

## Safety Data Sheet

## Castaldo® LiquaCast® RTV Jewelry Molding Rubber Part A



SDS Revision Date:

11/03/2014

ITEM# 73-0522 / 0523 LIQUACAST LONG LIFE

## 1. Identification of the substance/mixture and of the company/undertaking

## 1.1. Product identifier

Item# 73-0522 / 0523

## Product Identity

Castaldo® LiquaCast® RTV Jewelry Molding Rubber Part A

## Alternate Names

Castaldo® LiquaCast® RTV Jewelry Molding Rubber Part A

## 1.2. Relevant identified uses of the substance or mixture and uses advised against

## Intended use

See Technical Data Sheet.

## Application Method

See Technical Data Sheet.

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

## Company Name

Romanoff International Supply Corporation  
9 Deforest Street  
Amityville, NY 11701-US  
Tel: 631-842-2400

## Emergency CHEMTREC (USA)

CHEMTEL, ACCOUNT #MIS4594445 COLLECT CALLS ACCEPTED  
24 HR EMERGENCY TELEPHONE: USA, CANADA, PUERTO RICO & US VIRGIN ISLANDS 1-800-255-3924 AUSTRALIA:  
1-300-954-583 BRAZIL: 0-800-591-6042 CHINA: 400-120-0751  
INDIA: 000-800-100-4086 MEXICO: 01-800-099-0731 ALL OTHER COUNTRIES: 1-813-248-0585

## 2. Hazard identification of the product

## 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4;H332	Harmful if inhaled.
Skin Irrit. 2;H315	Causes skin irritation.
Eye Irrit. 2;H319	Causes serious eye irritation.
Skin Sens. 1;H317	May cause an allergic skin reaction.
Resp. Sens. 1;H334	May cause allergy or asthma symptoms of breathing difficulties if inhaled.
Carc. 2;H351	Suspected of causing cancer.
STOT SE 3;H335	May cause respiratory irritation.
STOT RE 2;H373	May cause damage to organs through prolonged or repeated exposure.

## Classification according to 67/548/EEC or 1999/45/EC.

Xn	Harmful.
R20	Harmful by inhalation.
R36/37/38	Irritating to eyes, respiratory system and skin.
R40	Limited evidence of a carcinogenic effect.
R43	May cause sensitisation by skin contact.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.

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### 2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

According to Regulation (EC) No 1272/2008



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**Danger**

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H334 May cause allergic or asthmatic 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.

#### [Prevention]:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing dust / fume / gas / mist / vapors / spray.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves / eye protection / face protection.

#### [Response]:

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P304+312 IF INHALED: Call a POISON CENTER or doctor / physician if you feel unwell.

P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P308+313 IF exposed or concerned: Get medical advice / attention.

P314 Get Medical advice / attention if you feel unwell.

P321 Specific treatment (see information on this label).

P333+313 If skin irritation or a rash occurs: Get medical advice / attention.

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P337+313 If eye irritation persists: Get medical advice / attention.

P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P341 If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P342+311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor / physician.

P362 Take off contaminated clothing and wash before reuse.

P363 Wash contaminated clothing before reuse.

### [Storage]:

P403+233 Store in a well ventilated place. Keep container tightly closed.

P405 Store locked up.

### [Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

See Technical Data Sheet.

### 2.3. Other hazards

This product contains no PBT/vPvB chemicals.

## 3. Composition/information on ingredients

If the product contains substances that present a health hazard within the meaning of the Dangerous Substances Directive 67/548/EC, or have occupational exposure limits detailed in EH40, these substances are listed below.

Ingredient/Chemical Designations	Weight %	67/548/EEC Classification*	EC No. 1272/2008 Classification*	Notes
Polymeric Diphenylmethane Diisocyanate CAS Number: 0009016-87-9 EC No. Index No.:	25 - 50	Xn;R20 Xi;R36/37/38 R42/43	Acute Tox. 4;H332 Skin Irrit. 2;H315 Eye Irrit. 2;H319 STOT SE 3;H335 Skin Sens. 1;H317 Resp. Sens. 1;H334	[1]
Diphenylmethanediisocyanate CAS Number: 0000101-68-8 EC No. 202-966-0 Index No.: 615-005-00-9	10 - 25	Carc. Cat. 3;R40 Xn;R20-48/20 Xi;R36/37/38 R42/43	Carc. 2;H351 Acute tox. 4;H332 STOT RE 2;H373 Eye Irrit. 2;H319 STOT SE 3;H335 Skin Irrit. 2;H315 Resp. Sens. 1;H334 Skin Sens. 1;H317	C; 2 <sup>^CLP 3.1</sup> [1][2]

<sup>^CLP 3.1</sup> Reference EC No. 1272/2008 1.1.3.1. Notes relating to the identification, classification and labelling of substances (Table 3.1).

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

\*The full texts of the phrases are shown in Section 16.



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**4. First aid measures**

**4.1. Description of first aid measures**

<b>General</b>	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
<b>Inhalation</b>	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
<b>Eye</b>	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
<b>Skin</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
<b>Ingestion</b>	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

**4.2. Most important symptoms and effects, both acute and delayed**

<b>Overview</b>	<b>Primary Route(s) of Entry:</b> Inhalation, skin or eye absorption. <b>Eye:</b> May cause moderate eye irritation. <b>Skin:</b> Exposure may cause skin irritation, staining, or sensitization. <b>Ingestion:</b> Single oral dose toxicity is low. May cause nausea, vomiting, and diarrhea. <b>Inhalation:</b> At room temp., vapors are minimal. Vapors or aerosols (e.g., generated during heating or spraying) may cause respiratory irritation. May cause respiratory sensitization in susceptible individuals. For individuals sensitized to MDI, exposure may result in allergic respiratory reactions (e.g., coughing, difficulty breathing). <b>Chronic Effects:</b> Repeated overexposure to MDI may cause respiratory and dermal sensitization. Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 3 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure. See section 2 for further details.
<b>Inhalation</b>	Harmful if inhaled. May cause allergy or asthma symptoms of breathing difficulties if inhaled.
<b>Eye</b>	Causes serious eye irritation.
<b>Skin</b>	May cause an allergic skin reaction. Causes skin irritation.

**5. Fire-fighting measures**

**5.1. Extinguishing media**

Recommended extinguishing media; alcohol resistant foam, CO<sub>2</sub>, powder, water spray.  
Do not use; water jet.

**5.2. Special hazards arising from the substance or mixture**

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Hazardous decomposition: Possibly isocyanate vapor, carbon monoxide, nitrogen oxides, and traces of hydrogen cyanide.

Decomposition products may include MDI vapor, nitrogen oxides, isocyanates, carbon monoxide, carbon dioxide, and unidentified toxic and irritating compounds.

Keep away from heat / sparks / open flames / hot surfaces - No smoking.

Use explosion-proof electrical / ventilating / light / equipment.

Avoid breathing dust / fume / gas / mist / vapors / spray.

### 5.3. Advice for fire-fighters

Firefighters wear SCBA and full-body protective suit. Solid stream of water into hot product may cause violent steam generation or eruption. Dense smoke is formed when product burns. Use water to cool hot containers

Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and contaminants from fire fighting to enter drains or water ways.

ERG Guide No. ---

## 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

### 6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

### 6.3. Methods and material for containment and cleaning up

Clear non-emergency personnel from the area. Extinguish sources of ignition. Put on protective equipment (see Section 8). Contain spill to minimize environmental contamination. Absorb spilled material with an inert absorbent. Collect and containerize material. Do not seal containers of spill residue since carbon dioxide is generated upon contact with moisture and dangerous pressure buildup can occur. Neutralize contaminated floor area with a mixture of water (90%), ammonia (3-8%) and detergent (2%). Clean floor before material reacts with moisture in the air and forms a difficult to remove rubber.

## 7. Handling and storage

### 7.1. Precautions for safe handling

See section 2 for further details. - [Prevention]:

### 7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Precautions should be taken to minimize exposure to atmospheric humidity or water as carbon dioxide may be formed which, in closed containers can result in pressurization. Care should be taken when re-opening partly used

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containers.

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used.

Examination of lung function should be carried out on a regular basis on persons applying this preparation.

Incompatible materials: Avoid contact with water, acids, bases, alcohols, strong oxidizers, and some metals (e.g., aluminum, brass, copper). Reaction with water generates carbon dioxide, and results in heat and pressure buildup in closed systems.

Store indoors at temperatures > 75°F and < 105°F. Store in original, unopened container. Protect from atmospheric moisture and water, since MDI reacts with water to form CO<sub>2</sub> leading to potentially dangerous pressure build up in sealed.

See section 2 for further details. - [Storage]:

**7.3. Specific end use(s)**

No data available.



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### 8. Exposure controls and personal protection

#### 8.1. Control parameters

##### Exposure

CAS No.	Ingredient	Source	Value
0000101-68-8	Diphenylmethanediisocyanate	OSHA	C 0.2 mg/m <sup>3</sup> (0.02 ppm)
		ACGIH	TWA: 0.005 ppm Ceiling: 0.01 ppmSkin, S
		NIOSH	TWA 0.05 mg/m <sup>3</sup> (0.005 ppm) C 0.2 mg/m <sup>3</sup> (0.020 ppm) [10-minute]
		Supplier	No Established Limit
0009016-87-9	Polymeric Diphenylmethane Diisocyanate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

##### Carcinogen Data

CAS No.	Ingredient	Source	Value
0000101-68-8	Diphenylmethanediisocyanate	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
0009016-87-9	Polymeric Diphenylmethane Diisocyanate	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;

#### 8.2. Exposure controls

##### Respiratory

If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

##### Eyes

Protective safety glasses recommended.

##### Skin

Wear overalls to keep skin contact to a minimum. Chemical splash goggles, protective clothing, and impervious rubber gloves are recommended.

##### Other Work Practices

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

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**9. Physical and chemical properties**

<b>Appearance</b>	Brown Clear Liquid
<b>Odor</b>	Mild
<b>Odor threshold</b>	Not Measured
<b>pH</b>	Not Measured
<b>Melting point / freezing point</b>	Not Measured
<b>Initial boiling point and boiling range</b>	No Data
<b>Flash Point</b>	400 F (estimated)
<b>Evaporation rate (Ether = 1)</b>	Not Measured
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> Not Measured <b>Upper Explosive Limit:</b> Not Measured
<b>Vapor pressure (Pa)</b>	Negligible
<b>Vapor Density</b>	Not Measured
<b>Specific Gravity</b>	Approximately 1.1, at 25 C, g/cc
<b>Solubility in Water</b>	Not Measured
<b>Partition coefficient n-octanol/water (Log Kow)</b>	Not Measured
<b>Auto-ignition temperature</b>	Not Measured
<b>Decomposition temperature</b>	Not Measured
<b>Viscosity (cSt)</b>	Not Measured
<b>Solubility in Water</b>	Insoluble forms CO <sub>2</sub>
<b>9.2. Other information</b>	
No other relevant information.	

**10. Stability and reactivity**

**10.1. Reactivity**

Hazardous Polymerization will not occur.

**10.2. Chemical stability**

Stable under normal circumstances.

**10.3. Possibility of hazardous reactions**

None known

**10.4. Conditions to avoid**

Moisture and temperatures < 75 °F and > 95°F to ensure product integrity.

**10.5. Incompatible materials**

Avoid contact with water, acids, bases, alcohols, strong oxidizers, and some metals (e.g., aluminum, brass, copper).  
Reaction with water generates carbon dioxide, and results in heat and pressure buildup in closed systems.



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### 10.6. Hazardous decomposition products

Possibly isocyanate vapor, carbon monoxide, nitrogen oxides, and traces of hydrogen cyanide.

## 11. Toxicological information

### Acute toxicity

Based on the properties of the isocyanate content of this product, respiratory exposure may cause acute irritation and/or sensitisation of the respiratory system resulting in asthmatic symptoms, wheezing and a tightness of the chest. Sensitised persons may subsequently show asthmatic symptoms when exposed to airborne concentrations of isocyanates well below the occupational exposure limit. Repeated exposure may lead to permanent respiratory disability.

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapour LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr	Inhalation Gas LD50, ppm
Diphenylmethanediisocyanate - (101-68-8)	4,700.00, Rat - Category: 5	No data available	No data available	No data available	No data available
Polymeric Diphenylmethane Diisocyanate - (9016-87-9)	49,000.00, Rat - Category: NA	9,400.00, Rabbit - Category: NA	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	4	Harmful if inhaled.
Skin corrosion/irritation	2	Causes skin irritation.
Serious eye damage/irritation	2	Causes serious eye irritation.
Respiratory sensitization	1	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitization	1	May cause an allergic skin reaction.
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	2	Suspected of causing cancer.
Reproductive toxicity	---	Not Applicable

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STOT-single exposure	---	Not Applicable
STOT-repeated exposure	2	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	---	Not Applicable

**12. Ecological information**

**12.1. Toxicity**

No additional information provided for this product. See Section 3 for chemical specific data.

**Aquatic Ecotoxicity**

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Diphenylmethanediisocyanate - (101-68-8)	Not Available	129.70, Daphnia magna	Not Available
Polymeric Diphenylmethane Diisocyanate - (9016-87-9)	Not Available	Not Available	Not Available

**12.2. Persistence and degradability**

There is no data available on the preparation itself.

**12.3. Bioaccumulative potential**

Not Measured

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

This product contains no PBT/vPvB chemicals.

**12.6. Other adverse effects**

No data available.

**13. Disposal considerations**

**13.1. Waste treatment methods**

Observe all federal, state and local regulations when disposing of this substance.

Toxic fumes may be generated upon incineration.



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### 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Applicable	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3. Transport hazard class(es)	DOT Hazard Class: Not Applicable DOT Label: ---	IMDG: Not Applicable Sub Class: Not Applicable	Air class: Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable
14.5. Environmental hazards			
IMDG	Marine Pollutant: No		
14.6. Special precautions for user	No further information		

### 15. Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

##### EU Legislation

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

##### National Legislation

None noted.



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**16. Other information**

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H334 May cause allergic or asthmatic 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.

CarCat3R40 Limited evidence of a carcinogenic effect.

R20 Harmful by inhalation.

R36/37/38 Irritating to eyes, respiratory system and skin.

R42/43 May cause sensitization by inhalation and skin contact.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

**This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.**

Disclaimer: The information contained herein is considered accurate; however, the supplier 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.

End of Document

**ITEM# 73-0525 / 0523 - LIQUACAST LONG LIFE** SDS Revision Date: 10/12/2014

**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**

Supplier: Romanoff International Supply Corporation  
 9 Deforest Street  
 Amityville, NY 11701 US  
 Tel: 631-842-2400

**1.4 Emergency Telephone Number:** CHEMTREC, Account# CCN620995  
 24-Hour Telephone: USA & Canada: 1-800-424-9300  
 Outside USA & Canada: 1-703-5217-3887

**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.



# SAFETY DATA SHEET

## 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, the supplier : / 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.