

MATERIAL SAFETY DATA SHEET

GROUP 01

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For MEDICAL EMERGENCY Information
Contact: 1-303-623-5716 (24 HRS)
ROCKY MTN POISON CONTROL CENTER

SUBSTANCE INFORMATION

CAS-Number 14807-96-6
RTEC-Number WW2710000

SUBSTANCE: TALC.

SYNONYMS: Talcum, Soapstone, Steatite.

PRODUCT NAMES: Act II 200, Act II 200 USP, Act II 300, Act II 400, Act II 500, Alpha-Fil 200, Alpha-Fil 300, Alpha-Fil 400, Alpha-Fil 500, Alpha-Glide 200, Alpha-Glide 300, Altalc 200, Altalc 200 USP, Altalc 300, Altalc 325, Altalc 400, Altalc 400-G, Altalc 500, Altalc 600, August 200, August 325, Aura 200, Aura 250, Aura 300, BHC-200, Beaverwhite 200, Beaverwhite 325, Brillante, C-400, Castle 65, Cimcoat 200, Cimcoat 325, Cimflx 606, Cimpact 500, Cimpact 510, Cimpact 600, Cimpact 610, Cimpact 699, Cimpact 700, Cimpact 705, Cimpact 705F Cimpact 710, Compacted Maximix, Mistron Frost, Compacted Mistron Vapor, Compacted Mistron II, Compacted Mistron 550, Compacted Nicron 100, Crude talc ore - Montana, Dover 50-A, Dynasty 200, Dynasty 300, Dynasty 400, Dynasty 500, Dynasty 600, Empress 200, Empress 300, Empress 400, Empress 500, E-Z Flow 200, E-Z Flow 325, Glacier 200, Glacier 325, Glacier 400, Glacier 600, Imperial FEM, Maximix, Mistrofil, Mistron II, Mistron II R, Mistron 100, Mistron 102, Mistron 400, Mistron 400-C, Mistron 400-F, Mistron 441, Mistron 442, Mistron 500, Mistron 500 SP, Mistron 550 Powder, Mistron 600, Mistron CF5A, Mistron CP, Mistron EG, Mistron Frost, Mistron Mist, Mistron Monomix, Mistron RCS, Mistron RCS-BH, Mistron Superfrost, Mistron Ultramix, Mistron Vapor, Mistron Vapor-A, Mistron Vapor-Densified, Mistron Vapor-P, Mistron Vapor-R, Mistron ZSC, Nicron 100, Nicron 101, Nicron 102, Nicron 100 RC, Nicron 325, Nicron 400, Nicron 401, Nicron 422, Nicron 500, Nicron 528, Nicron 600, Nicron 660, Nicron 665, Nicron 670, Nicron JS 320, Nicron JS 422, Nicron JS 528, Olympic, PA-100, Pelletized Nicron 100, Pelletized Nicron II, Regal 200, Regal 300, Regal 400, Regal 500, Silverline 200, Silverline 325, Silverline 400, Silverline 665, Steawhite 200, Stellar A, Stellar 200, Stellar 300, Stellar 400, Stellar 500, Stellar 600, Stellar EX, Steriline 200, Steriline 320, Steriline 325, Steriline 400, Supra, Supra A, Supra AA, Supra EF, Supra EF-A, Suprafino, Suprafino A, Supreme, Top Note 200, Top Note 300, Ultrafino, Vertal 200, Vertal 200 ZSC, Vertal 300, Vertal 300 USP, Vertal 310, Vertal 350, Vertal 360, Vertal 700, Vertal 710, Vertal 1000, Vertal 1000 USP, Vertal 1500, Vertal 1500 USP, Vertal 1510, Vertal C-1, Vertal C-2, Vertal C-2 USP, Vertal C-O, Vertal C-O Plus, Vertal PC, W-400, Windsor Grade 66, Windsor Grade 96, Windsor Grade 910, XP 300, YB 200, Yellowstone.

CHEMICAL FAMILY: Silicate.

MOLECULAR FORMULA: $3\text{MgO} \cdot 4\text{SiO}_2 \cdot \text{H}_2\text{O}$.

CERCLA RATINGS (Scale 0-3): Health = U, Fire = 0, Reactivity = 0, Persistence = 3.

NFPA RATINGS (Scale 0-4): Health = U, Fire = 0, Reactivity = 0.

COMPONENTS

MAJOR COMPONENT: Talc, CAS #14807-96-6.

CONCENTRATION: ~ 90-100%

MINOR COMPONENTS: Talc is a naturally occurring mineral which may, depending on the product, contain varying minor amounts of the following non-talc minerals:

Dolomite, CAS #16389-88-1
Chlorite, CAS #1318-59-8
Calcite, CAS #13397-26-7
Magnesite, CAS #546-93-0
Quartz, CAS #14808-60-7

CONCENTRATION: ~ 0-10%
~ 0-10%
~ 0-10%
~ 0-10%
~ 0-1%

EXPOSURE LIMIT

TALC: 2 mg/m³ OSHA TWA (respirable dust),
2 mg/m³ ACGIH TWA (respirable dust).

DOLOMITE, CHLORITE, CALCITE, MAGNESITE
5 mg/m³ OSHA TWA (respirable dust),
10 mg/m³ ACGIH TWA (total dust).

QUARTZ: 0.1 mg/m³ OSHA TWA (respirable dust),
0.1 mg/m³ ACGIH TWA (respirable dust),

PHYSICAL DATA

TALC

DESCRIPTION: Slight earthy odor, white to grayish-white, fine powder.
DECOMPOSITION TEMPERATURE: 1652°-1832°F (900°-1000°C) LOI @ 1000°C: 4.8 - 9.0%.
SPECIFIC GRAVITY: 2.7-2.8.
SOLUBILITY IN WATER: Insoluble. PH: Slightly alkaline.
OTHER SOLVENTS (Solubility, solvents): Soluble in concentrated, hot phosphoric acid; insoluble in cold acids and alkalies.
HARDNESS: 1.0-1.5 MOHS.

FIRE AND EXPLOSION DATA

TALC

FIRE AND EXPLOSION HAZARD: None.
FIRE FIGHTING MEDIA: None.
FLASH POINT: None.

REACTIVITY SECTION

TALC

REACTIVITY: Stable under normal temperatures and pressures.
INCOMPATIBILITIES: No data available.
DECOMPOSITION: None hazardous.
POLYMERIZATION: Hazardous polymerization has not been reported to occur under normal temperatures and pressures.

TOXICITY

TALC

TOXICITY DATA: Tumorigenic data (RTECS).
CARCINOGEN STATUS: Human inadequate evidence, animal inadequate evidence (IARC Group 3).

QUARTZ

TOXICITY DATA: Tumorigenic data (RTECS).
CARCINOGENIC STATUS: Human limited evidence, animal sufficient evidence
(Respirable quartz: IARC Group-2A).

This product does not contain quantifiable concentrations of asbestos; asbestiform or non-asbestiform tremolite, actinolite, or anthophyllite when analyzed by high-intensity x-ray diffraction and polarized light microscopy—in accordance with CTFA Method J4-1.

HEALTH EFFECTS AND FIRST AID

INHALATION

TALC

ACUTE EXPOSURE: Exposure to a large concentration of air-born dust of this material may cause mechanical irritation of the mucous membranes and respiratory tract.

CHRONIC EXPOSURE: Repeated or prolonged inhalation of air-born dust of this material may cause scarring of the lungs (pulmonary fibrosis), with shortness of breath, chronic cough, and respiratory assisted heart failure. Prolonged exposure to talc can produce a mild symptomatic pneumoconiosis.

RESPIRABLE QUARTZ - A CARCINOGEN

ACUTE EXPOSURE: Exposure to high concentrations of respirable crystalline silica may cause physical discomfort of the upper respirator tract.

CHRONIC EXPOSURE: Inhalation of very high concentrations of finely divided respirable crystalline silica dust may cause a rapidly developing silicosis or cancer. Smoking can increase the risk of injury.

FIRST AID: Remove from exposure area to fresh air. If breathing has stopped, perform artificial respiration and get medical attention immediately. Keep person warm and at rest. Treat symptomatically and supportively.

SKIN CONTACT

ACUTE EXPOSURE: Direct contact may cause dryness, or may cause mild irritation if an allergic predisposition exists.

CHRONIC EXPOSURE: Prolonged contact may cause dryness of the skin, or may cause mild irritation if an allergic predisposition exists.

FIRST AID: Apply common skin moisturizers to relieve dryness. Irritations are uncommon; however, if irritation or redness develops, seek medical attention. Broken skin can be cleansed with mild soap and water.

EYE CONTACT

ACUTE EXPOSURE: Direct contact with dust may cause mechanical irritation of the eyes.

CHRONIC EXPOSURE: Repeated exposure may cause conjunctival inflammation.

FIRST AID: Wash eyes with large amounts of water or normal saline solution. If irritation or redness develops, seek medical attention.

INGESTION

ACUTE EXPOSURE: This material is considered to be harmless and inert when ingested.

CHRONIC EXPOSURE: Repeated ingestion of large doses of talc for 13 and 10 successive days by rabbits and mice, respectively, revealed negative teratogenic and carcinogenic results.

FIRST AID: Treat symptomatically and supportively. If vomiting occurs, keep head lower than hips to prevent aspiration. No specific antidote.

STORAGE AND DISPOSAL

Talc is not considered a hazardous waste by RCRA criteria (40 CFR 261). Observe all federal, state and local regulations when storing or disposing of this substance. For assistance, contact the district director of the Environmental Protection Agency.

STORAGE: Preserve in sealed containers to prevent dispersion of dust in air.

WASTE DISPOSAL: Dry material can be landfilled. Wet material can be sewered, if quantities are small and diluted enough that slurries or gels will not cause drain system blockage.

CONDITIONS TO AVOID

Prevent dispersion of dust in air.

ACCIDENTAL SPILLS

OCCUPATIONAL SPILL: For large spills, shovel or sweep up (while keeping dispersion of dust in air to a minimum) and place into suitable sealed containers for reclamation or later disposal. Residue should be cleaned up using a high-efficiency particulate filter vacuum. The use of water washdown is not recommended. Wet material can cause a surface used for walking to become extremely slippery.

PROTECTIVE EQUIPMENT

VENTILATION: Provide local exhaust or process enclosure ventilation to meet published exposure limits.

RESPIRATOR: The following maximum-use concentrations and respirators are recommendations by the U.S. Department of Health and Human Services; NIOSH Pocket Guide to Chemical Hazards; NIOSH criteria documents; or by the U.S. Department of Labor, 29 CFR 1910 subpart Z. The specific respirator selected must be based on contamination levels found in the work place, must not exceed the working limits of the respirator, and be jointly approved by the National Institute for Occupational Safety and Health (NIOSH) and the Mine Safety and Health Administration (MSHA).

TALC

Maximum-Use Concentration	Respirator
10 mg/m ³	Any dust and mist respirator.
20 mg/m ³	Any dust and mist respirator except single-use and quarter-mask respirators.
50 mg/m ³	Any powered air-purifying respirator with a dust and mist filter. Any supplied air respirator operated in a continuous flow mode.

QUARTZ

0.25 mg/m ³	Any dust and mist respirator.
0.5 mg/m ³	Any dust and mist respirator except single-use and quarter-mask respirators. Any supplied-air respirator. Any self-contained breathing apparatus.
1.25 mg/m ³	Any powered air-purifying respirator with a dust and mist filter. Any supplied-air respirator operated in a continuous flow mode.
2.5 mg/m ³	Any air-purifying full face-piece respirator with a high efficiency particulate filter. Any self-contained breathing apparatus with a full face-piece. Any powered air-purifying respirator with a tight-fitting face-piece and a high-efficiency particulate filter. Any supplied-air respirator with a full face-piece. Any supplied-air respirator with a tight-fitting face-piece operated in a continuous flow mode.

50 mg/m³ Any supplied-air respirator with a half mask and operated in a pressure-demand or other positive pressure mode.

CLOTHING: Protective clothing is not required.

GLOVES: Protective gloves are not required, but may be worn to prevent skin dryness or irritation due to skin allergy.

EYE PROTECTION: Employees should wear dust-resistant safety goggles to prevent eye contact with bulk quantities or high concentrations of air-born dust of this substance.

EMERGENCY EYE WASH: Where there is a possibility that an employee's eyes may be exposed to bulk quantities or high concentrations of air-born dust of this substance, the employer should provide an eye wash fountain within the immediate work area for emergency use.

SECTION 313 SUPPLIER NOTIFICATION

This product does not contain toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

ADDITIONAL INFORMATION

NATIONAL PAINT AND COATINGS ASSOCIATION – HAZARDOUS MATERIAL IDENTIFICATION SYSTEM

HEALTH HAZARD: 1–slight.

FLAMMABILITY HAZARD: 0–minimal.

REACTIVITY HAZARD: 0–minimal.

PERSONAL PROTECTION: E–glasses, gloves, dust respirator.

DOT CLASS: This substance is not regulated as hazardous material by DOT.

TSCA STATUS: All ingredients are included on the TSCA Inventory of Chemical Substances.

NTP STATUS: A two year NTP inhalation study on rats and mice reported some evidence of carcinogenicity in male rats, clear evidence of carcinogenicity in female rats, and no evidence of carcinogenicity in male and female mice. At an ISRTIP Talc Workshop held at the NIH on January 31 and February 1, 1994, medical experts concluded that the observed tumors were probably a result of a lung overburden situation caused by the very high talc exposure levels employed in the study. No carcinogenicity was observed in any of the rodents at lower levels. It is not anticipated that this study will result in the listing of talc as a possible carcinogen.

SUBSTANCES ON THE NEW JERSEY WORKPLACE HAZARDOUS SUBSTANCES LIST PRESENT AT A CONCENTRATION OF 1% OR MORE (0.1% FOR SUBSTANCES IDENTIFIED AS CARCINOGENS, MUTAGENS OR TERATOGENS): Quartz, p. 113; Talc, p. 119.

DISCLAIMER

The information contained herein is based on data available to Luzenac America and is believed to be correct. However, Luzenac America makes no warranty, expressed or implied, regarding the accuracy or completeness of this information or the results to be obtained from the use thereof.

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