



SAFETY DATA SHEET

1. Identification

Product identifier: MALODOR AIR FRESHENER & DEODORIZER

Other means of identification

SDS number: RE1000012077

Recommended restrictions

Product use: Air Freshener

Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name: CLAIRE MANUFACTURING COMPANY
Address: 1000 Integram Dr
Pacific, MO 63069
Telephone: 1-630-543-7600
Fax:

Emergency telephone number: 1-866-836-8855

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable aerosol Category 1

Health Hazards

Serious Eye Damage/Eye Irritation Category 2A

Specific Target Organ Toxicity -
Single Exposure Category 3¹.

Target Organs

1. Narcotic effect.

Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement: Extremely flammable aerosol.
Causes serious eye irritation.
May cause drowsiness or dizziness.

Precautionary Statements



- Prevention:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area.
- Response:** IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Call a POISON CENTER/doctor if you feel unwell.
- Storage:** Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place. Keep container tightly closed. Store locked up.
- Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
- Hazard(s) not otherwise classified (HNOC):** None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
2-Propanone	67-64-1	50 - <100%
Propane	74-98-6	10 - <20%
Butane	106-97-8	10 - <20%
Oils, orange, sweet	8008-57-9	0.1 - <1%
1,2-Benzenedicarboxylic acid, 1,2-diethyl ester	84-66-2	0.1 - <1%
Acetic acid, pentyl ester	628-63-7	0.1 - <1%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

- Ingestion:** Rinse mouth thoroughly.
- Inhalation:** Move to fresh air.
- Skin Contact:** Remove contaminated clothing and wash the skin thoroughly with soap and water after work.
- Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

Most important symptoms/effects, acute and delayed

- Symptoms:** No data available.
- Hazards:** No data available.

Indication of immediate medical attention and special treatment needed

- Treatment:** No data available.



5. Fire-fighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: Vapors may travel considerable distance to a source of ignition and flash back.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind.

Methods and material for containment and cleaning up: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.

Notification Procedures: Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling: Avoid contact with eyes. Wash hands thoroughly after handling. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required.

Conditions for safe storage, including any incompatibilities: Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Store locked up. Aerosol Level 3

8. Exposure controls/personal protection



Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
2-Propanone	STEL	1,000 ppm 2,400 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	PEL	1,000 ppm 2,400 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	250 ppm	US. ACGIH Threshold Limit Values (03 2015)
	TWA	750 ppm 1,800 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	500 ppm	US. ACGIH Threshold Limit Values (03 2015)
Propane	REL	250 ppm 590 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	REL	1,000 ppm 1,800 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	1,000 ppm 1,800 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Butane	TWA	1,000 ppm 1,800 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	REL	800 ppm 1,900 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	STEL	1,000 ppm	US. ACGIH Threshold Limit Values (03 2018)
1,2-Benzenedicarboxylic acid, 1,2-diethyl ester	TWA	800 ppm 1,900 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	REL	5 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	5 mg/m3	US. ACGIH Threshold Limit Values (2008)
Acetic acid, pentyl ester	TWA	5 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	REL	100 ppm 525 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	50 ppm	US. ACGIH Threshold Limit Values (2008)
	STEL	100 ppm	US. ACGIH Threshold Limit Values (2008)
	PEL	100 ppm 525 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-	TWA	100 ppm 525 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	20 ppm	US. ACGIH Threshold Limit Values (2008)
Acetic acid, phenylmethyl ester	TWA	10 ppm	US. ACGIH Threshold Limit Values (2008)
	TWA	10 ppm	US. ACGIH Threshold Limit Values (2008)
Benzene, 1,1'-oxybis- - Vapor.	STEL	2 ppm	US. ACGIH Threshold Limit Values (03 2018)
	TWA	1 ppm	US. ACGIH Threshold Limit Values (03 2018)
	PEL	1 ppm 7 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	REL	1 ppm 7 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA	1 ppm 7 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
2,6-Octadienal, 3,7-dimethyl- - Inhalable fraction and vapor.	TWA	5 ppm	US. ACGIH Threshold Limit Values (01 2010)

Biological Limit Values

Chemical Identity	Exposure Limit Values	Source
2-Propanone (acetone: Sampling time: End of shift.)	25 mg/l (Urine)	ACGIH BEL (03 2015)

Appropriate Engineering Controls

No data available.

Individual protection measures, such as personal protective equipment



General information:	Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Eye/face protection:	Wear safety glasses with side shields (or goggles).
Skin Protection	
Hand Protection:	No data available.
Other:	No data available.
Respiratory Protection:	In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.
Hygiene measures:	Avoid contact with eyes. Observe good industrial hygiene practices. When using do not smoke. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	Spray Aerosol
Color:	No data available.
Odor:	No data available.
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	-104.44 °C
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	4,136.8544 - 4,826.3301 hPa (20 °C)
Vapor density:	No data available.
Density:	No data available.
Relative density:	No data available.
Solubility(ies)	
Solubility in water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.



Decomposition temperature: No data available.
Viscosity: No data available.

10. Stability and reactivity

Reactivity: No data available.
Chemical Stability: Material is stable under normal conditions.
Possibility of hazardous reactions: No data available.
Conditions to avoid: Avoid heat or contamination.
Incompatible Materials: No data available.
Hazardous Decomposition Products: No data available.

11. Toxicological information

Information on likely routes of exposure

Inhalation: No data available.
Skin Contact: No data available.
Eye contact: No data available.
Ingestion: No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.
Skin Contact: No data available.
Eye contact: No data available.
Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

2-Propanone LD 50 (Rat): 5,800 mg/kg

Oils, orange, sweet LD 50: > 2,000 mg/kg

1,2-Benzenedicarboxylic acid, 1,2-diethyl ester LD 50 (Mouse): 2,500 mg/kg

Dermal

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

2-Propanone LD 50 (Rabbit): > 7,426 mg/kg



Oils, orange, sweet LD 50: > 2,000 mg/kg

1,2-Benzenedicarboxylic acid, 1,2-diethyl ester LD 50: > 2,000 mg/kg

Inhalation

Product: Not classified for acute toxicity based on available data.

Specified substance(s):
2-Propanone LC 50 (Rat): 50.1 mg/l
LC 50: > 5 mg/l

Propane LC 50: > 100 mg/l
LC 50: > 100 mg/l

Butane LC 50: > 100 mg/l
LC 50: > 100 mg/l

Oils, orange, sweet LC 50: > 5 mg/l
LC 50: > 20 mg/l

1,2-Benzenedicarboxylic acid, 1,2-diethyl ester LC 50: > 20 mg/l
LC 50: > 5 mg/l

Repeated dose toxicity

Product: No data available.

Specified substance(s):
2-Propanone NOAEL (Rat(Male), Oral, 13 Weeks): 10,000 ppm(m) Oral Experimental result, Key study
Propane NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study
LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study
Butane LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study
NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study
1,2-Benzenedicarboxylic acid, 1,2-diethyl ester NOAEL (Rat(Female, Male), Oral, 6 - 16 Weeks): 150 mg/kg Oral Experimental result, Key study

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):
2-Propanone in vivo (Rabbit): Not irritant Experimental result, Supporting study
1,2-Benzenedicarboxylic acid, 1,2-diethyl ester in vivo (Rabbit): Not irritant Experimental result, Key study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):
2-Propanone Irritating.
Rabbit, 24 hrs: Minimum grade of severe eye irritant

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):
2-Propanone Skin sensitization:, in vivo (Guinea pig): Non sensitising



1,2-Benzenedicarboxylic acid, 1,2-diethyl ester Skin sensitization:, in vivo (Guinea pig): Non sensitising

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specified substance(s):

2-Propanone Inhalation - vapor: Narcotic effect. - Category 3 with narcotic effects.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Target Organs

Specific Target Organ Toxicity - Single Exposure: Narcotic effect.

Aspiration Hazard

Product: No data available.

Specified substance(s):

Oils, orange, sweet May be fatal if swallowed and enters airways.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

2-Propanone LC 50 (Oncorhynchus mykiss, 96 h): 5,540 mg/l Experimental result, Key study

Propane LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study



Butane	LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
Oils, orange, sweet	LC 50 (96 h): < 1 mg/l
1,2-Benzenedicarboxylic acid, 1,2-diethyl ester	NOAEL (Oncorhynchus mykiss, 96 h): 1.9 mg/l Experimental result, Key study LC 50 (Oncorhynchus mykiss, 96 h): 12 mg/l Experimental result, Key study
Acetic acid, pentyl ester	LC 50 (Western mosquitofish (Gambusia affinis), 96 h): 65 mg/l Mortality

Aquatic Invertebrates

Product:	No data available.
Specified substance(s): 2-Propanone	LC 50 (Daphnia pulex, 48 h): 8,800 mg/l Experimental result, Key study
Butane	LC 50 (Daphnia sp., 48 h): 69.43 mg/l QSAR QSAR, Key study
1,2-Benzenedicarboxylic acid, 1,2-diethyl ester	NOAEL (Daphnia magna, 48 h): 43 mg/l Experimental result, Key study LC 50 (Daphnia magna, 48 h): 90 mg/l Experimental result, Key study
Acetic acid, pentyl ester	LC 50 (Water flea (Daphnia magna), 24 h): 210 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish

Product:	No data available.
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Aquatic Invertebrates

Product:	No data available.
Specified substance(s): 2-Propanone	LOAEL (Daphnia magna): 2,212 mg/l Experimental result, Key study NOAEL (Daphnia magna): 2,212 mg/l Experimental result, Key study
1,2-Benzenedicarboxylic acid, 1,2-diethyl ester	NOAEL (Daphnia magna): 25 mg/l Experimental result, Key study

Toxicity to Aquatic Plants

Product:	No data available.
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Persistence and Degradability

Biodegradation

Product:	No data available.
Specified substance(s): 2-Propanone	90.9 % (28 d) Detected in water. Experimental result, Key study
Propane	100 % (385.5 h) Detected in water. Experimental result, Key study 50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study
Butane	100 % (385.5 h) Detected in water. Experimental result, Key study
Oils, orange, sweet	< 70 % (10 d, Assessment)
1,2-Benzenedicarboxylic acid, 1,2-diethyl ester	94.6 % (28 d) Detected in water. Experimental result, Key study

BOD/COD Ratio

Product:	No data available.
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Bioaccumulative potential

Bioconcentration Factor (BCF)

Product:	No data available.
Specified substance(s):	
2-Propanone	Haddock, adult, Bioconcentration Factor (BCF): 0.69 Aquatic sediment Experimental result, Not specified
1,2-Benzenedicarboxylic acid, 1,2-diethyl ester	Bluegill (<i>Lepomis macrochirus</i>), Bioconcentration Factor (BCF): 117 (Flow through)

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

2-Propanone	No data available.
Propane	No data available.
Butane	No data available.
Oils, orange, sweet	No data available.
1,2-Benzenedicarboxylic acid, 1,2-diethyl ester	No data available.
Acetic acid, pentyl ester	No data available.

Other adverse effects: No data available.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Contaminated Packaging: No data available.

14. Transport information

DOT

UN Number:	UN 1950
UN Proper Shipping Name:	Aerosols, flammable
Transport Hazard Class(es)	
Class:	2.1
Label(s):	–
Packing Group:	II
Marine Pollutant:	No
Environmental Hazards:	No
Marine Pollutant	No
Special precautions for user:	Not regulated.

IMDG

UN Number:	UN 1950
UN Proper Shipping Name:	Aerosols, flammable
Transport Hazard Class(es)	
Class:	2
Label(s):	–
EmS No.:	
Packing Group:	–
Environmental Hazards:	No
Marine Pollutant	No
Special precautions for user:	Not regulated.



IATA

UN Number:	UN 1950
Proper Shipping Name:	Aerosols, flammable
Transport Hazard Class(es):	
Class:	2.1
Label(s):	–
Packing Group:	–
Environmental Hazards:	No
Marine Pollutant	No
Special precautions for user:	Not regulated.

15. Regulatory information

US Federal Regulations

Restrictions on use: Not known.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
 None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

<u>Chemical Identity</u>	<u>Reportable quantity</u>
2-Propanone	lbs. 5000
Propane	lbs. 100
Butane	lbs. 100
1,2-Benzenedicarboxylic acid, 1,2-diethyl ester	lbs. 1000
Acetic acid, pentyl ester	lbs. 5000
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-	lbs. 100

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

- Fire Hazard
- Immediate (Acute) Health Hazards
- Flammable aerosol
- Serious Eye Damage/Eye Irritation
- Specific Target Organ Toxicity - Single Exposure

SARA 302 Extremely Hazardous Substance

<u>Chemical Identity</u>	<u>Reportable quantity</u>	<u>Threshold Planning Quantity</u>
2-Propanone		

SARA 304 Emergency Release Notification

<u>Chemical Identity</u>	<u>Reportable quantity</u>
2-Propanone	lbs. 5000
Propane	lbs. 100
Butane	lbs. 100
1,2-Benzenedicarboxylic acid, 1,2-diethyl ester	lbs. 1000
Acetic acid, pentyl ester	lbs. 5000
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-	lbs. 100



SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
2-Propanone	10000 lbs
Propane	10000 lbs
Butane	10000 lbs
Oils, orange, sweet	10000 lbs
1,2-Benzenedicarboxylic acid, 1,2-diethyl ester	10000 lbs
Acetic acid, pentyl ester	10000 lbs
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-	10000 lbs
Acetic acid, phenylmethyl ester	10000 lbs
Benzene, 1,1'-oxybis-	10000 lbs
2,6-Octadienal, 3,7-dimethyl-	10000 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Methanone, diphenyl- Carcinogenic. 07 2012

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

2-Propanone
Propane
Butane

US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

2-Propanone
Propane
Butane

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable



Inventory Status:

Australia AICS:	Not in compliance with the inventory.
EINECS, ELINCS or NLP:	Not in compliance with the inventory.
Japan (ENCS) List:	Not in compliance with the inventory.
China Inv. Existing Chemical Substances:	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	Not in compliance with the inventory.
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	Not in compliance with the inventory.
New Zealand Inventory of Chemicals:	Not in compliance with the inventory.
Japan ISHL Listing:	Not in compliance with the inventory.
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.
Mexico INSQ:	Not in compliance with the inventory.
Ontario Inventory:	Not in compliance with the inventory.
Taiwan Chemical Substance Inventory:	Not in compliance with the inventory.
Canada DSL Inventory List:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory

16. Other information, including date of preparation or last revision

Issue Date:	10/03/2019
Revision Information:	No data available.
Version #:	1.0
Further Information:	No data available.
Disclaimer:	This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.