



Manufacturer of Precision Tools and Equipment

PAGE 1

MANUFACTURE INFORMATION

GROBET FILE CO. OF AMERICA, INC.
750 WASHINGTON AVE.
CARLSTADT, NJ 07072

EMERGENCY PHONE.....: 800-255-3924
PREPARATION/REVISION DATE: 07/15/98

TRADE NAME/SYNONYMS...: THERMA-GUARD
CHEMICAL NAME/SYNONYMS:
CHEMICAL FAMILY.....:
FORMULA.....:
PRODUCT CODE.....: 54.469

***** HAZARDOUS INGREDIENTS *****

DOES PRODUCT CONTAIN HAZARDOUS INGREDIENTS? (Y,N,N/A,N/I) : Y

CHEMICAL/COMMON NAME	CAS-NUMBER	%	PEL-OSHA	TLV-ACGIH
CERAMIC WOOL FIBER	N/A	N/A	N/A	N/A

THE CERAMIC WOOL FIBER CONTAINS 1%
CRYSTALLINE SILICA, WHICH ONLY WILL FORM
AFTER SERVICE AT TEMPERATURES GREATER
THAN 1000C. THE "AFTER SERVICE" DUST CAN
PRESENT A HEALTH HAZARD IF INHALED OVER
A LONG PERIOD OF TIME. THE ABOVE CERAMIC
FIBER IS USED WET IN SMALL QUANTITIES
AND THE FORMATION OF DUST IS THEREFOR
NOT APPLICABLE.

DOES PRODUCT CONTAIN CARCINOGENS (NTP, IARC, OR OSHA)? (Y,N,N/A,N/I): Y

CHEMICAL/COMMON NAME	CAS-NUMBER	%	NTP	IARC	OSHA
CERAMIC WOOL FIBER-1%CRYSTALLINE SILICA	N/A	N/A	N/A	N/A	N/A

***** HEALTH HAZARD DATA *****

HEALTH EFFECTS (ACUTE AND CHRONIC)

CWF CAN CAUSE IRRITATION TO THE EYES ON CONTACT AND TO THE SKIN ON PROLONGED
CONTACT. IF THE MATERIAL CONTACTS THE SKIN IT SHOULD BE WASHED OFF THOROUGHLY
USING MILD SOAP AND WATER. ACUTE: IRRITATION OF SKIN AND UPPER RESPIRATORY
SYSTEM. CHRONIC HEALTH HAZARDS CAN OCCUR FROM LONG TERM EXCESSIVE INHALATION
OF CRYSTALLINE SILICA DUST. CRYSTALLINE SILICA IN THE LUNGS CAN PRODUCE
PNEUMOCONIOSIS, COMMONLY CALLED SILICOSIS, WHICH IS A SLOWLY DEVELOPING
DISEASE. SYMPTOMS ARE USUALLY DELAYED (10 YEARS OR MORE). SMOKING CAN INCREASE
RISK OF INJURY.

PRIMARY ROUTES OF ENTRY

LUNGS AND SKIN



Manufacturer of Precision Tools and Equipment

PAGE 2

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

PRE-EXISTING UPPER RESPIRATORY AND LUNG DISEASES SUCH AS, BUT NOT LIMITED TO
BRONCHITIS, EMPHYSEMA AND ASTHMA.

EMERGENCY FIRST AID PROCEDURES

N/A

***** CHEMICAL DATA *****

BOILING POINT(F)....	N/A	SPECIFIC GRAVITY(WATER=1).....	N/A
VAPOR PRESSURE(MMHG)	N/A	PERCENT VOLATILE BY VOLUME(%).....	N/A
VAPOR DENSITY(AIR=1)	N/A	EVAP RATE(N/A	=1) N/A

SOLUBILITY IN WATER.. NO

APPEARANCE AND ODOR INFORMATION

WHITE TO OFF-WHITE FIBER. NO ODOR. DENSITY APPROX. 4-8 LBS PER CUBIC FOOT

***** PHYSICAL HAZARD DATA *****

FLASH POINT (METHOD USED) N/A FLAMMABLE LIMITS-LEL= N/A UEL= N/A

EXTINGUISHING MEDIA

PRODUCT IS NON-COMBUSTIBLE REFRACTORY. USE EXTINGUISHING MEDIA APPROPRIATE
FOR SURROUNDINGS

SPECIAL FIRE FIGHTING PROCEDURES

NONE

UNUSUAL FIRE AND EXPLOSION HAZARDS

SEE EXTINGUISHING MEDIA

***** REACTIVITY DATA *****

INCOMPATIBILITY (MATERIALS TO AVOID)

NONE

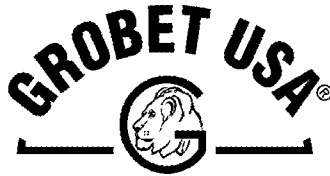
HAZARDOUS DECOMPOSITION PRODUCTS

NONE

WILL HAZARDOUS POLYMERIZATION OCCUR

NO

CONDITIONS TO AVOID/POLYMERIZATION



Manufacturer of Precision Tools and Equipment

PAGE

3

NONE

IS THE PRODUCT STABLE

YES UNDER NORMAL CONDITIONS OF STORAGE AND USE.

CONDITIONS TO AVOID/STABILITY

NONE

***** SPILL AND LEAK PROCEDURES *****

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

SEE WASTE DISPOSAL

WASTE DISPOSAL METHOD

SOLID WASTE REGULATIONS APPLY. CONSULT LOCAL, STATE, AND FEDERAL REGULATIONS TO DETERMINE BEST DISPOSAL ALTERNATIVES.

***** EXPOSURE CONTROL INFORMATION *****

VENTILATION

LOCAL EXHAUST YES

MECHANICAL (GEN) YES

SPECIAL..... YES

OTHER..... N/A

RESPIRATORY PROTECTION

PROVIDE ADEQUATE GENERAL AND LOCAL EXHAUST VENTILATION TO MEET PEL REQUIREMENTS. PROVIDE WORKERS WITH DUST RESPIRATORS WHERE DUST LEVELS MAY EXCEED PEL. NIOSH AND MSHA APPROVED EQUIPMENT ARE RECOMMENDED WHEN AIRBORNE FIBER EXPOSURE LIMITS ARE EXCEEDED. NIOSH AND MSHA APPROVED BREATHING EQUIPMENT MAY BE REQUIRED FOR NON-ROUTINE AND EMERGENCY USE. VENTILATION SHOULD BE USED TO CONTROL OR REDUCE AIRBORNE CONCENTRATIONS. ACCEPTABLE RESPIRATORS RECOMMENDED FOR GIVEN AIRBORNE CONCENTRATIONS OF CERAMIC FIBER ARE:

2.0-5.0 F/CC NIOSH APPROVED DISPOSABLE FACE MASK

5.0-50.0 F/CC NIOSH APPROVED FULL FACE PIECE WITH HIGH EFFICIENT FILTER

>50.0 F/CC NIOSH APPROVED FULL FACE PIECE SUPPLIED-AIR

AIR APPROVED SOURCE REQUIRED

PENDING THE RESULTS OF LONG-TERM HEALTH EFFECTS STUDIES, ENGINEERING CONTROL OF AIRBORNE FIBERS TO THE LOWEST LEVEL ATTAINABLE IS ADVISED.

PROTECTIVE GLOVES

YES

OTHER PROTECTIVE EQUIPMENT

NO

OTHER ENGINEERING CONTROLS



Manufacturer of Precision Tools and Equipment

PAGE

4

SEE SPECIAL PRECAUTIONS

WORK PRACTICES

N/A

HYGENIC PRACTICES

N/A

***** SPECIAL PRECAUTIONS *****

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE
STABLE UNDER NORMAL CONDITIONS OF STORAGE AND USE

MAINTENANCE PRECAUTIONS
SEE ABOVE

OTHER PRECAUTIONS

BECAUSE OF THE PRESENCE OF CRYSTALLINE SILICA IN FIRED REFRACTORY LININGS, PARTICULAR CARE SHOULD BE EXERCISED DURING TEAR-OUT TO MINIMIZE THE GENERATION OF DUST. ADHERENCE TO PROPER METHODS OF DUST SUPPRESSION AND CONTROL IS IMPERATIVE. FOLLOWING ARE RECOMMENDED PRECAUTIONS TO BE TAKEN DURING REMOVAL:

1. EMPLOYEES SHOULD BE APPRISED OF THE HAZARDS AND PROPER CONDITIONS AND PRECAUTIONS FOR SAFE USE OR EXPOSURE.
2. NIOSH APPROVED RESPIRATORS SHOULD BE USED FOR DUST LEVELS < 10X PEL
3. DUST GENERATION SHOULD BE MINIMIZED BY USE OF DUST CONTROL EQUIPMENT OR WATER SPRAY.
4. WEAR PROTECTIVE CLOTHING AND VACUUM CLEAN PRIOR TO REMOVING CLOTHING

OTHER COMMENTS

CERAMIC FIBER IS UNDER INVESTIGATION AS A POSSIBLE ANIMAL CARCINOGEN. ANIMAL STUDIES TO DATE ARE INCONCLUSIVE. EXPOSURE TO DUST FROM THIS PRODUCT SHOULD BE MINIMIZED UNTIL FURTHER ANIMAL AND HUMAN STUDIES ARE COMPLETE. THIS PRODUCT IS SUSPECTED TO BE AN ANIMAL CARCINOGEN.