

Printing date 12/04/2000

Reviewed on 10/16/2000

**1 Identification of substance**

- **Product details**
- **Trade name:** INSBOARD 2300
- **Manufacturer/Supplier:**  
RHI Refractories America  
600 Grant Street  
Pittsburgh, PA 15219  
  
Phone: (412) 562-6200
- **Information department:** MSDS Technical Information: (412) 562-6437
- **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:**

142844-00-6 refractory ceramic fibers (RCF)	60-100 %
9005-25-8 Starch	5-10 %
7631-86-9 silicon dioxide, chemically prepared	2.5-5 %

- **Additional information:**  
\*This product contains Refractory Ceramic Fibers (RCF) or an RCF wrap or mat. IARC has classified RCFs as a possible human carcinogen, Group 2B. This classification was based on sufficient evidence of carcinogenicity in animals and no available data in humans. NTP classified respirable RCFs as reasonably anticipated carcinogens. Recent industry ongoing epidemiology studies show the general health of workers in the RCF industry was similar to that of workers in other dusty work environments. There have been no reports of mesothelioma, and the lung cancer rate appears similar to background rates, but the number of workers with a long latency period are too few for definitive conclusions. There was a small number of employees with an increased risk of developing pleural plaques (shadows along the inside of the chest wall). These plaques, however, are not known to cause symptoms or disability. RHI recommends that safe handling methods are followed, including air monitoring in areas wherever the potential exists for airborne fibers, minimizing airborne exposures through use of NIOSH approved respirators, and wearing protective clothing, gloves and eye protection.

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**3 Hazards identification**

- **Hazard description:** Toxic
- **Medical conditions aggravated by exposure to the product:** Asthma, chronic lung disease, and skin irritation.
- **Carcinogenicity Information:** Refractory ceramic fibers are listed by IARC as Group 2B "Possibly Carcinogenic to Humans."
- **Information pertaining to particular dangers for man and environment:** May cause cancer.  
Irritating to eyes and respiratory system.

PRODUCT MAY CONTAIN REFRACTORY CERAMIC FIBERS (RCF) OR INCLUDE A WRAP OR MAT WHICH CONTAINS RCF:

Prolonged or repeated inhalation of RCF dust may cause cancer.

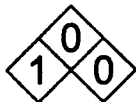
Exposure of the product to high temperature may convert fibers to crystalline silica, an IARC and NTP listed carcinogen which can cause silicosis or cancer.

Use with adequate ventilation, wear safety glasses and dust-type respirator if dust is present.

In case of inhalation, remove victim to fresh air.

In case of eye contact, flush with water for 15 minutes.

- **NFPA ratings (scale 0-4)**



Health = 1  
Fire = 0  
Reactivity = 0

- **HMIS Classification**

HEALTH	1
FIRE	0
REACTIVITY	0

**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:** Flush eyes with water for 15 minutes. If irritation persists, consult a doctor.
- **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.

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<p><b>Trade name: INSBOARD 2300</b></p>
<p><b>5 <u>Fire fighting measures</u></b></p> <ul style="list-style-type: none"> <li>• <b>Suitable extinguishing agents:</b> Use fire fighting measures that suit the environment.</li> <li>• <b>Protective equipment:</b> No special measures required.</li> </ul>
<p><b>6 <u>Accidental release measures</u></b></p> <ul style="list-style-type: none"> <li>• <b>Person-related safety precautions:</b> Not required.</li> <li>• <b>Measures for environmental protection:</b> Do not allow to enter sewers/ surface or ground water.</li> <li>• <b>Measures for cleaning/collecting:</b> Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.</li> </ul>
<p><b>7 <u>Handling and storage</u></b></p> <ul style="list-style-type: none"> <li>• <b>Handling:</b></li> <li>• <b>Information for safe handling:</b> Prevent formation of dust.</li> <li>• <b>Information about protection against explosions and fires:</b> Keep respiratory protective device available.</li> <li>• <b>Storage:</b></li> <li>• <b>Requirements to be met by storerooms and containers:</b> No special requirements.</li> <li>• <b>Information about storage in one common storage facility:</b> Not required.</li> <li>• <b>Further information about storage conditions:</b> Store product inside, out of extreme weather conditions.</li> <li>• <b>Storage class:</b></li> <li>• <b>Class according to regulation on flammable liquids:</b> Not applicable</li> </ul>
<p><b>8 <u>Exposure controls and personal protection</u></b></p> <p><b><u>Components with limit values that require monitoring at the workplace:</u></b></p> <p>142844-00-6 refractory ceramic fibers (RCF) ACGIH TLV: Short-term value: 1 f/cc; proposed 0.1 f/cc mg/m<sup>3</sup> Confirmed Animal Carcinogen; Suspected Human Carc.</p> <p>9005-25-8 Starch ACGIH TLV: 10 mg/m<sup>3</sup> A4 NIOSH REL: 10*; 5** mg/m<sup>3</sup> *Total dust **Respirable dust OSHA PEL: 15*; 5** mg/m<sup>3</sup> *Total dust **Respirable dust</p> <ul style="list-style-type: none"> <li>• <b>Personal protective equipment:</b></li> </ul>

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- **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.  
Avoid contact with the eyes.  
Avoid contact with the eyes and skin.

- **Breathing equipment:**



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

- **Protection of hands:**



Protective gloves recommended

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

**9 Physical and chemical properties**

- **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:** at 20 ° C 2.066 g/cm<sup>3</sup>
- **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.

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<ul style="list-style-type: none"> <li>• <b>Dangerous products of decomposition:</b> No dangerous decomposition products known.</li> </ul>	
<b>11 Toxicological information</b>	
<ul style="list-style-type: none"> <li>• <b>Acute toxicity:</b> <u>LD/Lc50 values that are relevant for classification:</u> 7631-86-9 silicon dioxide, chemically prepared Oral: LD50: 10000 mg/kg (rat)</li> <li>• <b>Primary acute effects:</b></li> <li>• <b>Skin contact:</b> No irritant effect.</li> <li>• <b>Eye contact:</b> Irritating effect.</li> <li>• <b>Sensitization:</b> No sensitizing effects known.</li> <li>• <b>Additional toxicological information:</b> The product shows the following dangers according to internally approved calculation methods for preparations: Irritant. Carcinogenic.</li> </ul>	
<b>12 Ecological information</b>	
<ul style="list-style-type: none"> <li>• <b>General notes:</b> Water danger class 3 (Self-assessment): extremely hazardous for water Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground. At present there are no ecotoxicological assessments.</li> </ul>	
<b>13 Disposal considerations</b>	
<ul style="list-style-type: none"> <li>• <b>Recommendation for Disposal of Product:</b> 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.</li> <li>• <b>Recommendation for Disposal of Uncleaned Packaging:</b> Reuse, recycle or treat as industrial waste.</li> </ul>	
<b>14 Transport information</b>	
<ul style="list-style-type: none"> <li>• <b>Transport/Additional information:</b> Not dangerous according to available information.</li> </ul>	
<b>15 Regulations</b>	
<p><u>SARA 313 TOXIC CHEMICALS</u> No material listed in the components in Section 2 of this MSDS is on (Contd. on page 6)</p>	

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the SARA 313 list.

**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  
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.
- **Classification according to EU-guidelines**
- **Hazard symbols: Toxic**
- **Hazard-determining components of labeling:**  
refractory ceramic fibers (RCF)
- **Risk phrases:**  
May cause cancer.  
Irritating to eyes and respiratory system.
- **Safety phrases:**  
When using do not eat or drink.  
Do not breathe dust.  
Avoid contact with eyes.  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
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.
- **Special labeling of certain preparations:**  
  
**PRODUCT MAY CONTAIN REFRACTORY CERAMIC FIBERS (RCF) OR INCLUDE A WRAP OR MAT WHICH CONTAINS RCF:**  
Prolonged or repeated inhalation of RCF dust may cause cancer.  
Exposure of the product to high temperature may convert fibers to crystalline silica, an IARC and NTP listed carcinogen which can cause silicosis or cancer.  
Use with adequate ventilation, wear safety glasses and dust-type respirator if dust is present.

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In case of inhalation, remove victim to fresh air.  
In case of eye contact, flush with water for 15 minutes.

- National regulations:
- The following ingredients are known in the state of California to be a cancer risk (Proposition 65):  
142844-00-6 refractory ceramic fibers (RCF)

**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:  
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Dal Persaud 905-639-8660 (Canada)
- Creation date: 10/16/2000