



# Safety Data Sheet

## Castaldo® Resin Release™ Spray



SDS Revision Date:

12/19/2014

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

#### 1.1. Product identifier

**Product Identity** Castaldo® Resin Release™ Spray

**Alternate Names** Castaldo® Resin Release™ Spray

#### 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

#### Emergency

**CHEMTREC (USA)** (800) 424-9300

**24 hour Emergency Telephone No.** Chem-Tel: 1-800-255-3924

**Customer Service: F. E. Knight Inc.** 508-520-1666 or 617-969-5399

### 2. Hazard identification of the product

#### 2.1. Classification of the substance or mixture

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

Press. Gas;H280 Contains gas under pressure; may explode if heated.

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

#### 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**



## Warning

H280 Contains gas under pressure; may explode if heated.

### [Prevention]:

No CLP prevention statements

### [Response]:

No CLP response statements

### [Storage]:

P410+403 Protect from sunlight. Store in a well ventilated place.

### [Disposal]:

No CLP disposal statements

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
Dimethyl ether CAS Number: 0000115-10-6 EC No. 204-065-8 Index No.: 603-019-00-8	50 - 75	F+;R12	Flam. Gas 1;H220 Press. Gas;H280	U <sup>^CLP 3.1</sup> [1]
1,1,1,2-Tetrafluoroethane (HFC-134a) CAS Number: 0000811-97-2 EC No. 212-377-0 Index No.:	50 - 75		Liquified Gas;H280 Simple Asphyxiant	[1]

<sup>^CLP 31</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.

## 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>Eyes</b>	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
<b>Skin</b>	Wash affected area with soap and water. Remove and launder contaminated clothing before re-use. Treat as frostbite. If irritation develops or if there is evidence of tissue damage, get medical attention.
<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

**Overview** Liquid and gas under pressure, overheating and overpressurizing may cause gas release or rupturing of container. May decompose on contact with flames or extremely hot metal surfaces to produce toxic and corrosive products. Vapor reduces oxygen available for breathing and is heavier than air. Harmful if inhaled and may cause heart irregularities, unconsciousness or death. Liquid contact with eyes or skin may cause frostbite.

Potential Health Effects Inhalation and skin contact are expected to be the primary routes of occupational exposure to this material. As with most liquefied gases, contact with rapidly volatilizing liquid or cold vapor can cause frostbite to any tissue. High vapor concentrations are irritating to the eyes and respiratory tract and may result in central nervous system effects such as headache, dizziness, anesthesia, drowsiness, and in severe exposure, loss of consciousness and death. The dense vapor of this material may reduce the available oxygen for breathing and produce symptoms such as headache, dizziness, drowsiness, cyanosis and lack of muscle control followed by collapse. Prolonged exposure to an oxygen-deficient atmosphere may be fatal. Inhalation of this material may cause an increase in the sensitivity of the heart to adrenaline, which could result in irregular or rapid heartbeats and reduced heart function. Workers with heart disease or compromised heart function should limit exposure to this material. See section 2 for further details.

## 5. Fire-fighting measures

#### 5.1. Extinguishing media

Dry chemical extinguisher (B-C), Water.

Use of dry chemical, foam, or CO<sub>2</sub>; water may be ineffective but should be used to keep exposed containers cool. Stop release of materials if possible. Avoid accumulation of unburned materials. Remove personnel in general area.

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

Hazardous decomposition: Hydrogen fluoride, hydrogen chloride, carbon monoxide carbon dioxide and chlorine.

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

### **5.3. Advice for fire-fighters**

Specific hazards during Firefighting: Container may rupture or explode under fire conditions. Hazardous decomposition products may be formed (see reactivity data in section 9). Vapors are heavier than air and may accumulate in low areas. Vapors confined in a poorly ventilated area may be ignited by a spark or flame. Vapors may travel considerable distances to ignition sources. Under fire conditions, empty containers retain product residue and can be dangerous.

Special protective Equipment for firefighters: In the event of fire and/or explosion do not breathe fumes. Wear self-contained breathing apparatus and protective suit. No unprotected exposed skin areas.

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## **6. Accidental release measures**

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

Immediately evacuate personnel to safe areas. Avoid breathing vapors. Remove all sources of ignition. Vapors may be heavier than air and can cause suffocation by reducing oxygen available for breathing. Ensure adequate ventilation.

### **6.2. Environmental precautions**

Do not allow spills to enter drains or waterways.

Prevent further discharge, if it can be done safely.

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**

Contain spillage and then collect with non-combustible absorbent material (e.g. sand, earth, vermiculite) and place in container for disposal according to local and national regulations

## **7. Handling and storage**

### **7.1. Precautions for safe handling**

Handle with care. For industrial use only. Keep out of reach of children. Do not get in eyes, on skin or on clothing. Do not use in areas without adequate ventilation. Do not breathe vapors or spray mist. If ventilation is not sufficient, wear proper respiratory equipment. Advice on protection against fire and explosion:

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

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

Contents are under pressure and some components may burn. Do not store or use near ignition sources, do not expose to open flame or temperatures above 120°F.

Incompatible materials: Finely divided metals. Can react violently if in contact with alkali or alkaline earth metals such as sodium, potassium or barium.

Read label precautions; do not remove or deface label. Keep containers tightly closed in a dry, cool and well-ventilated area, or not store near ignition sources. Do not store at temperatures above 120°F. Keep out of direct sunlight. See section 2 for further details. - [Storage]:

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

No data available.

## 8. Exposure controls and personal protection

### 8.1. Control parameters

#### Exposure

CAS No.	Ingredient	Source	Value
0000115-10-6	Dimethyl ether	OSHA	No Established Limit
		ACGIH	TWA: 1000 ppm
		NIOSH	No Established Limit
		Supplier	No Established Limit
0000811-97-2	1,1,1,2-Tetrafluoroethane (HFC-134a)	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

#### Carcinogen Data

CAS No.	Ingredient	Source	Value
0000115-10-6	Dimethyl ether	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0000811-97-2	1,1,1,2-Tetrafluoroethane (HFC-134a)	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; 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

Wear safety glasses, with side-shields, chemical splash goggles, and/or full-face shield where there is potential for eye contact. An eyewash fountain should be located in areas where the product is used.

#### Skin

Wear overalls to keep skin contact to a minimum. Avoid skin contact. Use chemically resistant gloves.

#### 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** Safety showers and eye wash stations should be provided in areas where this product is used. 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]:

## 9. Physical and chemical properties

<b>Appearance</b>	Clear Colorless Liquid, under pressure
<b>Odor</b>	slight sweet ether-like
<b>Odor threshold</b>	Not Measured
<b>pH</b>	NA
<b>Melting point / freezing point</b>	NA
<b>Initial boiling point and boiling range</b>	NA
<b>Flash Point</b>	NA
<b>Evaporation rate (Ether = 1)</b>	NA
<b>Flammability (solid, gas)</b>	NA
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit: NA</b> <b>Upper Explosive Limit: NA</b>
<b>Vapor pressure (Pa)</b>	69 PSIG @70 F
<b>Vapor Density</b>	2.6 (AIR=1)
<b>Specific Gravity</b>	NA
<b>Solubility in Water</b>	Insoluble
<b>Partition coefficient n-octanol/water (Log Kow)</b>	Not Measured
<b>Auto-ignition temperature</b>	NA
<b>Decomposition temperature</b>	NA
<b>Viscosity (cSt)</b>	NA
<b>VOC %</b>	NA
<b>Form</b>	Aerosol, in cans

### 9.2. Other information

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

No data available.

#### 10.4. Conditions to avoid

Do not expose to heat or store at temperature above 120°F. Avoid all ignition sources.

#### 10.5. Incompatible materials

Finely divided metals. Can react violently if in contact with alkali or alkaline earth metals such as sodium, potassium or barium.

#### 10.6. Hazardous decomposition products

Hydrogen fluoride, hydrogen chloride, carbon monoxide carbon dioxide and chlorine.

## 11. Toxicological information

### Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr	Inhalation Gas LD50, ppm
Dimethyl ether - (115-10-6)	No data available	No data available	308.00, Rat - Category: NA	No data available	No data available
1,1,1,2-Tetrafluoroethane (HFC-134a) - (811-97-2)	No data available	No data available	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)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
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
Dimethyl ether - (115-10-6)	4,000.00, Poecilia reticulata	4,000.00, Daphnia magna	Not Available
1,1,1,2-Tetrafluoroethane (HFC-134a) - (811-97-2)	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

Do not puncture or incinerate cans. Empty fully and relieve pressure. Empty containers can be recycled. Observe all Federal, State, and Local Environmental regulations.

## 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
<b>14.1. UN number</b>	UN1950	UN1950	UN1950
<b>14.2. UN proper shipping name</b>	Aerosols	Aerosols	Aerosols non-flammable Packing Instruction: Y203 (Passenger Aircraft)
<b>14.3. Transport hazard class(es)</b>	<b>DOT Hazard Class:</b> 2.2 <b>DOT Label:</b> "Limited Quantity" marking	<b>IMDG:</b> 2	<b>Air Class:</b> 2
<b>14.4. Packing group</b>	Not Applicable	Not Applicable	Not Applicable
<b>14.5. Environmental hazards</b>			



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.

**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:

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

R12 Extremely flammable.

**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, 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.

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