

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking
1.1 Product Identifier(s): Castaldo® LiquaCast Long Life™ RTV Part B

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against: Component for Polyurethane Mold Rubber. For Industrial/Professional use only. Do not use in toys or childcare articles which can be placed in the mouth.

1.3 Details of the Supplier of the Safety Data Sheet

 Manufacturer: Goodwin Refractory Services Ltd
 Spencroft Road, Newcastle-under-Lyme, Staffordshire, ST5 9JE, United Kingdom
 +44 (0) 1782 66 36 00

1.4 Emergency Telephone Number: Chem-Tel: 1-800-255-3924

Section 2: Hazards Identification
2.1 Classification of the Substance or Mixture:
CLP/GHS (No 1272/2008): Specific Target Organ Toxicity - Repeated Exposure Category 2
 Aquatic Chronic Toxicity Category 3 (H412)

EU (1999/45/EC): R52/53

2.2 Label Elements: Warning!


Contains Diethyltoluenediamine

Hazard Phrases

H373 May cause damage to pancreas through prolonged or repeated exposure.

H412 Harmful to aquatic life with long-lasting effects.

Precautionary Phrases

P260 Do not breathe vapors.

P273 Avoid release to the environment.

P314 Get medical advice if you feel unwell.

P501 Dispose of contents and container to licensed, permitted incinerator, or other thermal destruction device in accordance with local and national regulations.

Supplemental Information: May cause mild eye and skin irritation. Avoid contact with eyes, skin and clothing. This is one part of a two-part system. Read and understand the hazard information on Part A before using.

2.3 Other Hazards: None

Section 3: Composition/Information on Ingredients
3.2 Mixtures

Chemical Name	CAS #	EINECS #	EU Classification (67/548/EEC)	CLP Annex VI Classification	%
Diethyltoluenediamine	68479-98-1	270-877-4	Xn, N R21/22, R36, R48/22, R50/53	Acute Toxicity Category 4 (H302, H312), Eye Irritation 2 (H319), STOT-RE 2 (H373), Aquatic Acute Category 1 (H400), Aquatic Chronic Category 1 (H410)	<5%

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Section 4: First-Aid Measures

4.1 Description of First Aid Measures:

Eye: Rinse thoroughly with water, holding the eyelids open to be sure the material is washed out. Get medical attention if irritation persists.

Skin: Remove contaminated clothing. Wash contact area thoroughly with soap and water. Get medical attention if irritation persists.

Inhalation: Remove person to fresh air. Get medical attention if symptoms persist.

Ingestion: Do not induce vomiting unless directed to do so by medical personnel. Get medical attention.

4.2 Most Important symptoms and effects, both acute and delayed: May cause mild skin and eye irritation. May be harmful if swallowed.

4.3 Indication of any immediate medical attention and special treatment needed: Immediate medical attention is not required.

Section 5: Fire-Fighting Measures

5.1 Extinguishing Media: Use water fog, foam, carbon dioxide or dry chemical. Do not use solid water stream. Solid stream of water into hot product may cause violent steam generation or eruption.

5.2 Special Hazards Arising from the Substance or Mixture:

Unusual Fire and Explosion Hazards: Not classified as flammable or combustible. Product will burn under fire conditions.

Combustion Products: Oxides of carbon and nitrogen, organic acids, and other toxic organic compounds.

5.3 Advice for Fire-Fighters: Wear an approved, positive pressure, self-contained breathing apparatus and full-body protective clothing. Cool fire-exposed containers with water.

Section 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures: Remove all ignition sources. Clear non-emergency personnel from the area. Wear appropriate protective clothing to avoid eye and skin contact and avoid breathing of vapours. Caution – spill area will be slippery.

6.2 Environmental Precautions: Prevent release to the environment. Report spills and releases as required to appropriate authorities.

6.3 Methods and Material for Containment and Cleaning Up: Cover with an inert absorbent material and collect into an appropriate container for disposal.

6.4 Reference to Other Sections: Refer to Section 8 for protective clothing and Section 13 for disposal.

Section 7: Handling and Storage

7.1 Precautions for Safe Handling: Use with adequate ventilation. Avoid contact with the eyes, skin and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep container closed when not in use.

7.2 Conditions for Safe Storage, Including any Incompatibilities: Store indoors at temperatures below 49°C (120°F). Store in original containers. Avoid getting moisture into containers. Keep containers tightly closed.

7.3 Specific end use(s): None identified

Section 8: Exposure Controls/Personal Protection

8.1 Control Parameters:

Occupational Exposure Limits: None Established

Biological Exposure Index: None Established

Derived No Effect Level (DNEL): None Established

Predicted No Effect Concentration (PNEC): None Established

8.2 Exposure Controls:

Ventilation: Use with adequate general or local exhaust ventilation to minimize exposure levels.

Respiratory Protection: If ventilation is inadequate, use an air-purifying respirator with organic vapour cartridges. Follow applicable regulations and good Industrial Hygiene practice.

Skin Protection: Impervious gloves such as butyl rubber or nitrile rubber are recommended.

Eye Protection: Chemical safety glasses/goggles recommended.

Other Protective Equipment: Impervious clothing is required to prevent skin contact and contamination of personal clothing. An eye wash facility and washing facility should be available in the work area.

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Section 9: Physical and Chemical Properties

9.1 Information on basic Physical and Chemical Properties

Appearance: Liquid of varied colors

Odour: Slightly pungent

Odour Threshold: No data available

pH: Not applicable

Melting Point/Freezing Point: No data available

Boiling Point: No data available

Flash Point: >177°C (350°F)

Evaporation Rate: No data available

Flammability (solid, gas): Not applicable

Flammable Limits: No data available

Vapour Pressure: <0.013 hPa @ 20°C (<0.01 mmHg @20°C)

Vapour Density: No data available

Relative Density: ~1.0 @ 25°C

Solubility: Slight in water

Partition Coefficient: n-Octanol/Water: No data

Autoignition Temperature: No data available

Decomposition Temperature: No data available

Viscosity: 150-1500 cP

Explosive Properties: Not explosive

Oxidizing Properties: Not oxidizing

9.2 Other Information: None available

Section 10: Stability and Reactivity

10.1 Reactivity: Not normally reactive.

10.2 Chemical Stability: Stable under recommended conditions.

10.3 Possibility of Hazardous Reactions: None known.

10.4 Conditions to Avoid: Avoid excessive heat and exposure to sunlight.

10.5 Incompatible Materials: Avoid contact with oxidizers, acids, organic sulfur compounds, and aluminum.

10.6 Hazardous Decomposition Products: Thermal decomposition will generate oxides of carbon and nitrogen, organic acids, and other toxic organic compounds.

Section 11: Toxicological Information

11.1 Information on Toxicological Effects:

Potential Health Effects:

Eye Contact: May cause mild irritation.

Skin Contact: May cause mild irritation.

Inhalation: Vapours and mists may cause mild respiratory irritation.

Ingestion: Single oral dose toxicity is low. No harmful effects anticipated from ingesting small amounts incidental to normal handling. Large amounts may cause gastrointestinal effects.

Chronic Health Effects: Mixture has not been tested. Based on laboratory animal studies; diethyltoluenediamine ingredient may cause damage to the pancreas, liver, thyroid and eyes through prolonged exposure.

Acute Toxicity Values: Diethyltoluenediamine: Oral rat LD50 738 mg/kg; Inhalation rat LC50 2.45 mg/L/hr; Dermal rabbit LD50 >2000 mg/kg.

Skin Corrosion/Irritation: Relevant components are not skin irritants.

Eye Damage/Irritation: Relevant components are not eye irritants.

Respiratory Irritation: Relevant components are not respiratory irritants.

Respiratory Sensitization: Components are not respiratory sensitizers.

Skin Sensitization: Components are not skin sensitizers.

Germ Cell Mutagenicity: Components are not mutagens.

Carcinogenicity: None of the components are carcinogens.

Reproductive Toxicity: Components are not reproductive toxins.

Specific Target Organ Toxicity: Single Exposure: No data available. Repeat Exposure: In animal studies, diethyltoluenediamine caused adverse effects in the pancreas at 8-10 mg/kg. At higher doses, effects were seen in the liver and thyroid as well.

Section 12: Ecological Information

12.1 Toxicity: This material is classified as harmful to aquatic organisms (Category 3) based on the concentration of diethyltoluenediamine. (Diethyltoluenediamine: Fish LC50 200 mg/L/48 hr; Daphnia EC50 0.5 mg/L/48 hr.)

12.2 Persistence and Degradability: No test data; but product is not expected to be readily biodegradable.

12.3 Bioaccumulative Potential: No test data; but product is not expected to bioaccumulate.

12.4 Mobility in Soil: No data available.

12.5 Results of PBT and vPvB Assessment: No data available.

12.6 Other Adverse Effects: No data available.

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Section 13: Disposal Considerations

13.1 Waste Treatment Methods: Dispose in accordance with all local, state and federal regulations.

Section 14: Transport Information

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Transport Hazard Class(es)	14.4 Packing Group	14.5 Environmental Hazards
US DOT	None	Not Regulated	None	None	No
Canadian TDG	None	Not Regulated	None	None	No
EU ADR/RID	None	Not Regulated	None	None	No
IMDG	None	Not Regulated	None	None	No
IATA/ICAO	None	Not Regulated	None	None	No

14.6 Special Precautions for User: Not applicable

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

Section 15: Regulatory Information

15.1 Safety, Health and Environment Regulations/Legislation Specific for the Substance or Mixture:

REACH: Substances in this formulation imported to EU in >1 tonne/yr are pre-registered. This product contains a plasticizer that is restricted from being used in toys and childcare articles which can be placed in the mouth (2005/84/EC).

International Inventories:

European Inventory of Existing Chemicals (EINECS): All of the components in this product are listed on the EINECS inventory.

15.2 Chemical Safety Assessment: A Chemical Safety Assessment has not been conducted.

Section 16: Other Information

GHS Classification for Reference (See Sections 2 and 3):

STOT-RE Specific Target Organ Toxicity – Repeated Exposure

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H319 Causes serious eye irritation.

H373 May cause damage to pancreas through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long-lasting effects.

EU Classes and Risk Phrases for Reference (See Sections 2 and 3):

Xn Harmful

N Dangerous for the Environment

R21/22 Harmful in contact with skin or if swallowed.

R36 Irritating to eyes.

R48/22 Danger of serious damage to health by prolonged exposure if swallowed.

N R50/53 Very toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

R52/53 Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

Training Advice: All personnel using/handling this product should be trained in proper chemical handling and the need for and use of engineering controls and protective equipment.

SDS Revision Note: Converted to REACH format.

Disclaimer: The information contained herein is considered accurate; however, F. E. Knight Inc / Castaldo makes no warranty regarding the accuracy of the information. The user must determine the suitability of the product for the intended use and accepts all risk and liability associated with that use.