
SECTION I - PRODUCT IDENTIFICATION AND PHYSICAL DATA

CHEMICAL NAME: Spodumene

COMMON NAME: Spodumene

CHEMICAL FORMULA: $\text{LiAlSi}_2\text{O}_6$

APPEARANCE AND ODOR: Gray to greenish granular solid. Odorless.

HAZARDOUS COMPONENTS OF MIXTURE: Spodumene is a mixture with silica as a hazardous component.

VAPOR PRESSURE: Effectively Zero at 20°C

FLASH POINT: No Flash Point

FLAMMABLE LIMITS: Not Flammable

OTHER CHARACTERISTICS: 70-90% Spodumene

6-15% Quartz

SECTION II - FIRE, EXPLOSION, AND PHYSICAL HAZARD DATA

FIRE AND EXPLOSION HAZARDS: Not Flammable

REACTIVITY DATA: Stable Material

EXTINGUISHING MEDIA: Not Flammable

SPECIAL FIRE FIGHTING PROCEDURES: Not Flammable

OTHER PHYSICAL HAZARDS: None

SECTION III - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Sweep up and return to container. Wear personal protective equipment when cleaning up spills or leaks.

WASTE DISPOSAL METHOD: Follow state and local regulations.

DATE OF ISSUE: 7/25/85

REVIEWED BY: W. E. Fanus

SUPERSEDES: 8/16/84

TITLE: Head of Analytical Chemistry

SECTION IV - HEALTH HAZARD DATA

EXPOSURE LIMIT VALUE(S): OSHA limits quartz or silica exposure to $0.1\text{mg}/\text{m}^3$ respirable dust and $0.3\text{mg}/\text{m}^3$ total dust. Spodumene exposure is limited to $10\text{mg}/\text{m}^3$.

PRIMARY ROUTE(S) OF EXPOSURE: Skin/eye contact or inhalation.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: Excessive coughing or itching are the first signs of overexposure. If such symptoms occur, remove from exposure and seek medical attention.

EFFECTS OF OVEREXPOSURE: Inhalation of spodumene dust may cause irritation of the respiratory tract. Years of overexposure to silica dust can cause silicosis, which is characterized by shortness of breath and lessened capacity for work. Skin or eye contact may cause irritation.

POTENTIAL FOR CARCINOGENICITY: Spodumene is not listed as a carcinogen or potential carcinogen by the National Toxicology Program of the U.S. Public Health Service, nor has it been found to be a carcinogen or potential carcinogen by OSHA or the International Agency for Research on Cancer. Foote is not aware of any data indicating that spodumene produces cancer.

EMERGENCY/FIRST AID PROCEDURES:

On contact with skin, practice proper hygiene.

On contact with eyes, flush eyes thoroughly with potable water for 15 minutes.

On inhalation, if respiratory distress persists, seek medical attention.

SECTION V - SPECIAL PROTECTION AND PRECAUTIONS

VENTILATION AND ENGINEERING CONTROLS: Engineering controls (e.g. mechanical exhaust) should be in place in order to ensure that employee exposures to silica dust do not exceed $0.1\text{mg}/\text{m}^3$ respirable dust and $0.3\text{mg}/\text{m}^3$ total dust. Exposure to spodumene dust should not exceed $10\text{mg}/\text{m}^3$.

PERSONAL PROTECTIVE EQUIPMENT: Under conditions in which dust level exposure limits are exceeded, NIOSH-approved respirators should be worn. Dust goggles, gloves and full length clothing help prevent contact with skin or eyes.

SAFE HANDLING, USE AND STORAGE: No special precautions.

PROTECTIVE MEASURES DURING REPAIR AND MAINTENANCE: Wear personal protective equipment during clean up or repair to prevent contact with skin or eyes and inhalation.

OTHER: None.

ADDITIONAL INFORMATION REGARDING THIS MATERIAL AND APPROPRIATE EMERGENCY PROCEDURES MAY BE OBTAINED FROM:

FOOTE SALES REPRESENTATIVE

Foote Mineral Company
Route 100, Exton, PA 19341
(215) 363-6500

The data in this Material Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The information set forth herein is based on technical data that Foote Mineral believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside our control, we make no warranties, expressed or implied, and assume no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under or a recommendation to infringe any patents. Any use of these data and information must be determined by the user to be in accordance with Federal, state and local laws and regulations.
