SYNONYMS<br>Hydrated Magnesium Silicate |                                                         | TRADE NAME AND SYNONYMS<br>Chrysotile Asbestos, Asbestos             |
| CHEMICAL FAMILY<br>Serpentine Mineral Group               | FORMULA<br>3MgO · 2SiO <sub>2</sub> · 2H <sub>2</sub> O |                                                                      |

## SECTION II - HAZARDOUS INGREDIENTS

| PAINTS, PRESERVATIVES, & SOLVENTS                                                                                                                                        | % | TLV<br>(Unit) | ALLOYS AND METALLIC COATINGS             | %  | TLV<br>(Unit) |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---------------|------------------------------------------|----|---------------|
| PIGMENTS Not Applicable (NA)                                                                                                                                             |   |               | BASE METAL NA                            |    |               |
| CATALYST "                                                                                                                                                               |   |               | ALLOYS "                                 |    |               |
| VEHICLE "                                                                                                                                                                |   |               | METALLIC COATINGS "                      |    |               |
| SOLVENTS "                                                                                                                                                               |   |               | FILLER METAL PLUS COATING OR CORE FLUX " |    |               |
| ADDITIVES "                                                                                                                                                              |   |               | OTHERS "                                 |    |               |
| OTHERS "                                                                                                                                                                 |   |               |                                          |    | OSHA          |
| HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES                                                                                                                    |   |               |                                          | %  | TLV<br>(Unit) |
| Chrysotile Asbestos (Min.)                                                                                                                                               |   |               |                                          | 95 | 2 fibers/cc*  |
| * Only fibers greater than 5 micrometers in length. OSHA ceiling concentration = 10 fibers/cc (>5 μm). See OSHA regulation 29 CFR 1910.1001 for additional requirements. |   |               |                                          |    |               |

## SECTION III - PHYSICAL DATA

|                                                  |        |                                       |         |
|--------------------------------------------------|--------|---------------------------------------|---------|
| BOILING POINT (°F.)                              | NA     | SPECIFIC GRAVITY (H <sub>2</sub> O=1) | 2.4-2.6 |
| VAPOR PRESSURE (mm Hg.)                          | NA     | PERCENT VOLATILE BY VOLUME (%)        | NA      |
| VAPOR DENSITY (AIR=1)                            | NA     | EVAPORATION RATE (_____=1)            | NA      |
| SOLUBILITY IN WATER                              | Insol. |                                       |         |
| APPEARANCE AND ODOR Odorless, white fibrous form |        |                                       |         |

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

|                                                                                                                          |                        |     |     |
|--------------------------------------------------------------------------------------------------------------------------|------------------------|-----|-----|
| FLASH POINT (Method used)<br>Nonflammable                                                                                | FLAMMABLE LIMITS<br>NA | LeI | UeI |
| EXTINGUISHING MEDIA<br>NA                                                                                                |                        |     |     |
| SPECIAL FIRE FIGHTING PROCEDURES<br>Wear NIOSH/MSHA approved self-contained breathing apparatus and protective clothing. |                        |     |     |
| UNUSUAL FIRE AND EXPLOSION HAZARDS<br>None                                                                               |                        |     |     |

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## SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE  
(See Section II)

EFFECTS OF OVEREXPOSURE Chronic inhalation of asbestos may cause symptoms of variable cough, dyspnea, chest pains, weakness and decreased chest expansion. Later findings may include asbestosis--a diffuse but non-uniform fibrosis of the lungs; and respiratory cancer.

EMERGENCY AND FIRST AID PROCEDURES

None specific, remove from exposure and see an occupational physician.

## SECTION VI - REACTIVITY DATA

|                                              |                |   |                        |
|----------------------------------------------|----------------|---|------------------------|
| STABILITY                                    | UNSTABLE       |   | CONDITIONS TO AVOID NA |
|                                              | STABLE         | X |                        |
| INCOMPATIBILITY (Materials to avoid)<br>None |                |   |                        |
| HAZARDOUS DECOMPOSITION PRODUCTS<br>None     |                |   |                        |
| HAZARDOUS POLYMERIZATION                     | MAY OCCUR      |   | CONDITIONS TO AVOID NA |
|                                              | WILL NOT OCCUR | X |                        |

## SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED A clean-up procedure (i.e., vacuuming or wetting) which minimizes exposure is required. Place all material in closed containers with approved labels. If the possibility of dust exposure exists, wear NIOSH/MSHA approved respiratory protection (see below).

WASTE DISPOSAL METHOD  
Dispose of material in accordance with all Federal, state and local air pollution, water pollution and solid waste regulations. Recommend disposal in an EPA approved hazardous waste landfill.

## SECTION VIII - SPECIAL PROTECTION INFORMATION

|                                                                                                                                                                                              |                                       |                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-------------------------------|
| RESPIRATORY PROTECTION (Specify type)<br>NIOSH/MSHA approved for toxic dusts or asbestos (see below)                                                                                         |                                       |                               |
| VENTILATION                                                                                                                                                                                  | LOCAL EXHAUST<br>Required (see below) | SPECIAL                       |
|                                                                                                                                                                                              | MECHANICAL (General)                  | OTHER                         |
| PROTECTIVE GLOVES<br>Required (see below)                                                                                                                                                    |                                       | EYE PROTECTION<br>Recommended |
| OTHER PROTECTIVE EQUIPMENT Protective clothing is required if exposures exceed the OSHA ceiling limit or significant contact occurs. Remove all work clothing before leaving plant premises. |                                       |                               |

## SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Local exhaust ventilation, material wetting and/or respiratory protection is required for all sawing, grinding, cutting, bulk handling, spraying, demolition, removal or other activities where dust exposure may occur.

OTHER PRECAUTIONS Avoid inhalation or ingestion of dust. Do not smoke. Practice good housekeeping and personal hygiene procedures. Avoid asbestos dust becoming airborne and remove spillage by vacuuming loose fiber or wetting before clean-up. Do not dry sweep. Repair damaged vacuum bags immediately. Place all material in closed containers properly labelled.