

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : RT640A Defender Coil Coating Aerosol

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

1.3. Details of the supplier of the safety data sheet

Refrigeration Technologies
1111 N. Armando St.
Anaheim, CA 92806 - USA
T 1-800-869-1407
www.refrigtech.com

1.4. Emergency telephone number

Emergency number : 1-800-255-3924 ChemTel; International Calls 1-813-248-0585

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

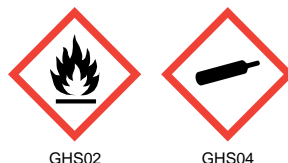
GHS-US classification

Flam. Liq. 2 H225

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Danger

Hazard statements (GHS-US) :
H225 - Highly flammable liquid and vapour
H241 - Heating may cause a fire or explosion
H280 - Contains gas under pressure; may explode if heated
H332 - Harmful if inhaled
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H336 - May cause drowsiness or dizziness

Precautionary statements (GHS-US) :
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical/ventilating/lighting/... equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P370+P378 - In case of fire: Use ... for extinction
P403+P235 - Store in a well-ventilated place. Keep cool
P501 - Dispose of contents/container to ...

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

Full text of H-phrases: see section 16

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3.2. Mixture

Name	Product identifier	%	GHS-US classification
acetone	(CAS No)67-64-1	1 - 20	Flam. Liq. 2, H225
n-butyl acetate	(CAS No)123-86-4	1 - 20	Flam. Liq. 3, H226 Aquatic Acute 3, H402
Petroleum gases, liquefied, sweetened	(CAS No)68476-86-8	1 - 20	Not classified

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.
- First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

- Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Highly flammable liquid and vapour.
- Explosion hazard : May form flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.
- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No naked lights. No smoking. Use only non-sparking tools.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/... equipment.
- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep in fireproof place. Keep container tightly closed.
- Incompatible products : Strong bases. Strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.
- Storage temperature : ≤ 25 (5 - 40) °C
- Storage area : Keep container in a well-ventilated place. Keep container tightly closed. Store away from heat. Store in a cool area.
- Special rules on packaging : Keep only in original container.
- Packaging materials : Do not store in corrodable metal.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

acetone (67-64-1)		
USA ACGIH	ACGIH TWA (ppm)	500 ppm
USA ACGIH	ACGIH STEL (ppm)	500 ppm

n-butyl acetate (123-86-4)		
USA ACGIH	ACGIH TWA (ppm)	150 ppm
USA ACGIH	ACGIH STEL (ppm)	150 ppm

8.2. Exposure controls

- Personal protective equipment : Avoid all unnecessary exposure.
- Hand protection : Wear protective gloves.
- Eye protection : Chemical goggles or safety glasses.
- Respiratory protection : Wear appropriate mask.
- Other information : Do not eat, drink or smoke during use.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid under pressure.
Colour	: Colorless.
Odour	: Characteristic odour.
Odour threshold	: No data available
pH	: None
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: >= °C
Freezing point	: < 0 °C Liquid concentrate
Boiling point	: >= 150 °C Liquid concentrate
Flash point	: >= 31 °C 88 F
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: Heavier than air
Relative density	: No data available
Density	: >= 0.9 g/ml
Solubility	: Insoluble in water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content	: <= 600 g/l
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SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established. Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Carbon monoxide. Hydrogen Fluoride. fume. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
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acetone (67-64-1)

LD50 oral rat	5800 mg/kg (Rat; Experimental value,Rat; Experimental value)
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acetone (67-64-1)	
LD50 dermal rabbit	20000 mg/kg (Rabbit; Experimental value,Rabbit; Experimental value)
LC50 inhalation rat (mg/l)	71 mg/l/4h (76 mg/l/4h; Rat; Rat; Experimental value; Experimental value,76 mg/l/4h; Rat; Rat; Experimental value; Experimental value)
LC50 inhalation rat (ppm)	30000 ppm/4h (Rat; Experimental value,Rat; Experimental value)

n-butyl acetate (123-86-4)	
LD50 oral rat	10770 mg/kg (12789 mg/kg; 10760 mg/kg bodyweight; Rat; Rat; Rat; Experimental value; Experimental value,12789 mg/kg; 10760 mg/kg bodyweight; Rat; Rat; Rat; Experimental value; Experimental value)
LD50 dermal rabbit	> 17600 mg/kg (>14112 mg/kg bodyweight; Rabbit; Rabbit; Experimental value,>14112 mg/kg bodyweight; Rabbit; Rabbit; Experimental value)
LC50 inhalation rat (mg/l)	> 21.1 mg/l/4h (0.74 mg/l/4h; Rat; Rat)

Skin corrosion/irritation	: Not classified pH: None
Serious eye damage/irritation	: Not classified pH: None
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

RT640A Defender Coil Coating Aerosol	
LC50 fishes 1	>= 5540 mg/l Trout

acetone (67-64-1)	
LC50 fishes 1	6210 mg/l (96 h; Pimephales promelas; Nominal concentration)
EC50 Daphnia 1	8800 mg/l (48 h; Daphnia pulex)
LC50 fish 2	5540 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
TLM fish 1	13000 ppm (96 h; Gambusia affinis; Turbulent water)
TLM fish 2	> 1000 ppm (96 h; Pisces)
Threshold limit other aquatic organisms 1	3000 mg/l (Plankton)
Threshold limit other aquatic organisms 2	28 mg/l (Protozoa)
Threshold limit algae 1	7500 mg/l (Scenedesmus quadricauda; pH = 7)
Threshold limit algae 2	3400 mg/l (48 h; Chlorella sp.)

n-butyl acetate (123-86-4)	
LC50 fishes 1	18 mg/l (96 h; Pimephales promelas; Lethal)
LC50 other aquatic organisms 1	10 - 100 mg/l (96 h)
EC50 Daphnia 1	10 - 100 mg/l (48 h; Daphnia magna; Nominal concentration)
EC50 other aquatic organisms 1	320 mg/l (96 h; Algae)
LC50 fish 2	62 mg/l (96 h; Brachydanio rerio)
EC50 Daphnia 2	24 - 205 mg/l (24 h; Daphnia magna)
TLM fish 1	10 - 100,96 h; Pisces
Threshold limit other aquatic organisms 1	10 - 100,96 h
Threshold limit algae 1	21 mg/l (168 h; Scenedesmus quadricauda; Growth rate)
Threshold limit algae 2	280 mg/l (192 h; Microcystis aeruginosa; Growth rate)

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12.2. Persistence and degradability

RT640A Defender Coil Coating Aerosol	
Persistence and degradability	Not established.
acetone (67-64-1)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	1.43 g O ₂ /g substance
Chemical oxygen demand (COD)	1.92 g O ₂ /g substance
ThOD	2.20 g O ₂ /g substance
BOD (% of ThOD)	(20 day(s)) 0.872
n-butyl acetate (123-86-4)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.
Biochemical oxygen demand (BOD)	0.15 - 0.5 g O ₂ /g substance
Chemical oxygen demand (COD)	2.32 g O ₂ /g substance
ThOD	2.21 g O ₂ /g substance

12.3. Bioaccumulative potential

RT640A Defender Coil Coating Aerosol	
Bioaccumulative potential	Not established.
acetone (67-64-1)	
BCF fish 1	0.69 (Pisces)
BCF other aquatic organisms 1	3
Log Pow	-0.24 (Test data)
Bioaccumulative potential	Not bioaccumulative.
n-butyl acetate (123-86-4)	
BCF fish 1	14 (Pisces)
BCF other aquatic organisms 1	15.3
Log Pow	2.3 (Experimental value; 25 °C, Experimental value; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

acetone (67-64-1)	
Surface tension	0.0237 N/m
n-butyl acetate (123-86-4)	
Surface tension	0.0145 N/m (25 °C)

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to ...

Additional information : Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials : Avoid release to the environment.

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SECTION 14: Transport information

In accordance with DOT

Transport document description	: UN1950 Aerosols (flammable, n.o.s. (engine starting fluid) (each not exceeding 1 L capacity)), 2.1
UN-No.(DOT)	: 1950
DOT NA no.	: UN1950
DOT Proper Shipping Name	: Aerosols flammable, n.o.s. (engine starting fluid) (each not exceeding 1 L capacity)
Department of Transportation (DOT) Hazard Classes	: 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115
Hazard labels (DOT)	: 2.1 - Flammable gas



DOT Special Provisions (49 CFR 172.102)	: N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 306
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 304
DOT Packaging Bulk (49 CFR 173.xxx)	: None
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: Forbidden
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 150 kg
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other	: 48 - Stow "away from" sources of heat, 87 - Stow "separated from" Class 1 (explosives) except Division 14, 126 - Segregation same as for Class 9, miscellaneous hazardous materials

Additional information

Other information	: Consumer Commodity ORM-D.
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ADR

Transport document description	:
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Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

acetone (67-64-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
RQ (Reportable quantity, section 304 of EPA's List of Lists) :	5000 lb
n-butyl acetate (123-86-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
RQ (Reportable quantity, section 304 of EPA's List of Lists) :	5000 lb

15.2. International regulations

CANADA

RT640A Defender Coil Coating Aerosol	
WHMIS Classification	Class B Division 2 - Flammable Liquid

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EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

15.2.2. National regulations

No additional information available

15.3. US State regulations

acetone (67-64-1)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

n-butyl acetate (123-86-4)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

Aquatic Acute 3	Hazardous to the aquatic environment — AcuteHazard, Category 3
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H402	Harmful to aquatic life

NFPA health hazard

: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard

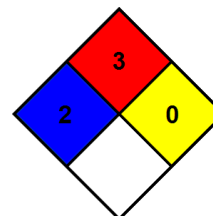
: 3 - Liquids and solids that can be ignited under almost all ambient conditions.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

NFPA specific hazard

: None



HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur
Flammability : 3 Serious Hazard
Physical : 0 Minimal Hazard
Personal Protection : A

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product