SUPERIOR CLAY CORPORATION
MATERIAL SAFETY DATA SHEET
FIRE CLAY

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

COMPANY NAME:
Superior Clay Corporation
P. O. Box 352
Newport Road
Uhrichsville, OH 44683 - 0352
Tel: (800) 848-6166
Fax: (740) 922-4122

EMERGENCY TELEPHONE NO.:
(800) 848-6166

TRADE NAME:
FIRE CLAY

IDENTIFICATION NUMBER:
1001

CHEMICAL NAME:
Kaolin and Quartz

SYNONYMS;
None

2. INGREDIENTS

Component	CAS #	Percent	ACGIH TLV	OSHA PEL	Units
Kaolin	1332-58-7	70-100	2 (R)	5 (R)	mg/M^3
Quartz	14808-60-7	0-30	0.05 (R)	$10/\%SiO_2 + 2$	mg/M^3

ACGIH TLVs are based on 2001 values. All values are 8-hour time-weighted averages unless otherwise noted.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Product is a gray powder with an earthy odor. Dust may cause irritation of the eyes, skin, mucous membranes, and respiratory tract. Product contains up 30% quartz which has been identified as a potential carcinogen. Wear appropriate personal protective equipment. Keep individuals not involved in the clean-up out of the area. Pick up released product with appropriate implements and return to original container if reusable. If not reusable, place in appropriate containers for disposal. Although the product itself is non-hazardous, material collected during clean-up operations may be contaminated and should be treated as hazardous unless specific testing, including TCLP, shows the collected material to be non-hazardous. Product is inert and is not expected to present an environmental hazard.

POTENTIAL HEALTH EFFECTS:

Eye: Dusts and particulates may cause irritation of the eyes.

Skin Contact:: Dusts and particulates may cause irritation of the skin.

Skin Absorption: Not known to be absorbed through the intact skin.

3. HAZARDS IDENTIFICATION - Continued

Ingestion: Not expected to be an important route of entry into the body. Ingestion of large quantities of product dusts or particulates may cause gastric discomfort or distress.

Inhalation: Dusts and particulates may cause irritation of the mucous membranes and respiratory tract.

Chronic and Carcinogenicity: Prolonged dermal exposure may cause dermatitis. Inhalation of high concentrations of kaolin over prolonged periods of time may cause a benign pneumoconiosis. Respirable quartz has been identified as a potential carcinogen. See Section 11. Prolonged exposure to respirable quartz may cause a progressive, disabling lung disorder (silicosis). Pre-existing skin and lung conditions may be aggravated by exposure to the components of the product.

4. FIRST AID MEASURES

Inhalation: Remove exposed person to fresh air. If breathing is difficult, oxygen may be administered. If breathing has stopped, artificial respiration should be started immediately. Seek medical attention.

Eyes: Flush with tepid water for at least 20 minutes, holding the eyelids wide open. Seek medical attention if irritation develops.

Skin: Wash thoroughly with mild soap and water. Seek medical attention if irritation develops. Remove any contaminated clothing and launder thoroughly before reuse.

Ingestion: Not expected to be an important route of entry into the body. If large amounts of product dusts or particulates are ingested, seek medical attention.

5. FIRE FIGHTING MEASURES

Flash Point: NA **LEL:** NA **UEL:** NA **Auto Ign. Temp.:** NA

Product will not burn. Material in or near fires should be cooled with a water spray or fog if compatible with fire fighting techniques for the other materials involved. A self-contained breathing apparatus, operating in the positive pressure mode, and full fire fighting gear should be worn for combating fires.

6. ACCIDENTAL RELEASE MEASURES

Pick up released product with appropriate implements and return to original container if reusable. If not reusable, place in appropriate containers for disposal. Appropriate personal protective equipment cited in Section 8 should be worn during all clean-up operations. Although the product itself is non-hazardous, material collected during clean-up operations may be contaminated and should be treated as hazardous unless specific testing, including TCLP, shows the collected material to be non-hazardous.

7. HANDLING AND STORAGE

Do not store with or near incompatible materials cited in Section 10. Store out of contact with the elements. Appropriate personal protective equipment cited in Section 8 should be worn during handling. Good housekeeping and engineering practices should be employed to prevent the generation and accumulation of dusts. Wet mopping or vacuuming with a unit containing a HEPA filter is recommended to clean up any dusts that may be generated during handling and processing. Wash hands and face thoroughly before eating, drinking, or smoking.

8. EXPOSURE CONTROL - PERSONAL PROTECTION

Engineering Controls: Local exhaust ventilation should be provided to maintain exposures below the limits cited in Section 2. Design details for local exhaust ventilation systems may be found in the latest edition of "Industrial Ventilation: A Manual of Recommended Practice", published by the ACGIH Committee on Industrial Ventilation, P.O. Box 16153, Lansing, MI, 48910. The need for local exhaust ventilation should be evaluated by a professional industrial hygienist. Local exhaust ventilation systems should be designed by a professional engineer.

Respiratory Protection: If exposures exceed the limits cited in Section 2 by less than a factor of ten, use, as a minimum, a NIOSH approved respirator with R-95 or N-100 cartridges. Consult a professional industrial hygienist or your respiratory protective equipment supplier for selection of the proper equipment. The evaluation of the need for respiratory protection should be determined by a professional industrial hygienist. All use of respiratory protection should be in accordance with the provisions of OSHA's Respiratory Protection Standard, 29 CFR 1910.134.

Eye Protection: Safety glasses with sideshields are recommended for all operations.

Protective Gloves: Polymeric gloves are recommended to prevent possible irritation. PVC or similar materials are recommended.

General: A polymeric coated apron or other body covering is recommended where regular work clothing may become contaminated with the product. All soiled or dirty clothing and personal protective equipment should be thoroughly cleaned before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND PHYSICAL STATE: Gray powder

OCTANOL/WATER PARTITION COEFFICIENT: NA

VAPOR DENSITY (AIR =1): NA

MELT POINT: >2000° F. (1190° C.)

VAPOR PRESSURE: NA

EVAPORATION RATE (BUTYL ACETATE = 1): NA

ODOR: Earthy

SPECIFIC GRAVITY/BULK DENSITY: 2.56 g/cc

% VOLATILE BY VOLUME: Not Volatile

BOILING POINT: ND

% SOLUBILITY (H_20): <1

pH: NA

10. STABILITY AND REACTIVITY

Stability & Polymerization: Product is stable. Hazardous polymerization will not occur.

Incompatibility (Conditions to Avoid): Do not store with or near strong acids or bases or strong oxidizing or reducing agents.

Hazardous Decomposition Products: None expected. Product is stable to >2000° F. (1190° C.)

Special Sensitivity: None that are known.

11. TOXICOLOGICAL INFORMATION

In classifying quartz as a potential carcinogen, the IARC cites a variety of animal and human epidemiology studies that showed an association between an increased incidence of lung cancer and exposure to respirable quartz particulates. Most of the epidemiology studies did not correct for smoking or exposure to other chemical species.

12. ECOLOGICAL INFORMATION

Detailed studies on the environmental fate of the product have not been conducted. The product is, however, not expected to present a hazard to aquatic and terrestrial flora and fauna.

13. DISPOSAL CONSIDERATIONS

As supplied, product is considered non-hazardous. It should be disposed of in an EPA approved landfill in accordance with all local, state, and federal regulations. If used or waste product is disposed of, appropriate testing, including TCLP, should be conducted to determine hazard characteristics.

14. TRANSPORTATION INFORMATION

Not currently regulated under Department of Transportation regulations.

15. REGULATORY INFORMATION

The components of the product are not reportable under Section 313 of the Superfund Amendments and Reauthorization Act of 1986.

OSHA Hazard Categories: Irritant, Lung Hazard, Skin Hazard, Carcinogen; SARA Hazard Categories: Acute Hazard, Chronic Hazard.

WHMIS Classification: Non-Hazardous

Quartz, with a particle size in the respirable range, has been identified as a carcinogen by the State of California and as an Extraordinarily Hazardous Substance by the State of Massachusetts.

All components of the product are included in the Toxic Substances Control Act (TSCA) inventory.

16. OTHER INFORMATION

Not Est. = Not Established; NA = Not Applicable; ND = Not Determined

Prepared By: Clayton Group Services, Inc.

Preparation /Revision Date: Issue: November 1, 2001.

IMPORTANT NOTICE FROM SUPERIOR CLAY CORPORATION

The information in the Material Safety Data Sheet relates only to the specific material(s) described herein and does not relate to use in combination with any other material or substance or in any process. We believe that the information contained herein is current as of the date of issue of this Material Safety Data Sheet. *Because the use of this information and these opinions and the conditions of use of this product are not within the control of Superior Clay Corporation, it is the user's obligation to determine the conditions of safe use of the product.*

Users of this product should study this Material Safety Data Sheet and become aware of the product hazards and safety information before using the product. Users should also notify their employees, agents, and contractors regarding information contained in this Material Safety Data Sheet and any product hazards and safety information in order to provide safe use of this product.