



## SAFETY DATA SHEET

### Denso Glass Outerwrap (NA)

According to WHMIS 2015, in compliance with the Hazardous Product Act (HPA, as amended) and the requirements of the Hazardous Product Regulations (HPR)

#### 1. Identification

##### Product identifier

**Product name** Denso Glass Outerwrap (NA)

**Product number** 811004K

##### Recommended use of the chemical and restrictions on use

**Restriction on use** Part of a corrosion protection system.

**Uses advised against** No specific uses advised against are identified.

##### Details of the supplier of the safety data sheet

**Supplier** Denso North America Inc.  
**Manufacturer** 90 Ironside Crescent, Unit 12  
 Toronto, ON, M1X 1M3  
 +1-416-291-3435 Tel  
 +1-416-291-0898 Fax  
 sales@densona-ca.com

##### Emergency telephone number

**Emergency telephone** 1-888-226-8832 Canutec Toll Free, \*666 Cellular

#### 2. Hazard identification

##### Classification of the substance or mixture

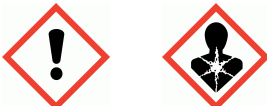
**Physical hazards** Not Classified

**Health hazards** Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334 Skin Sens. 1  
 - H317 Carc. 2 - H351 STOT SE 3 - H335 STOT RE 2 - H373

**Environmental hazards** Aquatic Chronic 3 - H412

##### Label elements

##### Hazard pictograms



**Signal word** Danger

## Denso Glass Outerwrap (NA)

### Hazard statements

H332 Harmful if inhaled.  
 H315 Causes skin irritation.  
 H319 Causes serious eye irritation.  
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H317 May cause an allergic skin reaction.  
 H351 Suspected of causing cancer.  
 H335 May cause respiratory irritation.  
 H373 May cause damage to organs through prolonged or repeated exposure.  
 H412 Harmful to aquatic life with long lasting effects.

### Precautionary statements

P102 Keep out of reach of children.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
 P262 Do not get in eyes, on skin, or on clothing.  
 P264 Wash contaminated skin thoroughly after handling.  
 P270 Do not eat, drink or smoke when using this product.  
 P271 Use only outdoors or in a well-ventilated area.  
 P272 Contaminated work clothing should not be allowed out of the workplace.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 P284 In case of inadequate ventilation wear respiratory protection.  
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
 P302+P352 IF ON SKIN: Wash with plenty of water.  
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P308+P313 IF exposed or concerned: Get medical advice/ attention.  
 P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.  
 P337+P313 If eye irritation persists: Get medical advice/ attention.  
 P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.  
 P362+P364 Take off contaminated clothing and wash it before reuse.  
 P391 Collect spillage.  
 P402 Store in a dry place.  
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
 P403+P235 Store in a well-ventilated place. Keep cool.  
 P405 Store locked up.  
 P501 Dispose of contents/ container in accordance with national regulations.

### Contains

Proprietary Resin A

### Other hazards

This product does not contain any substances classified as PBT or vPvB.

### 3. Composition/information on ingredients

#### Mixtures

## Denso Glass Outerwrap (NA)

<b>Proprietary Resin A</b>	<b>30-60%</b>
CAS number: Proprietary	
<b>Classification</b>	
Acute Tox. 4 - H332	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Resp. Sens. 1B - H334	
Skin Sens. 1B - H317	
Carc. 2 - H351	
STOT SE 3 - H335	
STOT RE 2 - H373	
<b>Proprietary Filler A</b>	<b>1-5%</b>
CAS number: Proprietary	
<b>Classification</b>	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Aquatic Chronic 2 - H411	
<b>Proprietary Filler B</b>	<b>&lt;1%</b>
CAS number: Proprietary	
<b>Classification</b>	
Not Classified	
<b>Proprietary Additive B</b>	<b>&lt;1%</b>
CAS number: Proprietary	
M factor (acute) = 1	M factor (chronic) = 1
<b>Classification</b>	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	

The full text for all hazard statements is displayed in Section 16.

**Composition comments**            The exact percentage/concentration is withheld as a trade secret in accordance with the Regulations amending the Hazardous Products Regulations.

#### 4. First-aid measures

##### Description of first aid measures

**General information**            Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.

## Denso Glass Outerwrap (NA)

<b>Inhalation</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. If breathing stops, provide artificial respiration. Get medical attention. Place unconscious person on their side in the recovery position and ensure breathing can take place. In the event of any sensitization symptoms developing, ensure further exposure is avoided.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Never give anything by mouth to an unconscious person. Place unconscious person on their side in the recovery position and ensure breathing can take place. Keep affected person under observation. Get medical attention if symptoms are severe or persist. Due to the physical nature of this product, it is unlikely that ingestion will occur.
<b>Skin contact</b>	It is important to remove the substance from the skin immediately. In the event of any sensitization symptoms developing, ensure further exposure is avoided. Remove contamination with soap and water or recognised skin cleansing agent. Get medical attention if symptoms are severe or persist after washing.
<b>Eye contact</b>	Rinse with water. Do not rub eye. Remove any contact lenses and open eyelids wide apart. Get medical attention if any discomfort continues.
<b>Protection of first aiders</b>	First aid personnel should wear appropriate protective equipment during any rescue.

### Most important symptoms and effects, both acute and delayed

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	This product is moderately irritating. May cause sensitization or allergic reactions in sensitive individuals. A single exposure may cause the following adverse effects: Headache. Exhaustion and weakness. Prolonged or repeated exposure may cause the following adverse effects: Suspected of causing cancer.
<b>Ingestion</b>	May cause sensitization or allergic reactions in sensitive individuals. May cause irritation. Prolonged or repeated exposure may cause the following adverse effects: Suspected of causing cancer.
<b>Skin contact</b>	May cause skin sensitization or allergic reactions in sensitive individuals. Redness. Irritating to skin. Prolonged or repeated exposure may cause the following adverse effects: Suspected of causing cancer.
<b>Eye contact</b>	Irritating to eyes.

### Indication of any immediate medical attention and special treatment needed

<b>Notes for the doctor</b>	Treat symptomatically. May cause sensitization or allergic reactions in sensitive individuals.
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## 5. Fire-fighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
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<b>Unsuitable extinguishing media</b>	Do not use water, if avoidable.
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### Specific hazards arising from the hazardous product

<b>Hazardous combustion products</b>	Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours.
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## Denso Glass Outerwrap (NA)

### Advice for firefighters

#### **Protective actions during firefighting**

Avoid breathing fire gases or vapours. Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

#### **Special protective equipment for firefighters**

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing that provides a basic level of protection during chemical incidents is defined by the Canada Occupational Health and Safety Regulations, by provincial guidelines on occupational health and safety or by NFPA standards if applicable.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

#### **Personal precautions**

Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material. Avoid inhalation of vapours and contact with skin and eyes. Use suitable respiratory protection if ventilation is inadequate.

### Environmental precautions

#### **Environmental precautions**

The product contains a substance which is very toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment.

### Methods and material for containment and cleaning up

#### **Methods for cleaning up**

Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Provide adequate ventilation. Collect spillage with a shovel and broom, or similar and reuse, if possible. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. For waste disposal, see Section 13.

### Reference to other sections

#### **Reference to other sections**

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

## 7. Handling and storage

### Precautions for safe handling

#### **Usage precautions**

Read and follow manufacturer's recommendations. Do not handle until all safety precautions have been read and understood. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Keep container tightly sealed when not in use. Avoid contact with skin and eyes. Avoid breathing gas, fume, vapours or spray. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. Suspected of causing cancer. Use only outdoors or in a well-ventilated area. Avoid discharge to the aquatic environment. Keep container dry. Do not handle broken packages without protective equipment. Do not reuse empty containers.

#### **Advice on general occupational hygiene**

Do not eat, drink or smoke when using this product. Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Wash at the end of each work shift and before eating, smoking and using the toilet.

### Conditions for safe storage, including any incompatibilities

## Denso Glass Outerwrap (NA)

<b>Storage precautions</b>	Store away from incompatible materials (see Section 10). Store locked up. Store in a dry place. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep container dry. Protect containers from damage. Protect from moisture. Protect from freezing and direct sunlight.
<b>Storage class</b>	Miscellaneous hazardous material storage.
<b>Specific end use(s)</b>	
<b>Specific end use(s)</b>	The identified uses for this product are detailed in Section 1.

### 8. Exposure controls/Personal protection

#### Control parameters

#### Occupational exposure limits

##### Proprietary Filler A

Long-term exposure limit (8-hour TWA): ACGIH 5 mg/m<sup>3</sup> respirable fraction  
A4

##### Proprietary Filler B

Long-term exposure limit (8-hour TWA): ACGIH 3 mg/m<sup>3</sup> inhalable fraction  
A3

ACGIH = American Conference of Governmental Industrial Hygienists.

A4 = Not Classifiable as a Human Carcinogen.

A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans.

**Ingredient comments** No dust formed during normal use.

#### Exposure controls

##### Protective equipment



##### Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Ensure the ventilation system is regularly maintained and tested. Good general ventilation should be adequate to control worker exposure to airborne contaminants. Observe any occupational exposure limits for the product or ingredients. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Ensure control measures are regularly inspected and maintained.

##### Eye/face protection

Wear eye protection. Personal protective equipment for eye and face protection should comply with the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.6), and any relevant provincial regulation relating to health and safety at work. If inhalation hazards exist, a full-face respirator may be required instead.

##### Hand protection

Wear protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.9), and any relevant provincial regulation relating to health and safety at work. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

##### Other skin and body protection

May cause skin sensitization or allergic reactions in sensitive individuals. Wear appropriate clothing to prevent repeated or prolonged skin contact.

## Denso Glass Outerwrap (NA)

<b>Hygiene measures</b>	Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product. Wash promptly if skin becomes contaminated. Take off immediately all contaminated clothing and wash it before reuse. Remove contaminated clothing and protective equipment before entering eating areas.
<b>Respiratory protection</b>	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Gas and combination filter cartridges should comply with the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work. Full face mask respirators with replaceable filter cartridges should comply with the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work. Half mask and quarter mask respirators with replaceable filter cartridges should comply with the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.7), and any relevant provincial regulation relating to health and safety at work. Check that the respirator fits tightly and the filter is changed regularly.
<b>Environmental exposure controls</b>	Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### 9. Physical and chemical properties

#### Information on basic physical and chemical properties

<b>Appearance</b>	Liquid-impregnated cloth.
<b>Colour</b>	Various colours.
<b>Odour</b>	Almost odourless.
<b>Odour threshold</b>	Not determined.
<b>pH</b>	Not determined.
<b>Melting point</b>	Not determined.
<b>Initial boiling point and range</b>	Not determined.
<b>Flash point</b>	~ 230°C/446°F Method: Closed cup.
<b>Evaporation rate</b>	Not determined.
<b>Evaporation factor</b>	Not determined.
<b>Flammability (solid, gas)</b>	Not determined.
<b>Upper/lower flammability or explosive limits</b>	Not determined.
<b>Other flammability</b>	Not determined.
<b>Vapour pressure</b>	<0.00001 mm Hg @ 25°C/77°F
<b>Vapour density</b>	> 1
<b>Relative density</b>	~ 2.5
<b>Bulk density</b>	Not determined.
<b>Solubility(ies)</b>	Slightly soluble in water.
<b>Partition coefficient</b>	Not determined.

## Denso Glass Outerwrap (NA)

<b>Auto-ignition temperature</b>	Not determined.
<b>Decomposition Temperature</b>	Not determined.
<b>Viscosity</b>	Technically not feasible.
<b>Explosive properties</b>	Not determined.
<b>Explosive under the influence of a flame</b>	Not considered to be explosive.
<b>Oxidising properties</b>	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidizing.

### 10. Stability and reactivity

<b>Reactivity</b>	See the other subsections of this section for further details.
<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
<b>Possibility of hazardous reactions</b>	Polymerises on contact with water or moisture. The following materials may react with the product: Alcohols, glycols. Strong alkalis. Amines. Epoxides. Phenols, cresols. Water, moisture.
<b>Conditions to avoid</b>	Avoid exposure to high temperatures or direct sunlight. Avoid heat, flames and other sources of ignition.
<b>Materials to avoid</b>	Alcohols, glycols. Strong alkalis. Amines. Epoxides. Phenols, cresols. Water, moisture.
<b>Hazardous decomposition products</b>	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours.

### 11. Toxicological information

#### Information on toxicological effects

**Toxicological effects**                      The product reacts with water to form a solid, insoluble reaction product which is not biodegradable.

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)**                              Based on available data the classification criteria are not met.

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)**                              Based on available data the classification criteria are not met.

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)**                              Acute Tox. 4 - H332 Harmful if inhaled.

**ATE inhalation (dusts/mists mg/l)**                              4.89

#### Skin corrosion/irritation

**Animal data**                                      Irritating.

#### Serious eye damage/irritation

**Serious eye damage/irritation**                              Causes serious eye irritation.

#### Respiratory sensitization

**Respiratory sensitization**                              There is evidence that the product can cause respiratory hypersensitivity.



## Denso Glass Outerwrap (NA)

### Skin sensitization

**Skin sensitization** May cause skin sensitization or allergic reactions in sensitive individuals.

### Germ cell mutagenicity

**Genotoxicity - in vitro** Based on available data the classification criteria are not met.

### Carcinogenicity

**Carcinogenicity** Suspected of causing cancer.

### IARC carcinogenicity

Contains a substance which may be potentially carcinogenic. IARC Group 2B Possibly carcinogenic to humans.

### Reproductive toxicity

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

**Reproductive toxicity - development** Based on available data the classification criteria are not met.

### Specific target organ toxicity - single exposure

**STOT - single exposure** STOT SE 3 - H335 May cause respiratory irritation.

**Target organs** Respiratory system, lungs

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** STOT RE 2 - H373 May cause damage to organs through prolonged or repeated exposure.

### Aspiration hazard

**Aspiration hazard** Not relevant. Solid.

### General information

May cause cancer after repeated exposure. Risk of cancer depends on duration and level of exposure. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

### Inhalation

May cause sensitization or allergic reactions in sensitive individuals. A single exposure may cause the following adverse effects: Headache. Exhaustion and weakness.

### Ingestion

May cause sensitization or allergic reactions in sensitive individuals. May cause irritation.

### Skin contact

May cause skin sensitization or allergic reactions in sensitive individuals. Redness. Irritating to skin.

### Eye contact

Irritating to eyes.

### Route of exposure

Ingestion Inhalation Skin and/or eye contact

### Target organs

Respiratory system, lungs

### Medical considerations

Skin disorders and allergies.

## 12. Ecological information

### Ecotoxicity

The product reacts with water to form a solid, insoluble reaction product which is not biodegradable.

### Toxicity

Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting effects.

### Persistence and degradability

**Persistence and degradability** The degradability of the product is not known.

### Bioaccumulative potential

## Denso Glass Outerwrap (NA)

**Bioaccumulative potential** No data available on bioaccumulation.

**Partition coefficient** Not determined.

**Mobility in soil**

**Mobility** No data available.

**Other adverse effects**

**Other adverse effects** None known.

### 13. Disposal considerations

**Waste treatment methods**

**General information** The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Empty containers or liners may retain some product residues and hence be potentially hazardous. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

**Disposal methods** Do not empty into drains. Incineration or landfill should only be considered when recycling is not feasible. Do not reuse empty containers. No specific disposal method required.

### 14. Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, TDG).

**UN number**

**UN No. (International)** Not applicable.

**UN No. (DOT)** Not applicable.

**UN proper shipping name**

**Proper shipping name (International)** Not applicable.

**Proper shipping name (DOT)** Not applicable.

**Transport hazard class(es)**

**Transport Labels (International)** No transport warning sign required.

**DOT transport label**

**Packing group**

**Packing group (International)** Not applicable.

**DOT packing group** Not applicable.

**Environmental hazards**

**Environmentally hazardous substance/marine pollutant**  
No.

**Special precautions for user**

Not applicable.

## Denso Glass Outerwrap (NA)

**DOT reportable quantity** Not applicable.

**DOT TIH Zone** Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

### 15. Regulatory information

#### Inventories

##### Canada – DSL/NDSL

The following ingredients are listed or exempt:

*Proprietary Filler B*

*Proprietary Additive A*

*Proprietary Filler A*

*Proprietary Additive B*

*Proprietary Resin A*

### 16. Other information

**Classification abbreviations and acronyms**

Acute Tox. = Acute toxicity  
 Carc. = Carcinogenicity  
 Eye Irrit. = Eye irritation  
 Resp. Sens. = Respiratory sensitisation  
 Skin Irrit. = Skin irritation  
 Skin Sens. = Skin sensitisation  
 STOT RE = Specific target organ toxicity-repeated exposure  
 STOT SE = Specific target organ toxicity-single exposure  
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

**Training advice** Only trained personnel should use this material.

**Issued by** HS&E Manager.

**Revision date** 2021-01-01

**Revision** 2

**Supersedes date** 2019-11-20

**SDS number** 5299

**Hazard statements in full**

H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.  
 H332 Harmful if inhaled.  
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H335 May cause respiratory irritation.  
 H351 Suspected of causing cancer.  
 H373 May cause damage to organs through prolonged or repeated exposure.  
 H400 Very toxic to aquatic life.  
 H410 Very toxic to aquatic life with long lasting effects.  
 H411 Toxic to aquatic life with long lasting effects.  
 H412 Harmful to aquatic life with long lasting effects.

## Denso Glass Outerwrap (NA)

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.