

1 Identification of substance

- **Product details**

- **Trade name:** SUPER HYBOND PLUS WINTERIZED VERSION

- **Manufacturer/Supplier:**

ANH Refractories Company
400 Fairway Drive
Moon Township, PA 15108

General Phone: (412)375-6600

- **Emergency information:** CHEMTREC 24 HOUR EMERGENCY PHONE NUMBER: 1-800-424-9300.

2 Composition/Data on components

- **Chemical characterization**

- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Components:**

1302-93-8	alumina silicate	30-60%
14464-46-1	crystalline silica (cristobalite) Danger: Health hazard 3.6/1B	10-20%
1302-87-0	hydrous alumina silicate	10-20%
1302-76-7	alumina silicate (kyanite)	5-10%
14808-60-7	crystalline silica (quartz) Danger: Health hazard 3.6/1B	5-10%
1344-28-1	non-fibrous alumina Warning: Exclamation mark 3.2/2, 3.3/2A, 3.8/3	2.5-5%
107-21-1	ethanediol Danger: Skull and crossbones 3.1.0/3, 3.1.1/4, 3.8/3; Health hazard 3.7/1A	1-2.5%
	organic fibers	1-2.5%

3 Hazards identification

- **Hazard description:**

Toxic

- **Medical conditions aggravated by exposure to the product:** Asthma, chronic lung disease, and skin irritation.

- **Carcinogenicity Information:**

Crystalline silica is listed by IARC as a Group 1 Carcinogen "sufficient evidence of carcinogenicity in humans", and is listed by NTP as K, "Known To Be A Human Carcinogen".

- **Information pertaining to particular dangers for man and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

May cause cancer by inhalation.

May cause harm to the unborn child

Danger of serious damage to health by prolonged exposure.

(Contd. on page 2)

Trade name: SUPER HYBOND PLUS WINTERIZED VERSION

(Contd. from page 1)

· **NFPA ratings (scale 0-4)**



· **HMIS Classification**

HEALTH	0	Health: *0
FIRE	0	Flammability: 0
REACTIVITY	0	Reactivity: 0

· **GHS label elements**

Health hazard **Danger**

3.6/1B - May cause cancer.

3.7/1A - May damage fertility or the unborn child.

· **Prevention:**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Use personal protective equipment as required.

· **Response:**

IF exposed or concerned: Get medical advice/attention.

· **Storage:**

Store locked up.

· **Disposal:**

Dispose of contents/container in accordance with local/regional/national/international regulations.

4 First aid measures

· **After inhalation:** Move to fresh air; consult doctor if needed.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:** Rinse opened eye for several minutes under running water.

· **After swallowing:**

This product is intended for industrial applications; in the unlikely event that this product is swallowed, consult a physician if any adverse medical conditions occur.

5 Fire fighting measures

· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

· **Protective equipment:** No special measures required.

6 Accidental release measures

· **Person-related safety precautions:** Not required.

· **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.

· **Measures for cleaning/collecting:**

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

7 Handling and storage

· **Handling:**

· **Information for safe handling:**

Ensure good ventilation/exhaust at the workplace.

(Contd. on page 3)

Trade name: SUPER HYBOND PLUS WINTERIZED VERSION

(Contd. from page 2)

- Prevent formation of dust.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Storage:**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store product inside, out of extreme weather conditions.

8 Exposure controls and personal protection

· **Components with limit values that require monitoring at the workplace:**

14464-46-1 crystalline silica (cristobalite)

PEL	1/2 value from respirable dust formulae for Quartz
REL	0.05* mg/m ³ *respirable dust
TLV	0.025* mg/m ³ *as respirable fraction

14808-60-7 crystalline silica (quartz)

PEL	see Quartz listing
REL	0.05* mg/m ³ *respirable dust
TLV	0.025* mg/m ³ *as respirable fraction

1344-28-1 non-fibrous alumina

PEL	15* 5** mg/m ³ *total dust **respirable fraction
REL	Short-term value: 1.5* mg/m ³ *as resprable fraction
TLV	(10) mg/m ³ (E)

107-21-1 ethanediol

TLV	Short-term value: C 100 mg/m ³ H
-----	--

· **Additional Occupational Exposure Limit Values for possible hazards during processing:**

14464-46-1 crystalline silica (cristobalite)

PEL	1/2 value from respirable dust formulae for Quartz
REL	0.05* mg/m ³ *respirable dust
TLV	0.025* mg/m ³ *as respirable fraction

- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
- **Breathing equipment:**



NIOSH approved respirators should be used if dust is present. A respiratory protection program should be implemented if exposures exceed OSHA PELs.

(Contd. on page 4)

Trade name: SUPER HYBOND PLUS WINTERIZED VERSION

(Contd. from page 3)

· **Protection of hands:**



Protective gloves recommended

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Safety glasses with side shields recommended

9 Physical and chemical properties

· **General Information**

Form:	Solid
Color:	According to product specification
Odor:	No specific odor.

· **Change in condition**

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.

· Flash point:	Not applicable.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Density:	Not determined.
· Solubility in / Miscibility with Water:	Insoluble.

10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **Dangerous reactions** No dangerous reactions known.

· **Dangerous products of decomposition:**

Refractories containing crystalline silica may, after service, contain more or less crystalline silica. Care must be taken to avoid and/or control dust from demolition. If in doubt of the proper protection, seek advice from a safety professional.

USA

(Contd. on page 5)

Trade name: SUPER HYBOND PLUS WINTERIZED VERSION

(Contd. from page 4)

11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

107-21-1 ethanediol

Oral	LD50	5840 mg/kg (rat)
Dermal	LD50	9530 mg/kg (rbt)

· **Primary acute effects:**

· **Skin contact:** No irritant effect.

· **Eye contact:** No irritating effect.

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:
Carcinogenic if inhaled.

12 Ecological information

· **General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
At present there are no ecotoxicological assessments.

13 Disposal considerations

· **Recommendation for Disposal of Product:**

As sold, this product is not RCRA hazardous. Final used condition must be evaluated prior to disposal. Dispose of waste product in accordance with Federal, State and Local regulations.
Dust created during demolition of used product may contain crystalline silica.

· **Recommendation for Disposal of Uncleaned Packaging:** Reuse, recycle or treat as industrial waste.

14 Transport information

· **Transport/Additional information:** Not dangerous according to available information.

15 Regulations

· **SARA 313 TOXIC CHEMICALS**

1344-28-1	non-fibrous alumina
107-21-1	ethanediol

· **SARA 302 EXTREMELY HAZARDOUS SUBSTANCES**

No material listed in the components in Section 2 of this MSDS is on the SARA 302 list.

· **TSCA (Toxic Substances Control Act)**

This substance or all the ingredients of this product are on the Chemical Substances Inventory of the Toxic Substances Control Act (TSCA Inventory). The presence on this list does not require any legal reporting.

· **WHMIS Classification**

Class D - Division 2 - Sub Division A

Untested mixture containing a very toxic material

Class D - Division 2 - Sub Division B

Untested mixture containing a toxic material

(Contd. on page 6)

Trade name: SUPER HYBOND PLUS WINTERIZED VERSION

(Contd. from page 5)

*Class D - Division 2 - Sub Division A**Untested mixture containing a very toxic material**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.***· Cancerogenity categories****· EPA (Environmental Protection Agency)***None of the ingredients is listed.***· IARC (International Agency for Research on Cancer)**14464-46-1 *crystalline silica (cristobalite)*

I

14808-60-7 *crystalline silica (quartz)*

I

· NTP (National Toxicology Program)14464-46-1 *crystalline silica (cristobalite)*

K

14808-60-7 *crystalline silica (quartz)*

K

· TLV (Threshold Limit Value established by ACGIH)14464-46-1 *crystalline silica (cristobalite)*

A2

14808-60-7 *crystalline silica (quartz)*

A2

1344-28-1 *non-fibrous alumina*

A4

107-21-1 *ethanediol*

A4

· MAK (German Maximum Workplace Concentration)14464-46-1 *crystalline silica (cristobalite)*

I

14808-60-7 *crystalline silica (quartz)*

I

1344-28-1 *non-fibrous alumina*

2

· NIOSH-Ca (National Institute for Occupational Safety and Health)14464-46-1 *crystalline silica (cristobalite)*14808-60-7 *crystalline silica (quartz)***· OSHA-Ca (Occupational Safety & Health Administration)***None of the ingredients is listed.***· Classification according to EU-guidelines****· Hazard symbols:***Toxic***· Hazard-determining components of labeling:***crystalline silica (cristobalite)**crystalline silica (quartz)**ethanediol***· Risk phrases:***May cause cancer by inhalation.**May cause harm to the unborn child**Danger of serious damage to health by prolonged exposure.***· Safety phrases:***Avoid exposure - obtain special instructions before use.**When using do not eat or drink.**Do not breathe dust.**After contact with skin, wash immediately with plenty of soap and water**Wear suitable protective clothing and gloves.**In case of accident or if you feel unwell, seek medical advice immediately.*

(Contd. on page 7)

Trade name: SUPER HYBOND PLUS WINTERIZED VERSION

(Contd. from page 6)

· **National regulations:**

· **The following ingredients are known in the state of California to be a cancer risk (Proposition 65):**

14464-46-1	crystalline silica (cristobalite)
14808-60-7	crystalline silica (quartz)

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Contact:** Dylan L. Miller 412-375-6712

· **Creation date:** 01/08/2009

· **Abbreviations and acronyms:**

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent