

Safety Data Sheet

Castaldo® White Label® Jewelry Molding Rubber



SDS Revision Date:

27/05/2018

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

Version 1.1

27/05/2018

1.1. Product identifier**Product Identity**

Castaldo® White Label® Jewelry Molding Rubber

Alternate Names

White Label Jewelry Molding Rubber

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**

F. E. Knight Inc.
120 Constitution Blvd.,
Franklin, MA 02038. USA

Customer Service: F. E. Knight Inc.

508-520-1666

1.4. Emergency telephone number**Emergency****24 hour Emergency Telephone No.**

Chem-Tel: 1-800-255-3924 or 617-969-5399

Section 2. Hazard identification of the product

2.1. Classification of the substance or mixture**Classification according to Regulation (EC) No 1272/2008**

Skin Sens. 1;H317

May cause an allergic skin reaction.

STOT RE 2;H373

May cause damage to organs through prolonged or repeated exposure.

Aquatic Acute 1;H400

Very toxic to aquatic life.

Aquatic Chronic 2;H411

Toxic to aquatic life with long lasting effects.

2.2. Label elements**According to Regulation (EC) No 1272/2008****Warning**

Safety Data Sheet

Castaldo® White Label® Jewelry Molding Rubber



SDS Revision Date:

27/05/2018

H317 May cause an allergic skin reaction.

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

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

[Prevention]:

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

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

P273 Avoid release to the environment.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

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

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.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

[Storage]:

No CLP storage statements

[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.

Section 3. Composition/information on ingredients

3.2. Mixtures

If the product contains substances that present a hazard according to Regulation (EC) No. 1272/2008 [CLP/GHS] (as amended by (EU) 2015/830), they are listed below.

| Ingredient/Chemical Designations | Weight % | EC No. 1272/2008 Classification* | Notes |
|--|----------|--|--------|
| Octadecanoic acid, zinc salt CAS Number: 0000557-05-1 EC No. 209-151-9 Index No.: | 5 - 10 | Not Classified | [1][2] |
| Zinc oxide CAS Number: 0001314-13-2 EC No. 215-222-5 Index No.: 030-013-00-7 | 5 - 10 | Aquatic Acute 1;H400 Aquatic Chronic 1;H410 | [1][2] |

Safety Data Sheet

Castaldo® White Label® Jewelry Molding Rubber



SDS Revision Date:

27/05/2018

| | | | |
|---|------------|--|--------|
| Zinc Sulfide CAS Number: 0001314-98-3 EC No. 215-251-3 Index No.: | 5 - 10 | Not classified | [1] |
| Tetramethylthiuram disulphide CAS Number: 0000137-26-8 EC No. 205-286-2 Index No.: 006-005-00-4 | 1 - 5 | Acute Tox. 4;H332 Acute Tox. 4;H302 STOT RE 2;H373 Eye Irrit. 2;H319 Skin Irrit. 2;H315 Skin Sens. 1;H317 Aquatic Acute 1;H400 Aquatic Chronic 1;H410 | [1][2] |
| 2-Mercaptobenzothiazole CAS Number: 0000149-30-4 EC No. 205-736-8 Index No.: 613-108-00-3 | 0.10 - 1.0 | Skin Sens. 1;H317 Aquatic Acute 1;H400 Aquatic Chronic 1;H410 | [1] |

^{^CLP 31} Reference EC No. 1272/2008 1.1.3.1. Notes relating to the identification, classification and labelling of substances (Table 3.1).

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[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.

Section 4. First aid measures

4.1. Description of first aid measures

| | |
|-------------------|--|
| General | In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. |
| Inhalation | 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. |
| Eye | Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention. |
| Skin | Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser. |
| Ingestion | If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting. Do not induce vomiting, give plenty of water. Seek medical attention. |

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

| | |
|-----------------|--|
| Overview | No specific symptom data available. Treat symptomatically. See section 2 for further details. |
| Skin | May cause an allergic skin reaction. Causes mild skin irritation. |

4.3. Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|------------------------|
| Notes to physician | Treat symptomatically. |
|---------------------------|------------------------|

Safety Data Sheet

Castaldo® White Label® Jewelry Molding Rubber



SDS Revision Date:

27/05/2018

Section 5. Fire-fighting measures

5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO₂, powder, water spray.
Do not use: water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: TMTD may react with nitrosating agents to form nitrosamines - suspect carcinogens.

- Oxides of CO_x, NO_x and SO_x.
- Unburned hydrocarbons, trace oxides, acetic acid, oxides of Zinc, undetermined aliphatic fragments and fumes of components may exist during decomposition.

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

5.3. Advice for fire-fighters

Means of Extinction:

If exposed to flames, acrid fumes and black smoke are emitted. Use water, dry chemical, carbon dioxide, foam, etc.

Recommended Fire Fighting Protective Gear:

A self-contained breathing apparatus (SCBA) in positive pressure mode and full fire fighting protective gear should be worn when fighting fires involving rubber.

Additional Comments/Information:

No explosion hazard. Product will not self-ignite but will burn if exposed to flame. As with any organic material and depending upon conditions, product may emit Carbon Dioxide and/or Carbon Monoxide.

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.

Section 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

Sweep up by mechanical means. Brooms are a recommended tool.

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

Safety Data Sheet

Castaldo® White Label® Jewelry Molding Rubber



SDS Revision Date:

27/05/2018

See Section 13 for additional waste treatment information.

Section 7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

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

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials: No data available.

No precautions necessary. However, it is recommended that it is stored in a cool, dry environment in original closed packaging. Individuals handling the material should follow recommendations in Section 8. Good housekeeping and hygienic practices should be observed. Avoid heat, sparks and/or flames.

Product may cure if exposed to heat. Product may freeze if exposed to cold.

Avoid storage near strong acids and/or oxidizers.

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

7.3. Specific end use(s)

No data available.

Section 8. Exposure controls and personal protection

8.1. Control parameters

Exposure

| CAS No. | Ingredient | Source | Value |
|----------------------------------|-------------------------------|----------|--|
| 0000137-26-8 EC No. 205-286-2 | Tetramethylthiuram disulphide | OSHA | TWA 5 mg/m ³ |
| | | ACGIH | TWA: 1 mg/m ³ S Revised 2008; 2010, |
| | | NIOSH | TWA 5 mg/m ³ |
| | | Supplier | No Established Limit |
| 0000149-30-4 EC No. 205-736-8 | 2-Mercaptobenzothiazole | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |
| 0000557-05-1 EC No. 209-151-9 | Octadecanoic acid, zinc salt | OSHA | TWA 10 mg/m ³ (total) TWA 5 mg/m ³ (resp) |
| | | ACGIH | TWA: 10 mg/m ³ STEL: 20 mg/m ³ |
| | | NIOSH | TWA 10 mg/m ³ (total) TWA 5 mg/m ³ (resp) |
| | | Supplier | No Established Limit |
| 0001314-13-2 EC No. 215-222-5 | Zinc oxide | OSHA | TWA 5 mg/m ³ (fume) TWA 15 mg/m ³ (total dust) TWA 5 mg/m ³ (resp dust) |
| | | ACGIH | TWA: 2 mg/m ³ STEL: 10 mg/m ³ A1, 1, Revised 2003, |
| | | NIOSH | No Established Limit |

Safety Data Sheet

Castaldo® White Label® Jewelry Molding Rubber



SDS Revision Date:

27/05/2018

| | | | |
|----------------------------------|--------------|----------|----------------------|
| | | Supplier | No Established Limit |
| 0001314-98-3 EC No. 215-251-3 | Zinc Sulfide | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |
| | | | |

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. None Needed unless the handler is sensitive to the finished product. In this case, cloth gloves should be worn.

Engineering Controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices

Observe general safety regulations for rubber processing and compounding. As conditions or methods of use are beyond the control of the Manufacturer. No responsibility is assumed. Liability is expressly disclaimed for any use of this product.
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.

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|--|
| Appearance | Tan Solid, approximately 0.125" thick, |
| Odor | smoky rubber |
| Odor threshold | Not determined |
| pH | NA |
| Melting point / freezing point | NA |
| Initial boiling point and boiling range | NA |
| Flash Point | NA |
| Evaporation rate (Ether = 1) | NA |
| Flammability (solid, gas) | Not Applicable - Not Studied |
| Upper/lower flammability or explosive limits | Lower Explosive Limit: NA Upper Explosive Limit: NA |
| Vapor pressure (Pa) | NA |

Safety Data Sheet

Castaldo® White Label® Jewelry Molding Rubber



SDS Revision Date:

27/05/2018

| | |
|--|-------------------|
| Vapor Density | NA |
| Specific Gravity | Approximately 1.5 |
| Solubility in Water | Not Measured |
| Partition coefficient n-octanol/water (Log Kow) | Not Measured |
| Auto-ignition temperature | NA |
| Decomposition temperature | NA |
| Viscosity (cSt) | NA |
| VOC Content | NA |
| Water Reactive | No |

9.2. Other information

No other relevant information.

Section 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

No data available. Not Studied.

10.4. Conditions to avoid

No data available. Not Studied.

10.5. Incompatible materials

No data available. Not Studied.

10.6. Hazardous decomposition products

TMTD may react with nitrosating agents to form nitrosamines - suspect carcinogens.

- Oxides of CO_x, NO_x and SO_x.
- Unburned hydrocarbons, trace oxides, acetic acid, oxides of Zinc, undetermined aliphatic fragments and fumes of components may exist during decomposition.

Section 11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Safety Data Sheet

Castaldo® White Label® Jewelry Molding Rubber



SDS Revision Date:

27/05/2018

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).

| Ingredient | Oral LD50, mg/kg | Skin LD50, mg/kg | Inhalation Vapour LC50, mg/L/4hr | Inhalation Dust/Mist LC50, mg/L/4hr | Inhalation Gas LC50, ppm |
|--|--------------------------------|-----------------------------------|----------------------------------|-------------------------------------|--------------------------|
| Tetramethylthiuram disulphide - (137-26-8) EC No. 205-286-2 | No data available | No data available | No data available | No data available | No data available |
| 2-Mercaptobenzothiazole - (149-30-4) EC No. 205-736-8 | > 5,000.00, Rat - Category: NA | > 5,000.00, Rabbit - Category: NA | No data available | No data available | No data available |
| Octadecanoic acid, zinc salt - (557-05-1) EC No. 209-151-9 | > 5,000.00, Rat - Category: NA | 6,800.00, Rabbit - Category: NA | No data available | No data available | No data available |
| Zinc oxide - (1314-13-2) EC No. 215-222-5 | 5,000.00, Rat - Category: 5 | No data available | No data available | 2.50, Mouse - Category: 4 | No data available |
| Zinc Sulfide - (1314-98-3) EC No. 215-251-3 | >2,000.00, Rat - Category: 5 | No data available | No data available | No data available | No data available |

Carcinogen Data

| CAS & EC No. | Ingredient | Source | Value |
|----------------------------------|-------------------------------|--------|---|
| 0000137-26-8 EC No. 205-286-2 | Tetramethylthiuram disulphide | OSHA | Regulated Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No; |
| 0000149-30-4 EC No. 205-736-8 | 2-Mercaptobenzothiazole | OSHA | Regulated Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: Yes; Group 2b: No; Group 3: No; Group 4: No; |
| 0000557-05-1 EC No. 209-151-9 | Octadecanoic acid, zinc salt | OSHA | Regulated Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |
| 0001314-13-2 EC No. 215-222-5 | Zinc oxide | OSHA | Regulated Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |
| 0001314-98-3 EC No. 215-251-3 | Zinc Sulfide | OSHA | Regulated Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |

| Classification | Category | Hazard Description |
|-------------------------|----------|------------------------------|
| Acute toxicity (oral) | --- | Not Applicable - Not Studied |
| Acute toxicity (dermal) | --- | Not Applicable - Not Studied |

Safety Data Sheet

Castaldo® White Label® Jewelry Molding Rubber



SDS Revision Date:

27/05/2018

| | | |
|-------------------------------|-----|--|
| Acute toxicity (inhalation) | --- | Not Applicable - Not Studied |
| Skin corrosion/irritation | 3 | Causes mild skin irritation. (Not adopted by EU CLP) |
| Serious eye damage/irritation | --- | Not Applicable - Not Studied |
| Respiratory sensitization | --- | Not Applicable - Not Studied |
| Skin sensitization | 1 | May cause an allergic skin reaction. |
| Germ cell mutagenicity | --- | Not Applicable - Not Studied |
| Carcinogenicity | --- | Not Applicable - Not Studied |
| Reproductive toxicity | --- | Not Applicable - Not Studied |
| STOT-single exposure | --- | Not Applicable - Not Studied |
| STOT-repeated exposure | 2 | May cause damage to organs through prolonged or repeated exposure. |
| Aspiration hazard | --- | Not Applicable - Not Studied |

Section 12. Ecological information

12.1. Toxicity

Very toxic to aquatic life.

Toxic to aquatic life with long lasting effects.

No additional information provided for this product. Not Studied. 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 | 3hr IC50 Bacteria mg/l | Biodegradability % |
|--|----------------------------|----------------------------|--|------------------------|--------------------|
| Tetramethylthiuram disulphide - (137-26-8) | Not Available | Not Available | Not Available | --- | --- |
| 2-Mercaptobenzothiazole - (149-30-4) | 2.80, Oryzias latipes | 14.20, Daphnia magna | 44.70 (72 hr), Algae | 3,301.00 | 333.00 |
| Octadecanoic acid, zinc salt - (557-05-1) | 0.82, Oncorhynchus kisutch | 0.413, Ceriodaphnia dubia | 0.997 (72 hr), Pseudokirchneriella subcapitata | 5.20 | --- |
| Zinc oxide - (1314-13-2) | 1.10, Oncorhynchus mykiss | 0.098, Daphnia magna | 0.042 (72 hr), Pseudokirchneriella subcapitata | --- | --- |
| Zinc Sulfide - (1314-98-3) | 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

Safety Data Sheet

Castaldo® White Label® Jewelry Molding Rubber



SDS Revision Date:

27/05/2018

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.

Section 13. Disposal considerations

13.1. Waste treatment methods

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

Section 14. Transport information

| | DOT (Domestic Surface Transportation) | IMO / IMDG (Ocean Transportation) | ICAO/IATA |
|--|--|---|---|
| 14.1. UN number | UN3077 | UN3077 | UN3077 |
| 14.2. UN proper shipping name | UN3077, Environmentally hazardous substances, solid, n.o.s., (Tetramethylthiuram disulphide), 9, III | Environmentally hazardous substances, solid, n.o.s., (Tetramethylthiuram disulphide) | Environmentally hazardous substances, solid, n.o.s., (Tetramethylthiuram disulphide) |
| 14.3. Transport hazard class(es) | DOT Hazard Class: 9 | IMDG: Sub Class: | Air class: |
| 14.4. Packing group | III | III | III |
| 14.5. Environmental hazards | | | |
| IMDG | Marine Pollutant: ; (Tetramethylthiuram disulphide) | | |
| 14.6. Special precautions for user | | | |
| | No further information | | |
| 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | | | |
| | Not Applicable - Not Studied | | |

Safety Data Sheet

Castaldo® White Label® Jewelry Molding Rubber



SDS Revision Date:

27/05/2018

Label



Section 15. Regulatory information

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

EU Legislation

REGULATION (EU) 2015/830 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

National Legislation

None noted.

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

Section 16. Other information

SDS Revision Date 28/07/2017

Version 1.1 28/07/2017 This was the first version in the GHS SDS format. Listings of changes from previous

Version 1.0 18/12/2014 versions in other formats are Not Applicable - Not Studied.

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:

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

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

Safety Data Sheet

Castaldo® White Label® Jewelry Molding Rubber



SDS Revision Date:

27/05/2018

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Disclaimer: The information contained herein is considered accurate; however, F .E. Knight, Inc. 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