

SAFETY DATA SHEET Denso Glass Outerwrap (US)

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

1. Identification

Product identifier

Product name Denso Glass Outerwrap (US)

Product number 702077

Recommended use of the chemical and restrictions on use

Application 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 See Manufacturer

Manufacturer Denso North America

9710 Telge Road Houston, TX 77095 1 (281) 821-3355 1 (281) 821-0304 info@densona.com

Emergency telephone number

Emergency telephone 1-801-629-0667

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2A - 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 symbols





Signal word Danger

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/ vapors/ 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 must 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/ 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

Proprietary Resin A 30-60%

CAS number: Proprietary

Classification

Acute Tox. 4 - H332

Skin Irrit. 2 - H315 Eye Irrit. 2A - H319

Resp. Sens. 1B - H334

Skin Sens. 1B - H317

Carc. 2 - H351

STOT SE 3 - H335

STOT RE 2 - H373

Proprietary Filler A 1-5%

CAS number: Proprietary

Classification

Skin Irrit. 2 - H315

Eye Irrit. 2A - H319

Aquatic Chronic 2 - H411

Proprietary Filler B <1%

CAS number: Proprietary

Classification

Not Classified

Proprietary Additive B <1%

CAS number: Proprietary

M factor (Acute) = 1 M factor (Chronic) = 1

Classification

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 29 CFR

1910.1200.

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.

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Inhalation 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.

Ingestion 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.

Skin Contact 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 recognized skin cleansing agent. Get medical attention

if symptoms are severe or persist after washing.

Eye contact Rinse with water. Do not rub eye. Remove any contact lenses and open eyelids wide apart.

Get medical attention if any discomfort continues.

Protection of first aiders First aid personnel should wear appropriate protective equipment during any rescue.

Most important symptoms and effects, both acute and delayed

General information The severity of the symptoms described will vary dependent on the concentration and the

length of exposure.

Inhalation 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.

Ingestion 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.

Skin contact 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.

Eye contact Irritating to eyes.

Indication of immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically. May cause sensitization or allergic reactions in sensitive individuals.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media 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.

Unsuitable extinguishing

media

Do not use water, if avoidable.

Special hazards arising from the substance or mixture

Hazardous combustion

products

Thermal decomposition or combustion products may include the following substances: Toxic

gases or vapors.

Advice for firefighters

Protective actions during firefighting

Avoid breathing fire gases or vapors. Evacuate area. Keep upwind to avoid inhalation of gases, vapors, 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. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

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 vapors 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

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 and wash before reuse. 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

Storage precautions 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.

Storage class Miscellaneous hazardous material storage.

Specific end uses(s)

Specific end use(s) 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/m³ respirable fraction

A4

Long-term exposure limit (8-hour TWA): OSHA 5 mg/m³ respirable fraction

Long-term exposure limit (8-hour TWA): OSHA 15 mg/m³ total dust Long-term exposure limit (8-hour TWA): OSHA 10 mg/m³ fume

Proprietary Filler B

Long-term exposure limit (8-hour TWA): ACGIH 3 mg/m³ inhalable fraction A3

Long-term exposure limit (8-hour TWA): OSHA 3.5 mg/m³

ACGIH = American Conference of Governmental Industrial Hygienists.

A4 = Not Classifiable as a Human Carcinogen.

A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans.

OSHA = Occupational Safety and Health Administration.

Ingredient commentsNo dust formed during normal use.

Proprietary Filler A

Immediate danger to life

and health

2500 mg/m³

Proprietary Filler B

Immediate danger to life 1750 mg/m³

and health

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 OSHA 1910.133. 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 OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. 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.

Hygiene measures 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.

Respiratory protection 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 OSHA 1910.134. Full face mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. Check that the

respirator fits tightly and the filter is changed regularly.

Environmental exposure

controls

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

Appearance Liquid-impregnated cloth.

Color Various colors.

Odor Almost odorless.

Odor threshold Not determined.

pH Not determined.

Melting point Not determined.

Initial boiling point and range Not determined.

Flash point ~ 230°C/446°F Method: Closed cup.

Evaporation rate Not determined.

Evaporation factor Not determined.

Flammability (solid, gas) Not determined.

Upper/lower flammability or

explosive limits

Not determined.

Other flammability Not determined.

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Vapor pressure <0.00001 mm Hg @ 25°C/77°F

Vapor density > 1

Relative density ~ 2.5

Bulk density Not determined.

Solubility(ies) Slightly soluble in water.

Partition coefficient Not determined.

Auto-ignition temperature Not determined.

Decomposition Temperature Not determined.

Viscosity Technically not feasible.

Explosive properties Not determined.

Explosive under the influence

of a flame

Not considered to be explosive.

Oxidizing properties The mixture itself has not been tested but none of the ingredient substances meet the criteria

for classification as oxidizing.

10. Stability and reactivity

Reactivity See the other subsections of this section for further details.

Stability Stable at normal ambient temperatures and when used as recommended. Stable under the

prescribed storage conditions.

Possibility of hazardous

reactions

Polymerizes on contact with water or moisture. The following materials may react with the product: Alcohols, glycols. Strong alkalis. Amines. Epoxides. Phenols, cresols. Water,

moisture.

Conditions to avoid Avoid exposure to high temperatures or direct sunlight. Avoid heat, flames and other sources

of ignition.

Materials to avoid Alcohols, glycols. Strong alkalis. Amines. Epoxides. Phenols, cresols. Water, moisture.

Hazardous decomposition

products

Does not decompose when used and stored as recommended. Thermal decomposition or

combustion products may include the following substances: Toxic gases or vapors.

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 LD₅o) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Acute Tox. 4 - H332 Harmful if inhaled.

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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.

Skin sensitization

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

Germ cell mutagenicity

Genotoxicity - in vitroBased 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.

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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

Bio-Accumulative 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, DOT).

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 labels

No transport warning sign required.

Packing group

Packing group (International) Not applicable.

DOT packing groupNot applicable.

Environmental hazards

Environmentally Hazardous Substance

No.

Special precautions for user

Not applicable.

DOT TIH Zone

DOT reportable quantityNot applicable.

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed or exempt.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

Not applicable.

None of the ingredients are listed or exempt.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed or exempt.

SARA 313 Emission Reporting

The following ingredients are listed or exempt:

Proprietary Resin A

1.0 %

CAA Accidental Release Prevention

None of the ingredients are listed or exempt.

FDA - Essential Chemical

None of the ingredients are listed or exempt.

FDA - Precursor Chemical

None of the ingredients are listed or exempt.

SARA (311/312) Hazard Categories

None of the ingredients are listed or exempt.

OSHA Highly Hazardous Chemicals

None of the ingredients are listed or exempt.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

The following ingredients are listed or exempt:

Proprietary Additive B

Proprietary Filler B

California Air Toxics "Hot Spots" (A-I)

None of the ingredients are listed or exempt.

California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed or exempt.

California Directors List of Hazardous Substances

The following ingredients are listed or exempt:

Proprietary Filler A

Proprietary Filler B

Massachusetts "Right To Know" List

The following ingredients are listed or exempt:

Proprietary Filler A

Proprietary Filler B

Rhode Island "Right To Know" List

The following ingredients are listed or exempt:

Proprietary Filler A

Proprietary Filler B

Minnesota "Right To Know" List

The following ingredients are listed or exempt:

Proprietary Filler A

Proprietary Filler B

New Jersey "Right To Know" List

The following ingredients are listed or exempt:

Proprietary Filler A

Proprietary Filler B

Pennsylvania "Right To Know" List

The following ingredients are listed or exempt:

Proprietary Filler A

Proprietary Filler B

Inventories

US - TSCA

The following ingredients are listed or exempt:

Proprietary Additive A

Proprietary Filler A

Proprietary Additive B

Proprietary Filler B

Proprietary Resin A

US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

16. Other information

Abbreviations and acronyms used in the safety data sheet

TDG: The transport of dangerous goods act

IATA: International air transport association.

ICAO: Technical instructions for the safe transport of dangerous goods by air.

IMDG: International maritime dangerous goods.

CAS: Chemical abstracts service. ATE: Acute toxicity estimate.

LC₅o: Lethal concentration to 50 % of a test population.

LD₅₀: Lethal dose to 50% of a test population (median lethal dose).

EC₅₀: 50% of maximal effective concentration.

PBT: Persistent, bioaccumulative and toxic substance. vPvB: Very persistent and very bioaccumulative.

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.

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Revision 2

Supersedes date 11/20/2019

SDS No. 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.

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.