Safety Data Sheet

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name

- **1,2,4-Trimethylbenzene (60 ppb),1,3,5-Trimethylbenzene (60 ppb), Methanol (80 ppb), Acetone (80 ppb), Benzene (80 ppb), 2-Butanone (80 ppb), Chloroform (80 ppb),1,1-Dichloroethylene (80 ppb), Trans-1,2-Dichloroethylene (80 ppb), Ethanol (80 ppb), Freon 11 (80 ppb), Freon 12 (80 ppb), Freon 113 (80 ppb), Freon 114 (80 ppb), 4-Methyl-2-pentanone (80 ppb), Methylene Chloride (80 ppb), Isopropyl Alcohol (80 ppb), 1,1,1-Trichloroethane (80 ppb), O-Xylene (80 ppb), Toluene (80 ppb), Trichloroethylene (80 ppb), Vinyl Chloride (80 ppb), M-Xylene (80 ppb), Nitrogen (Balance) [23 Components in Nitrogen]**

Product Code

- MSDS No. 90054

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

Relevant identified use(s)

- Laboratory Instrument Calibration

1.3 Details of the supplier of the safety data sheet

Manufacturer

- Air Liquide

2700 Post Oak Blvd.
Houston, TX 77056
United States
www.us.airliquide.com

Telephone (Technical)

- 713-896-2896

Telephone (Technical)

- 800-819-1704

1.4 Emergency telephone number

Manufacturer

- 800-424-9300

Manufacturer

- +1 703-527-3887

Section 2: Hazards Identification

EU/EEC

According to EU Directive 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]
According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP

- Compressed Gas - H280

DSD/DPD

- Not classified - Classification criteria not met

2.2 Label Elements

CLP

WARNING

Hazard statements
- H280 - Contains gas under pressure; may explode if heated

Precautionary statements

Storage/Disposal
- P403 - Store in a well-ventilated place.

DSD/DPD

Risk phrases
- Not required

Safety phrases
- Not required

2.3 Other Hazards

CLP
- This material is a simple asphyxiant. May displace or reduce oxygen available for breathing especially in confined spaces.
  According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

DSD/DPD
- This material is a simple asphyxiant. May displace or reduce oxygen available for breathing especially in confined spaces.
  This preparation is not considered dangerous according to European Directive 1999/45/EC.

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012
- Compressed Gas - H280
  Simple Asphyxiant

2.2 Label elements

OSHA HCS 2012

WARNING

Hazard statements
- Contains gas under pressure; may explode if heated - H280
  May displace oxygen and cause rapid suffocation.

Precautionary statements

Storage/Disposal
- Store in a well-ventilated place. - P403

2.3 Other hazards

OSHA HCS 2012
- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to WHMIS

2.1 Classification of the substance or mixture

WHMIS
- Compressed Gas - A

2.2 Label elements

WHMIS

- Compressed Gas - A

2.3 Other hazards

WHMIS

- This material is a simple asphyxiant. May displace or reduce oxygen available for breathing especially in confined spaces.
  In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

3.1 Substances

- Material does not meet the criteria of a substance in accordance with Regulation (EC) No 1272/2008.

3.2 Mixtures

Hazardous Components					
Chemical Name	**Identifiers**	**%(weight)**	**LD50/LC50**	**Classifications According to Regulation/Directive**	**Comments**
1,2,4-Trimethylbenzene	**CAS:**95-63-6 **EC Number:**202-436-9	na	Ingestion/Oral-Rat LD50 • 5 g/kg Inhalation-Rat LC50 • 18000 mg/m³ 4 Hour (s)	**EU DSD/DPD:** Annex I - R10 Xn; R20 Xi; R36/37/38 N; R51-53 **EU CLP:** Annex VI - Flam. Liq. 3, H226; Acute Tox. 4, H332; Eye Irrit. 2, H319; STOT SE 3, H335; Skin Irrit. 2, H315; Aquatic Chronic 2; H411 **OSHA HCS 2012:** Flam. Liq. 3; Eye Irrit. 2, Skin Irrit. 2, STOT SE 3: Resp Irrit	60 ppb
1,3,5-Trimethylbenzene	**CAS:**108-67-8 **EC Number:**203-604-4	na	Inhalation-Rat LC50 • 24000 mg/m³ 4 Hour (s) Ingestion/Oral-Rat LD50 • 5000 mg/kg	**EU DSD/DPD:** Annex I - R10 Xi; R37 N; R51-53 **EU CLP:** Annex VI - Flam. Liq. 3, H226; STOT SE 3, H335; Aquatic Chronic 2, H411 **OSHA HCS 2012:** Flam. Liquid 3; Eye Irrit. 2, Skin Irrit. 2, STOT SE 3: Resp. Irrit.	60 ppb
2-Butanone	**CAS:**78-93-3 **EC Number:**201-159-0	na	Ingestion/Oral-Rat LD50 • 2737 mg/kg Inhalation-Rat LC50 • 23500 mg/m³ 8 Hour (s)	**EU DSD/DPD:** Annex I - F; R11 Xi; R36 R66 R67 **EU CLP:** Annex VI - Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336 **OSHA HCS 2012:** Flam. Liq. 2; Eye Irrit. 2, Skin Irrit. 2; STOT SE 3; Resp. Irrit. & Narc	80 ppb
4-Methyl-2-pentanone	**CAS:**108-10-1 **EC Number:**203-550-1	na	Ingestion/Oral-Rat LD50 • 4600 mg/kg	**EU DSD/DPD:** Annex I - F; R11 Xn; R20 Xi; R36/37 R66 **EU CLP:** Annex VI - Flam. Liq. 2, H225; Acute Tox. 4, H332; Eye Irrit. 2, H319; STOT SE 3, H335 **OSHA HCS 2012:** Flam. Liq. 2; Eye Irrit. 2; STOT SE 3: Resp. Irrit. & Narc.	80 ppb

Acetone	**CAS:**67-64-1 **EC Number:**200-662-2	na	Ingestion/Oral-Rat LD50 • 5800 mg/kg Inhalation-Rat LC50 • 50100 mg/m³ 8 Hour (s)	**EU DSD/DPD:** Annex I - F; R11 Xi; R36 R66 R67 **EU CLP:** Annex VI - Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336 **OSHA HCS 2012:** Flam. Liq. 2; Eye Irrit. 2; Repr. 2; STOT SE 3: Narc.	80 ppb
Benzene	**CAS:**71-43-2 **EC Number:**200-753-7	na	Ingestion/Oral-Rat LD50 • 930 mg/kg Inhalation-Rat LC50 • 10000 ppm 7 Hour(s)	**EU DSD/DPD:** Annex I - F; R11 Xi; R36/38 Carc.Cat.1; R45 Muta.Cat.2; R46 T; R48/23/24/25 Xn; R65 **EU CLP:** Annex VI - Flam. Liq. 2 H225; Carc. 1A, H350; Muta. 1B, H340; STOT RE 1, H372; Asp. Tox. 1, H304; Eye Irrit. 2, H319; Skin Irrit. 2, H315 **OSHA HCS 2012:** Flam Liq. 2; Eye Irrit. 2A, Skin Irrit. 2, Muta. 1B; Carc. 1A	80 ppb
Chloroform	**CAS:**67-66-3 **EC Number:**200-663-8	na	Ingestion/Oral-Rat LD50 • 695 mg/kg Inhalation-Rat LC50 • 47702 mg/m³ 4 Hour (s)	**EU DSD/DPD:** Annex I - F; R11 Xi; R36 R67 **EU CLP:** Annex VI - Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336 **OSHA HCS 2012:** Flam. Liq. 2; Eye Irrit. 2; STOT SE 3: Narc.; Carc. 2	80 ppb
Methylene Chloride	**CAS:**75-09-2 **EC Number:**200-838-9	na	Ingestion/Oral-Rat LD50 • 1600 mg/kg Inhalation-Rat LC50 • 76000 mg/m³ 4 Hour (s)	**EU DSD/DPD:** Annex I - Carc.Cat.3; R40 **EU CLP:** Annex VI - Carc. 2; H351 **OSHA HCS 2012:** Eye Irrit. 2; Skin Irrit. 2; Carc. 2; Repr. 2; STOT SE 3: Resp. Irrit. & Narc; Acute Tox 4 (Oral)	80 ppb
1,1,1-Trichloroethane	**CAS:**71-55-6 **EC Number:**200-756-3	na	Ingestion/Oral-Rat LD50 • 9600 mg/kg Inhalation-Rat LC50 • 17000 ppm 4 Hour(s)	**EU DSD/DPD:** Annex I - Xn; R20 N; R59 **EU CLP:** Annex VI - Acute Tox. 4, H332; Ozone; EUH059 **OSHA HCS 2012:** Eye Irrit. 2; STOT SE 3: Resp Irrit. & Narc.	80 ppb
Freon 113	**CAS:**76-13-1 **EINECS:**200-936-1	na	Ingestion/Oral-Rat LD50 • 43 g/kg Inhalation-Rat LC50 • 38500 ppm 4 Hour(s)	**EU DSD/DPD:** Self Classified - Xi; R36 **EU CLP:** Self Classified - Press. Gas - Comp., H280; Eye Irrit. 2, H319 **OSHA HCS 2012:** Press. Gas - Comp, Eye Irrit. 2	80 ppb
Freon 114	**CAS:**76-14-2 **EINECS:**200-937-7	na	Inhalation-Rat LC50 • 72 pph 30 Minute(s)	**EU DSD/DPD:** Self Classified - Xi; R37 **EU CLP:** Self Classified - STOT SE 3: Resp. Irrit. H335 & Narc., H336 **OSHA HCS 2012:** STOT SE 3: Resp. Irrit. & Narc	80 ppb
Ethanol	**CAS:**64-17-5 **EC Number:**200-578-6	na	Ingestion/Oral-Rat LD50 • 7060 mg/kg Inhalation-Rat LC50 • 5900 mg/m³ 6 Hour(s)	**EU DSD/DPD:** Annex I - F; R11 **EU CLP:** Annex VI - Flam. Liq. 2; H225 **OSHA HCS 2012:** Flam. Liq. 2; Eye Irrit. 2	80 ppb
1,1-Dichloroethylene	**CAS:**75-35-4 **EC Number:**200-864-0	na	Ingestion/Oral-Rat LD50 • 200 mg/kg Inhalation-Rat LC50 • 10000 ppm 4 Hour(s)	**EU DSD/DPD:** Annex I - F+; R12 Xn; R20 Carc. Cat. 3; R40 **EU CLP:** Annex VI - Flam. Liq. 1, H224; Carc. 2, H351; Acute Tox. 4, H332 **OSHA HCS 2012:** Flam. Liq. 1; Eye Irrit. 2; Skin Irrit. 2, Acute Tox 3 (Oral); Acute Tox 4 (Inh); Repr. 2; STOT SE 3: Narc. & Resp. Irrit.	80 ppb
Trans-1,2-Dichloroethylene	**CAS:**156-60-5 **EC Number:**205-860-2	na	NDA	**EU DSD/DPD:** Annex I: F; R11 Xn; R20 R52-53 **EU CLP:** Annex VI: Flam. Liq. 2; Acute Tox. 4; Aquatic Chronic 3; H225; H332; H412 **OSHA HCS 2012:** Flam. Liq. 2	80 ppb

Trichloroethylene	**CAS:**79-01-6 **EC Number:**201-167-4	na	Inhalation-Rat LC50 • 140700 mg/m³ 1 Hour (s) Ingestion/Oral-Rat LD50 • 4920 mg/kg	**EU DSD/DPD:** Annex I - Xi; R36/38 Carc. Cat. 2; R45 R52-53 R67 Muta. Cat. 3; R68 **EU CLP:** Annex VI - Carc. 1B, H350; Muta. 2, H341; Eye Irrit. 2, H319; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Chronic 3, H412 **OSHA HCS 2012:** Eye Irrit. 2; Skin Irrit. 2; Carc. 1B; STOT SE 3: Narc.; Muta. 2	80 ppb
Isopropyl alcohol	**CAS:**67-63-0 **EC Number:**200-661-7	na	Ingestion/Oral-Rat LD50 • 5045 mg/kg Inhalation-Rat LC50 • 16000 ppm 8 Hour(s)	**EU DSD/DPD:** Annex I - F; R11 Xi; R36 R67 **EU CLP:** Annex VI - Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336 **OSHA HCS 2012:** Flam. Liq. 2; Eye Irrit. 2; STOT SE 3: Resp. & Narc.	80 ppb
Freon 12	**CAS:**75-71-8 **EINECS:**200-893-9	na	NDA	**EU DSD/DPD:** Self Classified - Xn; R67 **EU CLP:** Self Classified - Press. Gas - Comp., H280; STOT SE 3, H336 **OSHA HCS 2012:** Press. Gas - Comp; STOT SE 3: Narc.	80 ppb
Freon 11	**CAS:**75-69-4 **EINECS:**200-892-3	na	Inhalation-Rat LC50 • 13 pph 15 Minute(s)	**EU DSD/DPD:** Self Classified - Xn; R67 **EU CLP:** Self Classified - STOT SE 3, H336 **OSHA HCS 2012:** STOT SE 3: Narc.	80 ppb
Methanol	**CAS:**67-56-1 **EC Number:**200-659-6	na	Inhalation-Rat LC50 • 64000 ppm 4 Hour(s) Ingestion/Oral-Rat LD50 • 5600 mg/kg	**EU DSD/DPD:** Annex I - F; R11 T; R23/24/25-39/23/24/25 **EU CLP:** Annex VI - Flam. Liq. 2, H225; Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; STOT SE 1, H370 **OSHA HCS 2012:** Flam. Liq. 2; Eye Irrit. 2, Skin Irrit. 2	80 ppb
m-Xylene	**CAS:**108-38-3 **EC Number:**203-576-3	na	Ingestion/Oral-Rat LD50 • 4988 mg/kg	**EU DSD/DPD:** Annex I - R10 Xn; R20/21 Xi; R38 **EU CLP:** Annex VI - Flam. Liq. 3, H226; Acute Tox. 4, H332; Acute Tox. 4, H312; Skin Irrit. 2, H315 **OSHA HCS 2012:** Flam. Liq. 3; Eye Irrit. 2, Skin Irrit. 2, STOT SE 3: Narc.	80 ppb
Nitrogen	**CAS:**7727-37-9 **EINECS:**231-783-9	na	NDA	**EU DSD/DPD:** Not Classified - Criteria not met **EU CLP:** Self Classified - Press. Gas - Comp., H280 **OSHA HCS 2012:** Press. Gas - Comp; Simple Asphyxiant	Balance
o-Xylene	**CAS:**95-47-6 **EC Number:**202-422-2	na	Ingestion/Oral-Rat LD50 • 3567 mg/kg	**EU DSD/DPD:** Annex I - R10 Xn; R20/21 Xi; R38 **EU CLP:** Annex VI - Flam. Liq. 3, H226; Acute Tox. 4, H332; Acute Tox. 4, H312; Skin Irrit. 2, H315 **OSHA HCS 2012:** Flam. Liq. 3; Eye Irrit. 2	80 ppb
Toluene	**CAS:**108-88-3 **EC Number:**203-625-9	na	Ingestion/Oral-Rat LD50 • 636 mg/kg Inhalation-Rat LC50 • 49 g/m³ 4 Hour(s)	**EU DSD/DPD:** Annex I - F; R11 Xi; R38 Xn; R48/20-65 Repr. Cat. 3; R63 R67 **EU CLP:** Annex VI - Flam. Liq. 2, H225; Repr. 2, H361d; Asp. Tox. 1, H304; STOT RE 2, H373; Skin Irrit. 2, H315; STOT SE 3, H336 **OSHA HCS 2012:** Flam. Liq. 2; Repr. 2; Acute Tox. 4 (Oral); STOT SE 3: Narc; Asp. Tox. 1	80 ppb
Vinyl Chloride	**CAS:**75-01-4 **EC Number:**200-831-0	na	Ingestion/Oral-Rat LD50 • 500 mg/kg Inhalation-Rat LC50 • 18 pph 15 Minute(s)	**EU DSD/DPD:** Annex I - F+; R12 Carc. Cat. 1; R45 **EU CLP:** Annex VI - Press. Gas, H280; Flam. Gas 1, H220; Carc. 1A; H350 **OSHA HCS 2012:** Press. Gas - Comp; Flam. Gas 1; Carc. 1A; Repr. 1B; Simple Asphyxiant; Acute Tox 4 (Oral)	80 ppb

See Section 16 for full text of H-statements and R-phrases.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

Skin
- Although exposure is unlikely, in case of contact immediately flush skin with running water. If skin irritation develops get medical advice/attention.

Eye
- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If irritation develops and persists, get medical attention.

Ingestion
- Ingestion is not considered a potential route of exposure.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician
- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. A potential health hazard associated with this gas is anoxia.

4.4 Other information

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. RESCUERS SHOULD NOT ATTEMPT TO RETRIEVE VICTIMS OF EXPOSURE TO GASES WITHOUT ADEQUATE PERSONAL PROTECTIVE EQUIPMENT. At a minimum, Self-Contained Breathing Apparatus must be worn. Victim(s) who experience any adverse effect after over-exposure to this gas mixture must be taken for medical attention. Rescuers should be taken for medical attention if necessary. Take a copy of the label and the MSDS to physician or other health professional with victim(s).

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media
- Use extinguishing agent suitable for type of surrounding fire.

Unsuitable Extinguishing Media
- None known.

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards
- Contains gas under pressure.
  Container may explode in a fire or if heated.
  Ruptured cylinders may rocket.

Hazardous Combustion Products
- Nitrogen Oxides.

5.3 Advice for firefighters

- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.
  Wear positive pressure self-contained breathing apparatus (SCBA).
  Move containers from fire area if you can do it without risk.
  FIRE: If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.
  FIRE INVOLVING TANKS: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.

FIRE INVOLVING TANKS: Cool containers with flooding quantities of water until well after fire is out.
FIRE INVOLVING TANKS: Do not direct water at source of leak or safety devices; icing may occur.
FIRE INVOLVING TANKS: Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
FIRE INVOLVING TANKS: ALWAYS stay away from tanks engulfed in fire.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions

- Avoid breathing gas. Ventilate the area before entry. In case of insufficient ventilation, wear suitable respiratory equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Emergency Procedures

- Evacuate area. Keep unauthorized personnel away. As an immediate precautionary measure, isolate spill or leak area for at least 100 meters (330 feet) in all directions. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area)

6.2 Environmental precautions

- No special environmental precautions necessary.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Stop leak if you can do it without risk.
Do not direct water at spill or source of leak.
Use water spray to reduce vapors; do not put water directly on leak, spill area or inside container.
If possible, turn leaking containers so that gas escapes rather than liquid.
Isolate area until gas has dispersed.
Ventilate the area.
Allow substance to evaporate.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

- Use only with adequate ventilation. Ventilate closed spaces before entering. Be aware of any signs of dizziness or fatigue, especially if work is done in a poorly ventilated area; exposures to fatal concentrations of this gas mixture could occur without any significant warning symptoms, due to olfactory fatigue or oxygen deficiency. Cylinders should be firmly secured to prevent falling or being knocked-over. Do not attempt to repair, adjust, or in any other way modify cylinders. If there is a malfunction or another type of operational problem, contact nearest distributor immediately. Empty containers retain product residue and can be hazardous. Do not cut, weld, puncture or incinerate container.

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Store in a cool, dry, well-ventilated place. Protect cylinders against physical damage. Cylinders should be firmly secured to prevent falling or being knocked-over.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines

- Currently there are no applicable exposure limits established for this material.

8.2 Exposure controls

Engineering Measures/Controls

- Good general ventilation 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.

Personal Protective Equipment

Pictograms

- 

Respiratory

- Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear safety glasses.

Skin/Body

- Wear leather gloves when handling cylinders.

Environmental Exposure Controls

- Follow best practice for site management and disposal of waste. Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

Key to abbreviations

MSHA = Mine Safety and Health Administration
NIOSH = National Institute of Occupational Safety and Health
OSHA = Occupational Safety and Health Administration

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Gas	Appearance/Description	Colorless compressed gas with no odor.
Color	Colorless	Odor	Odorless
Taste	Data lacking	Particulate Type	Not relevant
Particulate Size	Not relevant	Aerosol Type	Not relevant
Odor Threshold	Data lacking	Physical and Chemical Properties	Data lacking
General Properties			
Boiling Point	-196 C(-320.8 F) Nitrogen	Melting Point	-210 C(-346 F) Nitrogen
Decomposition Temperature	Data lacking	Heat of Decomposition	Data lacking
pH	Data lacking	Specific Gravity/Relative Density	0.967 Water=1 Nitrogen
Density	Data lacking	Bulk Density	Data lacking
Water Solubility	Data lacking	Solvent Solubility	Data lacking
Viscosity	Data lacking	Explosive Properties	Not relevant.
Oxidizing Properties:	Not relevant.		
Volatility			
Vapor Pressure	Data lacking	Vapor Density	< 1 Air=1 Nitrogen

Evaporation Rate	Data lacking	VOC (Wt.)	Data lacking
VOC (Vol.)	Data lacking	Volatiles (Wt.)	Data lacking
Volatiles (Vol.)	Data lacking		
Flammability			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Autoignition	Not relevant
Self-Accelerating Decomposition Temperature (SADT)	Not relevant	Heat of Combustion (ΔHc)	Not relevant
Burning Time	Not relevant	Flame Height	Not relevant
Flame Extension	Not relevant	Ignition Distance	Not relevant
Flame Duration	Not relevant	Flammability (solid, gas)	Not flammable.
Environmental			
Half-Life	Data lacking	Octanol/Water Partition coefficient	Data lacking
Coefficient of water/oil distribution	Data lacking	Bioaccumulation Factor	Data lacking
Bioconcentration Factor	Data lacking	Biochemical Oxygen Demand BOD/BOD5	Data lacking
Chemical Oxygen Demand	Data lacking	Persistence	Data lacking
Degradation	Data lacking		

9.2 Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

- Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

- Excess heat.

10.5 Incompatible materials

- Incompatible with oxidizing materials and Lithium.

10.6 Hazardous decomposition products

- Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Other Material Information

- This material contains multiple components, with concentrations in ppb, that can or may cause carcinogenic, mutagenic, reproductive and other effects. No exposure that would cause hazardous effects is expected because these components are present in such small amounts.

Component Name	CAS	Data
1,2,4-Trimethylbenzene (na)	95-63-6	**Acute Toxicity:** ihl-rat LC50:18000 mg/m3/4H
1,3,5-Trimethylbenzene (na)	108-67-8	**Acute Toxicity:** ihl-rat LC50:24000 mg/m3/4H; **Irritation:** eye-rbt 500 mg/24H MLD; skn-rbt 20 mg/24H MOD
2-Butanone (na)	78-93-3	**Acute Toxicity:** ihl-rat :3000 ppm/15D-I; ihl-rat LC50:23500 mg/m3/8H; **Irritation:** skn-rbt 402 mg/24H MLD
4-Methyl-2-pentanone (na)	108-10-1	**Acute Toxicity:** orl-rat LD50:4600 mg/kg; **Irritation:** eye-rbt 100 uL/24H MOD; skn-rbt 500 mg/24H MLD
Acetone (na)	67-64-1	**Acute Toxicity:** orl-rat LD50:5800 mg/kg; ihl-rat LC50:50100 mg/m3/8H; **Irritation:** eye-rbt 20 mg/24H MOD; skn-rbt 500 mg/24H MLD
Benzene (na)	71-43-2	**Acute Toxicity:** orl-rat LD50:930 mg/kg; ihl-rat LC50:10000 ppm/7H; **Irritation:** eye-rbt 2 mg/24H SEV; skn-rbt 20 mg/24H MOD; **Mutagen:** dnr-hmn-ihl 24.4 ppb/8H; cyt-rat-ihl 300 mg/m3/16W-I; **Tumorigen/Carcinogen:** ihl-hmn TC :8 ppb/4W-I
Chloroform (na)	67-66-3	**Acute Toxicity:** orl-rat LD50:695 mg/kg; ihl-rat LC50:6000 mg/m3/6H; **Irritation:** eye-rbt 20 mg/24H MOD; skn-rbt 500 mg/24H MLD; **Mutagen:** cyt-rat-orl 597 mg/kg/5D-I
Methylene Chloride (na)	75-09-2	**Acute Toxicity:** orl-rat LD50:985 mg/kg; ihl-rat LC50:76000 mg/m3/4H; **Irritation:** eye-rbt 162 mg MOD; skn-rbt 810 mg/24H SEV; **Mutagen:** dnd-rat-orl 1275 mg/kg
1,1,1-Trichloroethane (na)	71-55-6	**Acute Toxicity:** orl-rat LD50:9600 mg/kg; ihl-rat LC50:20000 ppm/2H; **Irritation:** eye-rbt 2 mg/24H SEV; skn-rbt 20 mg/24H MOD
Freon 113 (na)	76-13-1	**Acute Toxicity:** orl-rat LD50:43 gm/kg; ihl-rat LC50:38500 ppm/4H; **Irritation:** skn-rbt 500 mg/24H MLD
Freon 114 (na)	76-14-2	**Acute Toxicity:** ihl-rat LC50:72 pph/30M
Ethanol (na)	64-17-5	**Acute Toxicity:** orl-rat LD50:7060 mg/kg; **Irritation:** eye-rbt 100 mg/4S rinse MOD; skn-rbt 20 mg/24H MOD
1,1-Dichloroethylene (na)	75-35-4	**Acute Toxicity:** ihl-rat LC50:6350 ppm/4H
Trichloroethylene (na)	79-01-6	**Acute Toxicity:** orl-rat LD50:4920 mg/kg; **Irritation:** eye-rbt 20 mg/24H MOD; skn-rbt 2 mg/24H SEV; **Mutagen:** mnt-rat-ihl 5 ppm/6H-C
Isopropyl alcohol (na)	67-63-0	**Acute Toxicity:** orl-rat LD50:5000 mg/kg; ihl-rat LC50:72600 mg/m3; **Irritation:** eye-rbt 100 mg/24H MOD; **Mutagen:** cyt-rat-ihl 1030 ug/m3/16W-I
Freon 11 (na)	75-69-4	**Acute Toxicity:** ihl-rat LC50:13 pph/15M
Methanol (na)	67-56-1	**Acute Toxicity:** orl-rat LD50:5600 mg/kg; **Irritation:** eye-rbt 100 mg/24H MOD; skn-rbt 20 mg/24H MOD; **Mutagen:** dnd-rat-orl 10 umol/kg
m-Xylene (na)	108-38-3	**Acute Toxicity:** orl-rat LD50:4988 mg/kg; **Irritation:** skn-rbt 10 ug/24H open SEV
o-Xylene (na)	95-47-6	**Acute Toxicity:** ihl-hmn LCLo:6125 ppm/12H
Toluene (na)	108-88-3	**Acute Toxicity:** ihl-rat LC50:49 gm/m3/4H; **Irritation:** eye-rbt 2 mg/24H SEV; skn-rbt 20 mg/24H MOD; **Mutagen:** cyt-rat-ihl 5400 ug/m3/16W-I
Vinyl Chloride (na)	75-01-4	**Acute Toxicity:** orl-rat LD50:500 mg/kg; **Mutagen:** dnd-rat-ihl 205 ppm/5H; **Tumorigen/Carcinogen:** ihl-hmn TC :300 mg/m3/1W-C; ihl-rat TC :50 ppm/7H/26W-C

GHS Properties	Classification
Acute toxicity	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met

Aspiration Hazard	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Carcinogenicity	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Germ Cell Mutagenicity	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Skin corrosion/Irritation	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Skin sensitization	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
STOT-RE	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
STOT-SE	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Toxicity for Reproduction	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Respiratory sensitization	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Serious eye damage/Irritation	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met

Route(s) of entry/exposure
- Inhalation, Skin, Eye, Ingestion

Potential Health Effects

Inhalation

Acute (Immediate)
- This material is a simple asphyxiant. May displace or reduce oxygen available for breathing especially in confined spaces. If this material is released in a small, poorly ventilated area (i.e. an enclosed or confined space), an oxygen-deficient environment may occur. Individuals breathing such an atmosphere may experience symptoms which include headaches, ringing in ears, dizziness, drowsiness, unconsciousness, nausea, vomiting, and depression of all the senses. Under some circumstances of over-exposure, death may occur. The following effects associated with decreased levels of oxygen: increase in breathing and pulse rate, emotional upset, abnormal fatigue, nausea, vomiting, collapse, loss of consciousness, convulsive movements, respiratory collapse and death.

Chronic (Delayed)
- No data available

Skin

Acute (Immediate)
- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)
- No data available

Eye

Acute (Immediate)
- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)
- No data available

Ingestion

Acute (Immediate)
- Ingestion is not anticipated to be a likely route of exposure to this product.

Chronic (Delayed)
- No data available

Mutagenic Effects
- Material level data is not available however this gas mixture contains ingredients which may cause mutagenic effects upon prolonged and repeated exposure. Exposure in amounts that would cause mutagenic effects is not expected as these components are present in very small amounts.

Carcinogenic Effects
- Material level data is not available however this gas mixture contains ingredients which may cause carcinogenic effects upon prolonged and repeated exposure.

Carcinogenic Effects				
	CAS	NTP	IARC	OSHA
1,1,1-Trichloroethane	71-55-6	Evidence of Carcinogenicity	Not established	Not established
1,1-Dichloroethylene	75-35-4	Evidence of Carcinogenicity	Not established	Not established
4-Methyl-2-pentanone	108-10-1	Evidence of Carcinogenicity	Group 2B-Possible Carcinogen	Not established
Benzene	71-43-2	Known Human Carcinogen	Group 1-Carcinogenic	Not established
Chloroform	67-66-3	Reasonably Anticipated to be Human Carcinogen	Group 2B-Possible Carcinogen	Not established
Ethanol	64-17-5	Evidence of Carcinogenicity	Group 1-Carcinogenic	Not established
Freon 11	75-69-4	Evidence of Carcinogenicity	Not established	Not established
Methylene Chloride	75-09-2	Reasonably Anticipated to be Human Carcinogen	Group 2B-Possible Carcinogen	Specifically Regulated Carcinogen
Toluene	108-88-3	Evidence of Carcinogenicity	Not established	Not established
Trichloroethylene	79-01-6	Reasonably Anticipated to be Human Carcinogen	Group 2A-Probable Carcinogen	Not established
Vinyl Chloride	75-01-4	Known Human Carcinogen	Group 1-Carcinogenic	Specifically Regulated Carcinogen

Reproductive Effects

- Exposure at levels that would cause reproductive or developmental effects is not expected. However, this material does contain components that can or may cause reproductive and/or developmental effects.

Key to abbreviations

TC = Toxic Concentration
LD = Lethal Dose
MLD = Mild
MOD = Moderate
SEV = Severe
LC = Lethal Concentration

Section 12 - Ecological Information

12.1 Toxicity

- Material data lacking.

12.2 Persistence and degradability

- Material data lacking.

12.3 Bioaccumulative potential

- Material data lacking.

12.4 Mobility in Soil

- Material data lacking.

12.5 Results of PBT and vPvB assessment

- PBT and vPvB assessment has not been conducted for this material.

12.6 Other adverse effects

- This material contains component(s) that are dangerous to the ozone layer.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste
- Dispose of content and/or container in accordance with local, regional, national, and/or international 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
DOT	UN1956	Compressed gas, n.o.s. (Nitrogen)	2.2	NDA	NDA
TDG	UN1956	COMPRESSED GAS, N.O.S. (Nitrogen)	2.2	NDA	NDA
IMO/IMDG	UN1956	COMPRESSED GAS, N.O.S. (Nitrogen)	2.2	NDA	NDA
IATA/ICAO	UN1956	Compressed gas, n.o.s. (Nitrogen)	2.2	NDA	NDA

14.6 Special precautions for user
- Cylinders should be transported in a secure position, in a well-ventilated vehicle. The transportation of compressed gas cylinders in automobiles or in closed-body vehicles can present serious safety hazards. If transporting these cylinders in vehicles, ensure these cylinders are not exposed to extremely high temperatures (as may occur in an enclosed vehicle on a hot day). Additionally, the vehicle should be well-ventilated during transportation.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
- Not relevant.

Section 15 - Regulatory Information

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

SARA Hazard Classifications
- Pressure(Sudden Release of)

State Right To Know				
Component	**CAS**	**MA**	**NJ**	**PA**
1,2,4-Trimethylbenzene	95-63-6	Yes	Yes	Yes
1,3,5-Trimethylbenzene	108-67-8	Yes	No	No
2-Butanone	78-93-3	Yes	Yes	Yes
4-Methyl-2-pentanone	108-10-1	Yes	Yes	Yes
Acetone	67-64-1	Yes	Yes	Yes
Benzene	71-43-2	Yes	Yes	Yes
Chloroform	67-66-3	Yes	Yes	Yes
Methylene Chloride	75-09-2	Yes	Yes	Yes

1,1,1-Trichloroethane	71-55-6	Yes	Yes	Yes
Freon 113	76-13-1	Yes	Yes	Yes
Freon 114	76-14-2	Yes	Yes	No
Ethanol	64-17-5	Yes	Yes	Yes
1,1-Dichloroethylene	75-35-4	Yes	Yes	Yes
Trans-1,2-Dichloroethylene	156-60-5	Yes	No	Yes
Trichloroethylene	79-01-6	Yes	Yes	Yes
Isopropyl alcohol	67-63-0	Yes	Yes	Yes
Freon 12	75-71-8	Yes	Yes	Yes
Freon 11	75-69-4	Yes	Yes	Yes
Methanol	67-56-1	Yes	Yes	Yes
m-Xylene	108-38-3	Yes	Yes	Yes
Nitrogen	7727-37-9	Yes	Yes	Yes
o-Xylene	95-47-6	Yes	Yes	Yes
Toluene	108-88-3	Yes	Yes	Yes
Vinyl Chloride	75-01-4	Yes	Yes	Yes

Inventory

Component	CAS	Canada DSL	Canada NDSL	EU EINECS	EU ELNICS	TSCA
1,2,4-Trimethylbenzene	95-63-6	Yes	No	Yes	No	Yes
1,3,5-Trimethylbenzene	108-67-8	Yes	No	Yes	No	Yes
2-Butanone	78-93-3	Yes	No	Yes	No	Yes
4-Methyl-2-pentanone	108-10-1	Yes	No	Yes	No	Yes
Acetone	67-64-1	Yes	No	Yes	No	Yes
Benzene	71-43-2	Yes	No	Yes	No	Yes
Chloroform	67-66-3	Yes	No	Yes	No	Yes
Methylene Chloride	75-09-2	Yes	No	Yes	No	Yes
1,1,1-Trichloroethane	71-55-6	Yes	No	Yes	No	Yes
Freon 113	76-13-1	Yes	No	Yes	No	Yes
Freon 114	76-14-2	Yes	No	Yes	Yes	Yes
Ethanol	64-17-5	Yes	No	Yes	No	Yes
1,1-Dichloroethylene	75-35-4	Yes	No	Yes	No	Yes
Trans-1,2-Dichloroethylene	156-60-5	Yes	No	Yes	No	Yes
Trichloroethylene	79-01-6	Yes	No	Yes	No	Yes
Isopropyl alcohol	67-63-0	Yes	No	Yes	No	Yes
Freon 12	75-71-8	Yes	No	Yes	No	Yes
Freon 11	75-69-4	Yes	No	Yes	No	Yes

Methanol	67-56-1	Yes	No	Yes	No	Yes
m-Xylene	108-38-3	Yes	No	Yes	No	Yes
Nitrogen	7727-37-9	Yes	No	Yes	No	Yes
o-Xylene	95-47-6	Yes	No	Yes	No	Yes
Toluene	108-88-3	Yes	No	Yes	No	Yes
Vinyl Chloride	75-01-4	Yes	No	Yes	No	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

• o-Xylene	95-47-6	na	B2, D2B
• m-Xylene	108-38-3	na	B2, D2B
• Freon 11	75-69-4	na	Uncontrolled product according to WHMIS classification criteria
• Trans-1,2-Dichloroethylene	156-60-5	na	B2, D2B
• Vinyl Chloride	75-01-4	na	A, B1, D2A, D2B, F
• Freon 114	76-14-2	na	A
• Chloroform	67-66-3	na	D1B, D2A, D2B
• Acetone	67-64-1	na	B2, D2B
• Freon 12	75-71-8	na	A
• 4-Methyl-2-pentanone	108-10-1	na	B2, D2A
• Isopropyl alcohol	67-63-0	na	B2, D2B (including 70%)
• Methanol	67-56-1	na	B2, D1B, D2A, D2B (including 28%)
• Toluene	108-88-3	na	B2, D2A, D2B
• Freon 113	76-13-1	na	Uncontrolled product according to WHMIS classification criteria
• Benzene	71-43-2	na	B2, D2A, D2B
• Ethanol	64-17-5	na	B2, D2B
• Methylene Chloride	75-09-2	na	D1B, D2A, D2B
• 2-Butanone	78-93-3	na	B2, D2B
• Trichloroethylene	79-01-6	na	D1B, D2A, D2B
• 1,2,4-Trimethylbenzene	95-63-6	na	B3
• Nitrogen	7727-37-9	na	A
• 1,3,5-Trimethylbenzene	108-67-8	na	B3
• 1,1-Dichloroethylene	75-35-4	na	B2, D1B, D2B, F
• 1,1,1-Trichloroethane	71-55-6	na	D1B, D2B

Canada - WHMIS - Ingredient Disclosure List

• o-Xylene	95-47-6	na	1 %
• m-Xylene	108-38-3	na	1 %
• Freon 11	75-69-4	na	1 %
• Trans-1,2-Dichloroethylene	156-60-5	na	Not Listed
• Vinyl Chloride	75-01-4	na	0.1 %
• Freon 114	76-14-2	na	1 %
• Chloroform	67-66-3	na	0.1 %
• Acetone	67-64-1	na	1 %
• Freon 12	75-71-8	na	1 %
• 4-Methyl-2-pentanone	108-10-1	na	1 %
• Isopropyl alcohol	67-63-0	na	1 %

• Methanol	67-56-1	na	1 %
• Toluene	108-88-3	na	1 %
• Freon 113	76-13-1	na	1 %
• Benzene	71-43-2	na	0.1 %
• Ethanol	64-17-5	na	0.1 %
• Methylene Chloride	75-09-2	na	0.1 %
• 2-Butanone	78-93-3	na	1 %
• Trichloroethylene	79-01-6	na	1 %
• 1,2,4-Trimethylbenzene	95-63-6	na	0.1 %
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	0.1 %
• 1,1-Dichloroethylene	75-35-4	na	1 %
• 1,1,1-Trichloroethane	71-55-6	na	0.1 %

Environment

Canada - CEPA - Priority Substances List

• o-Xylene	95-47-6	na	Not Listed
• m-Xylene	108-38-3	na	Not Listed
• Freon 11	75-69-4	na	Not Listed
• Trans-1,2-Dichloroethylene	156-60-5	na	Not Listed
• Vinyl Chloride	75-01-4	na	Not Listed
• Freon 114	76-14-2	na	Not Listed
• Chloroform	67-66-3	na	Priority Substance List 2 (substance not considered toxic)
• Acetone	67-64-1	na	Not Listed
• Freon 12	75-71-8	na	Not Listed
• 4-Methyl-2-pentanone	108-10-1	na	Not Listed
• Isopropyl alcohol	67-63-0	na	Not Listed
• Methanol	67-56-1	na	Not Listed
• Toluene	108-88-3	na	Priority Substance List 1 (substance not considered toxic)
• Freon 113	76-13-1	na	Not Listed
• Benzene	71-43-2	na	Priority Substance List 1 (substance considered toxic)
• Ethanol	64-17-5	na	Not Listed
• Methylene Chloride	75-09-2	na	Priority Substance List 1 (substance considered toxic)
• 2-Butanone	78-93-3	na	Not Listed
• Trichloroethylene	79-01-6	na	Priority Substance List 1 (substance considered toxic)
• 1,2,4-Trimethylbenzene	95-63-6	na	Not Listed
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	Not Listed
• 1,1-Dichloroethylene	75-35-4	na	Not Listed
• 1,1,1-Trichloroethane	71-55-6	na	Priority Substance List 1 (substance considered toxic, added to CEPA's Schedule 1, List of Toxic Substances)

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Europe

Other

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

• o-Xylene	95-47-6	na	R10 Xn; R20/21 Xi; R38

• m-Xylene	108-38-3	na	R10 Xn; R20/21 Xi; R38
• Freon 11	75-69-4	na	Not Listed
• Trans-1,2-Dichloroethylene	156-60-5	na	F; R11 Xn; R20 R52-53
• Vinyl Chloride	75-01-4	na	F+; R12 Carc.Cat.1; R45
• Freon 114	76-14-2	na	Not Listed
• Chloroform	67-66-3	na	Xn; R22-48/20/22 Xi; R38 Carc.Cat.3; R40
• Acetone	67-64-1	na	F; R11 Xi; R36 R66 R67
• Freon 12	75-71-8	na	Not Listed
• 4-Methyl-2-pentanone	108-10-1	na	F; R11 Xn; R20 Xi; R36/37 R66
• Isopropyl alcohol	67-63-0	na	F; R11 Xi; R36 R67
• Methanol	67-56-1	na	F; R11 T; R23/24/25-39/23/24/25
• Toluene	108-88-3	na	F; R11 Xi; R38 Xn; R48/20-65 Repr.Cat.3; R63 R67
• Freon 113	76-13-1	na	Not Listed
• Benzene	71-43-2	na	F; R11 Xi; R36/38 Carc.Cat.1; R45 Muta.Cat.2; R46 T; R48/23/24/25 Xn; R65
• Ethanol	64-17-5	na	F; R11
• Methylene Chloride	75-09-2	na	Carc.Cat.3; R40
• 2-Butanone	78-93-3	na	F; R11 Xi; R36 R66 R67
• Trichloroethylene	79-01-6	na	Xi; R36/38 Carc.Cat.2; R45 R52-53 R67 Muta.Cat.3; R68
• 1,2,4-Trimethylbenzene	95-63-6	na	R10 Xn; R20 Xi; R36/37/38 N; R51-53
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	R10 Xi; R37 N; R51-53
• 1,1-Dichloroethylene	75-35-4	na	F+; R12 Xn; R20 Carc.Cat.3; R40
• 1,1,1-Trichloroethane	71-55-6	na	Xn; R20 N; R59

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

• o-Xylene	95-47-6	na	12.5%<=C: Xn; R20/21
• m-Xylene	108-38-3	na	12.5%<=C: Xn; R20/21
• Freon 11	75-69-4	na	Not Listed
• Trans-1,2-Dichloroethylene	156-60-5	na	12.5%<=C: Xn; R20
• Vinyl Chloride	75-01-4	na	Not Listed
• Freon 114	76-14-2	na	Not Listed
• Chloroform	67-66-3	na	5%<=C: Xn; R22 5%<=C: Xn; R48/20/22
• Acetone	67-64-1	na	Not Listed
• Freon 12	75-71-8	na	Not Listed
• 4-Methyl-2-pentanone	108-10-1	na	Not Listed
• Isopropyl alcohol	67-63-0	na	Not Listed
• Methanol	67-56-1	na	20%<=C: T; R:23/24/25 3%<=C<20%: Xn; R:20/21/22 10%<=C: T; R:39/23/24/25 3%<=C<10%: Xn; R:68/20/21/22
• Toluene	108-88-3	na	Not Listed
• Freon 113	76-13-1	na	Not Listed
• Benzene	71-43-2	na	Not Listed
• Ethanol	64-17-5	na	Not Listed
• Methylene Chloride	75-09-2	na	Not Listed
• 2-Butanone	78-93-3	na	Not Listed
• Trichloroethylene	79-01-6	na	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	na	Not Listed
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	25%<=C: Xi; R37
• 1,1-Dichloroethylene	75-35-4	na	12.5%<=C: Xn; R20
• 1,1,1-Trichloroethane	71-55-6	na	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

• o-Xylene	95-47-6	na	Xn R:10-20/21-38 S:(2)-25
• m-Xylene	108-38-3	na	Xn R:10-20/21-38 S:(2)-25
• Freon 11	75-69-4	na	Not Listed
• Trans-1,2-Dichloroethylene	156-60-5	na	F Xn R:11-20-52/53 S:(2)-7-16-29-61
• Vinyl Chloride	75-01-4	na	F+ T R:45-12 S:53-45
• Freon 114	76-14-2	na	Not Listed
• Chloroform	67-66-3	na	Xn R:22-38-40-48/20/22 S:(2)-36/37
• Acetone	67-64-1	na	F Xi R:11-36-66-67 S:(2)-9-16-26
• Freon 12	75-71-8	na	Not Listed
• 4-Methyl-2-pentanone	108-10-1	na	F Xn R:11-20-36/37-66 S:(2)-9-16-29
• Isopropyl alcohol	67-63-0	na	F Xi R:11-36-67 S:(2)-7-16-24/25-26
• Methanol	67-56-1	na	F T R:11-23/24/25-39/23/24/25 S:(1/2)-7-16-36/37-45
• Toluene	108-88-3	na	F Xn R:11-38-48/20-63-65-67 S:(2)-36/37-46-62
• Freon 113	76-13-1	na	Not Listed
• Benzene	71-43-2	na	F T R:45-46-11-36/38-48/23/24/25-65 S:53-45
• Ethanol	64-17-5	na	F R:11 S:(2)-7-16
• Methylene Chloride	75-09-2	na	Xn R:40 S:(2)-23-24/25-36/37
• 2-Butanone	78-93-3	na	F Xi R:11-36-66-67 S:(2)-9-16
• Trichloroethylene	79-01-6	na	T R:45-36/38-52/53-67 S:53-45-61
• 1,2,4-Trimethylbenzene	95-63-6	na	Xn N R:10-20-36/37/38-51/53 S:(2)-26-61
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	Xi N R:10-37-51/53 S:(2)-61
• 1,1-Dichloroethylene	75-35-4	na	F+ Xn R:12-20-40 S:(2)-7-16-29-36/37-46
• 1,1,1-Trichloroethane	71-55-6	na	Xn N R:20-59 S:(2)-24/25-59-61

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

• o-Xylene	95-47-6	na	C
• m-Xylene	108-38-3	na	C
• Freon 11	75-69-4	na	Not Listed
• Trans-1,2-Dichloroethylene	156-60-5	na	C
• Vinyl Chloride	75-01-4	na	D
• Freon 114	76-14-2	na	Not Listed
• Chloroform	67-66-3	na	Not Listed
• Acetone	67-64-1	na	Not Listed
• Freon 12	75-71-8	na	Not Listed
• 4-Methyl-2-pentanone	108-10-1	na	Not Listed
• Isopropyl alcohol	67-63-0	na	Not Listed
• Methanol	67-56-1	na	Not Listed
• Toluene	108-88-3	na	Not Listed
• Freon 113	76-13-1	na	Not Listed
• Benzene	71-43-2	na	E
• Ethanol	64-17-5	na	Not Listed
• Methylene Chloride	75-09-2	na	Not Listed
• 2-Butanone	78-93-3	na	Not Listed
• Trichloroethylene	79-01-6	na	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	na	Not Listed
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	Not Listed

• 1,1-Dichloroethylene	75-35-4	na	D
• 1,1,1-Trichloroethane	71-55-6	na	F

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

• o-Xylene	95-47-6	na	S:(2)-25
• m-Xylene	108-38-3	na	S:(2)-25
• Freon 11	75-69-4	na	Not Listed
• Trans-1,2-Dichloroethylene	156-60-5	na	S:(2)-7-16-29-61
• Vinyl Chloride	75-01-4	na	S:53-45
• Freon 114	76-14-2	na	Not Listed
• Chloroform	67-66-3	na	S:(2)-36/37
• Acetone	67-64-1	na	S:(2)-9-16-26
• Freon 12	75-71-8	na	Not Listed
• 4-Methyl-2-pentanone	108-10-1	na	S:(2)-9-16-29
• Isopropyl alcohol	67-63-0	na	S:(2)-7-16-24/25-26
• Methanol	67-56-1	na	S:(1/2)-7-16-36/37-45
• Toluene	108-88-3	na	S:(2)-36/37-46-62
• Freon 113	76-13-1	na	Not Listed
• Benzene	71-43-2	na	S:53-45
• Ethanol	64-17-5	na	S:(2)-7-16
• Methylene Chloride	75-09-2	na	S:(2)-23-24/25-36/37
• 2-Butanone	78-93-3	na	S:(2)-9-16
• Trichloroethylene	79-01-6	na	S:53-45-61
• 1,2,4-Trimethylbenzene	95-63-6	na	S:(2)-26-61
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	S:(2)-61
• 1,1-Dichloroethylene	75-35-4	na	S:(2)-7-16-29-36/37-46
• 1,1,1-Trichloroethane	71-55-6	na	S:(2)-24/25-59-61

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United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• o-Xylene	95-47-6	na	Not Listed
• m-Xylene	108-38-3	na	Not Listed
• Freon 11	75-69-4	na	Not Listed
• Trans-1,2-Dichloroethylene	156-60-5	na	Not Listed
• Vinyl Chloride	75-01-4	na	Not Listed
• Freon 114	76-14-2	na	Not Listed
• Chloroform	67-66-3	na	Not Listed
• Acetone	67-64-1	na	Not Listed
• Freon 12	75-71-8	na	Not Listed
• 4-Methyl-2-pentanone	108-10-1	na	Not Listed
• Isopropyl alcohol	67-63-0	na	Not Listed
• Methanol	67-56-1	na	Not Listed
• Toluene	108-88-3	na	Not Listed
• Freon 113	76-13-1	na	Not Listed
• Benzene	71-43-2	na	Not Listed

• Ethanol	64-17-5	na	Not Listed
• Methylene Chloride	75-09-2	na	Not Listed
• 2-Butanone	78-93-3	na	Not Listed
• Trichloroethylene	79-01-6	na	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	na	Not Listed
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	Not Listed
• 1,1-Dichloroethylene	75-35-4	na	Not Listed
• 1,1,1-Trichloroethane	71-55-6	na	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• o-Xylene	95-47-6	na	Not Listed
• m-Xylene	108-38-3	na	Not Listed
• Freon 11	75-69-4	na	Not Listed
• Trans-1,2-Dichloroethylene	156-60-5	na	Not Listed
• Vinyl Chloride	75-01-4	na	0.5 ppm Action Level (Cancer suspect agent, See 29 CFR 1910.1017); 1 ppm TWA; 5 ppm STEL (15 min)
• Freon 114	76-14-2	na	Not Listed
• Chloroform	67-66-3	na	Not Listed
• Acetone	67-64-1	na	Not Listed
• Freon 12	75-71-8	na	Not Listed
• 4-Methyl-2-pentanone	108-10-1	na	Not Listed
• Isopropyl alcohol	67-63-0	na	Not Listed
• Methanol	67-56-1	na	Not Listed
• Toluene	108-88-3	na	Not Listed
• Freon 113	76-13-1	na	Not Listed
• Benzene	71-43-2	na	5 ppm STEL (Cancer hazard, Flammable, See 29 CFR 1910.1028, 15 min); 0.5 ppm Action Level; 1 ppm TWA
• Ethanol	64-17-5	na	Not Listed
• Methylene Chloride	75-09-2	na	125 ppm STEL (Cancer, cardiac effects, central nervous system effects, liver effects, and skin and eye irritation, See 29 CFR 1910.1052, 15 min); 12.5 ppm Action Level; 25 ppm TWA
• 2-Butanone	78-93-3	na	Not Listed
• Trichloroethylene	79-01-6	na	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	na	Not Listed
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	Not Listed
• 1,1-Dichloroethylene	75-35-4	na	Not Listed
• 1,1,1-Trichloroethane	71-55-6	na	Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• o-Xylene	95-47-6	na	
• m-Xylene	108-38-3	na	
• Freon 11	75-69-4	na	Not Listed
• Trans-1,2-Dichloroethylene	156-60-5	na	Not Listed
• Vinyl Chloride	75-01-4	na	
• Freon 114	76-14-2	na	Not Listed

• Chloroform	67-66-3	na	
• Acetone	67-64-1	na	Not Listed
• Freon 12	75-71-8	na	Not Listed
• 4-Methyl-2-pentanone	108-10-1	na	
• Isopropyl alcohol	67-63-0	na	Not Listed
• Methanol	67-56-1	na	
• Toluene	108-88-3	na	
• Freon 113	76-13-1	na	Not Listed
• Benzene	71-43-2	na	(including Benzene from gasoline)
• Ethanol	64-17-5	na	Not Listed
• Methylene Chloride	75-09-2	na	
• 2-Butanone	78-93-3	na	Not Listed
• Trichloroethylene	79-01-6	na	
• 1,2,4-Trimethylbenzene	95-63-6	na	Not Listed
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	Not Listed
• 1,1-Dichloroethylene	75-35-4	na	
• 1,1,1-Trichloroethane	71-55-6	na	

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• o-Xylene	95-47-6	na	1000 lb final RQ; 454 kg final RQ
• m-Xylene	108-38-3	na	1000 lb final RQ; 454 kg final RQ
• Freon 11	75-69-4	na	5000 lb final RQ; 2270 kg final RQ
• Trans-1,2-Dichloroethylene	156-60-5	na	1000 lb final RQ (listed under 1,2-Dichloroethylene); 454 kg final RQ (listed under 1,2-Dichloroethylene)
• Vinyl Chloride	75-01-4	na	1 lb final RQ; 0.454 kg final RQ
• Freon 114	76-14-2	na	Not Listed
• Chloroform	67-66-3	na	10 lb final RQ; 4.54 kg final RQ
• Acetone	67-64-1	na	5000 lb final RQ; 2270 kg final RQ
• Freon 12	75-71-8	na	5000 lb final RQ; 2270 kg final RQ
• 4-Methyl-2-pentanone	108-10-1	na	5000 lb final RQ; 2270 kg final RQ
• Isopropyl alcohol	67-63-0	na	Not Listed
• Methanol	67-56-1	na	5000 lb final RQ; 2270 kg final RQ
• Toluene	108-88-3	na	1000 lb final RQ; 454 kg final RQ
• Freon 113	76-13-1	na	Not Listed
• Benzene	71-43-2	na	10 lb final RQ (received an adjusted RQ of 10 lbs based on potential carcinogenicity in an August 14, 1989 final rule); 4.54 kg final RQ (received an adjusted RQ of 10 lbs based on potential carcinogenicity in an August 14, 1989 final rule)
• Ethanol	64-17-5	na	Not Listed
• Methylene Chloride	75-09-2	na	1000 lb final RQ; 454 kg final RQ
• 2-Butanone	78-93-3	na	5000 lb final RQ; 2270 kg final RQ
• Trichloroethylene	79-01-6	na	100 lb final RQ; 45.4 kg final RQ
• 1,2,4-Trimethylbenzene	95-63-6	na	Not Listed
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	Not Listed
• 1,1-Dichloroethylene	75-35-4	na	100 lb final RQ; 45.4 kg final RQ
• 1,1,1-Trichloroethane	71-55-6	na	1000 lb final RQ; 454 kg final RQ

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• o-Xylene	95-47-6	na	Not Listed
• m-Xylene	108-38-3	na	Not Listed
• Freon 11	75-69-4	na	Not Listed
• Trans-1,2-Dichloroethylene	156-60-5	na	Not Listed
• Vinyl Chloride	75-01-4	na	Not Listed
• Freon 114	76-14-2	na	Not Listed
• Chloroform	67-66-3	na	10 lb EPCRA RQ
• Acetone	67-64-1	na	Not Listed
• Freon 12	75-71-8	na	Not Listed
• 4-Methyl-2-pentanone	108-10-1	na	Not Listed
• Isopropyl alcohol	67-63-0	na	Not Listed
• Methanol	67-56-1	na	Not Listed
• Toluene	108-88-3	na	Not Listed
• Freon 113	76-13-1	na	Not Listed
• Benzene	71-43-2	na	Not Listed
• Ethanol	64-17-5	na	Not Listed
• Methylene Chloride	75-09-2	na	Not Listed
• 2-Butanone	78-93-3	na	Not Listed
• Trichloroethylene	79-01-6	na	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	na	Not Listed
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	Not Listed
• 1,1-Dichloroethylene	75-35-4	na	Not Listed
• 1,1,1-Trichloroethane	71-55-6	na	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• o-Xylene	95-47-6	na	Not Listed
• m-Xylene	108-38-3	na	Not Listed
• Freon 11	75-69-4	na	Not Listed
• Trans-1,2-Dichloroethylene	156-60-5	na	Not Listed
• Vinyl Chloride	75-01-4	na	Not Listed
• Freon 114	76-14-2	na	Not Listed
• Chloroform	67-66-3	na	10000 lb TPQ
• Acetone	67-64-1	na	Not Listed
• Freon 12	75-71-8	na	Not Listed
• 4-Methyl-2-pentanone	108-10-1	na	Not Listed
• Isopropyl alcohol	67-63-0	na	Not Listed
• Methanol	67-56-1	na	Not Listed
• Toluene	108-88-3	na	Not Listed
• Freon 113	76-13-1	na	Not Listed
• Benzene	71-43-2	na	Not Listed
• Ethanol	64-17-5	na	Not Listed
• Methylene Chloride	75-09-2	na	Not Listed
• 2-Butanone	78-93-3	na	Not Listed
• Trichloroethylene	79-01-6	na	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	na	Not Listed
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	Not Listed

• 1,1-Dichloroethylene	75-35-4	na	Not Listed
• 1,1,1-Trichloroethane	71-55-6	na	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• o-Xylene	95-47-6	na	1.0 % de minimis concentration
• m-Xylene	108-38-3	na	1.0 % de minimis concentration
• Freon 11	75-69-4	na	1.0 % de minimis concentration
• Trans-1,2-Dichloroethylene	156-60-5	na	Not Listed
• Vinyl Chloride	75-01-4	na	0.1 % de minimis concentration
• Freon 114	76-14-2	na	1.0 % de minimis concentration (listed under Dichlorotetrafluoroethane)
• Chloroform	67-66-3	na	0.1 % de minimis concentration
• Acetone	67-64-1	na	Not Listed
• Freon 12	75-71-8	na	1.0 % de minimis concentration
• 4-Methyl-2-pentanone	108-10-1	na	1.0 % de minimis concentration
• Isopropyl alcohol	67-63-0	na	1.0 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)
• Methanol	67-56-1	na	1.0 % de minimis concentration
• Toluene	108-88-3	na	1.0 % de minimis concentration
• Freon 113	76-13-1	na	1.0 % de minimis concentration
• Benzene	71-43-2	na	0.1 % de minimis concentration
• Ethanol	64-17-5	na	Not Listed
• Methylene Chloride	75-09-2	na	0.1 % de minimis concentration
• 2-Butanone	78-93-3	na	Not Listed
• Trichloroethylene	79-01-6	na	0.1 % de minimis concentration
• 1,2,4-Trimethylbenzene	95-63-6	na	1.0 % de minimis concentration
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	Not Listed
• 1,1-Dichloroethylene	75-35-4	na	1.0 % de minimis concentration
• 1,1,1-Trichloroethane	71-55-6	na	1.0 % de minimis concentration

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• o-Xylene	95-47-6	na	Not Listed
• m-Xylene	108-38-3	na	Not Listed
• Freon 11	75-69-4	na	Not Listed
• Trans-1,2-Dichloroethylene	156-60-5	na	Not Listed
• Vinyl Chloride	75-01-4	na	Not Listed
• Freon 114	76-14-2	na	Not Listed
• Chloroform	67-66-3	na	Not Listed
• Acetone	67-64-1	na	Not Listed
• Freon 12	75-71-8	na	Not Listed
• 4-Methyl-2-pentanone	108-10-1	na	Not Listed
• Isopropyl alcohol	67-63-0	na	Not Listed
• Methanol	67-56-1	na	Not Listed
• Toluene	108-88-3	na	Not Listed
• Freon 113	76-13-1	na	Not Listed
• Benzene	71-43-2	na	Not Listed
• Ethanol	64-17-5	na	Not Listed
• Methylene Chloride	75-09-2	na	Not Listed

• 2-Butanone	78-93-3	na	Not Listed
• Trichloroethylene	79-01-6	na	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	na	Not Listed
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	Not Listed
• 1,1-Dichloroethylene	75-35-4	na	Not Listed
• 1,1,1-Trichloroethane	71-55-6	na	Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

• o-Xylene	95-47-6	na	Not Listed
• m-Xylene	108-38-3	na	Not Listed
• Freon 11	75-69-4	na	Not Listed
• Trans-1,2-Dichloroethylene	156-60-5	na	Not Listed
• Vinyl Chloride	75-01-4	na	carcinogen, initial date 2/27/87
• Freon 114	76-14-2	na	Not Listed
• Chloroform	67-66-3	na	carcinogen, initial date 10/1/87
• Acetone	67-64-1	na	Not Listed
• Freon 12	75-71-8	na	Not Listed
• 4-Methyl-2-pentanone	108-10-1	na	carcinogen, initial date 11/04/11
• Isopropyl alcohol	67-63-0	na	Not Listed
• Methanol	67-56-1	na	Not Listed
• Toluene	108-88-3	na	Not Listed
• Freon 113	76-13-1	na	Not Listed
• Benzene	71-43-2	na	carcinogen, initial date 2/27/87
• Ethanol	64-17-5	na	carcinogen, initial date 4/29/11 (in alcoholic beverages)
• Methylene Chloride	75-09-2	na	carcinogen, initial date 4/1/88
• 2-Butanone	78-93-3	na	Not Listed
• Trichloroethylene	79-01-6	na	carcinogen, initial date 4/1/88
• 1,2,4-Trimethylbenzene	95-63-6	na	Not Listed
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	Not Listed
• 1,1-Dichloroethylene	75-35-4	na	Not Listed
• 1,1,1-Trichloroethane	71-55-6	na	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• o-Xylene	95-47-6	na	Not Listed
• m-Xylene	108-38-3	na	Not Listed
• Freon 11	75-69-4	na	Not Listed
• Trans-1,2-Dichloroethylene	156-60-5	na	Not Listed
• Vinyl Chloride	75-01-4	na	Not Listed
• Freon 114	76-14-2	na	Not Listed
• Chloroform	67-66-3	na	developmental toxicity, initial date 8/7/09
• Acetone	67-64-1	na	Not Listed
• Freon 12	75-71-8	na	Not Listed
• 4-Methyl-2-pentanone	108-10-1	na	Not Listed

• Isopropyl alcohol	67-63-0	na	Not Listed
• Methanol	67-56-1	na	Developmental toxicity, initial date 3/16/12
• Toluene	108-88-3	na	developmental toxicity, initial date 1/1/91
• Freon 113	76-13-1	na	Not Listed
• Benzene	71-43-2	na	developmental toxicity, initial date 12/26/97
• Ethanol	64-17-5	na	developmental toxicity, initial date 10/1/87 (in alcoholic beverages)
• Methylene Chloride	75-09-2	na	Not Listed
• 2-Butanone	78-93-3	na	Not Listed
• Trichloroethylene	79-01-6	na	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	na	Not Listed
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	Not Listed
• 1,1-Dichloroethylene	75-35-4	na	Not Listed
• 1,1,1-Trichloroethane	71-55-6	na	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• o-Xylene	95-47-6	na	Not Listed
• m-Xylene	108-38-3	na	Not Listed
• Freon 11	75-69-4	na	Not Listed
• Trans-1,2-Dichloroethylene	156-60-5	na	Not Listed
• Vinyl Chloride	75-01-4	na	Not Listed
• Freon 114	76-14-2	na	Not Listed
• Chloroform	67-66-3	na	Not Listed
• Acetone	67-64-1	na	Not Listed
• Freon 12	75-71-8	na	Not Listed
• 4-Methyl-2-pentanone	108-10-1	na	Not Listed
• Isopropyl alcohol	67-63-0	na	Not Listed
• Methanol	67-56-1	na	Not Listed
• Toluene	108-88-3	na	7000 µg/day MADL (level represents absorbed dose)
• Freon 113	76-13-1	na	Not Listed
• Benzene	71-43-2	na	24 µg/day MADL (oral); 49 µg/day MADL (inhalation)
• Ethanol	64-17-5	na	Not Listed
• Methylene Chloride	75-09-2	na	Not Listed
• 2-Butanone	78-93-3	na	Not Listed
• Trichloroethylene	79-01-6	na	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	na	Not Listed
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	Not Listed
• 1,1-Dichloroethylene	75-35-4	na	Not Listed
• 1,1,1-Trichloroethane	71-55-6	na	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• o-Xylene	95-47-6	na	Not Listed
• m-Xylene	108-38-3	na	Not Listed
• Freon 11	75-69-4	na	Not Listed
• Trans-1,2-Dichloroethylene	156-60-5	na	Not Listed
• Vinyl Chloride	75-01-4	na	3 µg/day NSRL
• Freon 114	76-14-2	na	Not Listed
• Chloroform	67-66-3	na	20 µg/day NSRL (oral); 40 µg/day NSRL (inhalation)

• Acetone	67-64-1	na	Not Listed
• Freon 12	75-71-8	na	Not Listed
• 4-Methyl-2-pentanone	108-10-1	na	Not Listed
• Isopropyl alcohol	67-63-0	na	Not Listed
• Methanol	67-56-1	na	Not Listed
• Toluene	108-88-3	na	Not Listed
• Freon 113	76-13-1	na	Not Listed
• Benzene	71-43-2	na	6.4 µg/day NSRL (oral); 13 µg/day NSRL (inhalation)
• Ethanol	64-17-5	na	Not Listed
• Methylene Chloride	75-09-2	na	200 µg/day NSRL (inhalation); 50 µg/day NSRL
• 2-Butanone	78-93-3	na	Not Listed
• Trichloroethylene	79-01-6	na	50 µg/day NSRL (oral); 80 µg/day NSRL (inhalation)
• 1,2,4-Trimethylbenzene	95-63-6	na	Not Listed
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	Not Listed
• 1,1-Dichloroethylene	75-35-4	na	Not Listed
• 1,1,1-Trichloroethane	71-55-6	na	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• o-Xylene	95-47-6	na	Not Listed
• m-Xylene	108-38-3	na	Not Listed
• Freon 11	75-69-4	na	Not Listed
• Trans-1,2-Dichloroethylene	156-60-5	na	Not Listed
• Vinyl Chloride	75-01-4	na	Not Listed
• Freon 114	76-14-2	na	Not Listed
• Chloroform	67-66-3	na	Not Listed
• Acetone	67-64-1	na	Not Listed
• Freon 12	75-71-8	na	Not Listed
• 4-Methyl-2-pentanone	108-10-1	na	Not Listed
• Isopropyl alcohol	67-63-0	na	Not Listed
• Methanol	67-56-1	na	Not Listed
• Toluene	108-88-3	na	female reproductive toxicity, initial date 8/7/09
• Freon 113	76-13-1	na	Not Listed
• Benzene	71-43-2	na	Not Listed
• Ethanol	64-17-5	na	Not Listed
• Methylene Chloride	75-09-2	na	Not Listed
• 2-Butanone	78-93-3	na	Not Listed
• Trichloroethylene	79-01-6	na	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	na	Not Listed
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	Not Listed
• 1,1-Dichloroethylene	75-35-4	na	Not Listed
• 1,1,1-Trichloroethane	71-55-6	na	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• o-Xylene	95-47-6	na	Not Listed
• m-Xylene	108-38-3	na	Not Listed
• Freon 11	75-69-4	na	Not Listed
• Trans-1,2-Dichloroethylene	156-60-5	na	Not Listed

• Vinyl Chloride	75-01-4	na	Not Listed
• Freon 114	76-14-2	na	Not Listed
• Chloroform	67-66-3	na	Not Listed
• Acetone	67-64-1	na	Not Listed
• Freon 12	75-71-8	na	Not Listed
• 4-Methyl-2-pentanone	108-10-1	na	Not Listed
• Isopropyl alcohol	67-63-0	na	Not Listed
• Methanol	67-56-1	na	Not Listed
• Toluene	108-88-3	na	Not Listed
• Freon 113	76-13-1	na	Not Listed
• Benzene	71-43-2	na	male reproductive toxicity, initial date 12/26/97
• Ethanol	64-17-5	na	Not Listed
• Methylene Chloride	75-09-2	na	Not Listed
• 2-Butanone	78-93-3	na	Not Listed
• Trichloroethylene	79-01-6	na	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	na	Not Listed
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	Not Listed
• 1,1-Dichloroethylene	75-35-4	na	Not Listed
• 1,1,1-Trichloroethane	71-55-6	na	Not Listed

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United States - Pennsylvania

Labor

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

• o-Xylene	95-47-6	na	
• m-Xylene	108-38-3	na	
• Freon 11	75-69-4	na	
• Trans-1,2-Dichloroethylene	156-60-5	na	
• Vinyl Chloride	75-01-4	na	
• Freon 114	76-14-2	na	Not Listed
• Chloroform	67-66-3	na	
• Acetone	67-64-1	na	
• Freon 12	75-71-8	na	
• 4-Methyl-2-pentanone	108-10-1	na	
• Isopropyl alcohol	67-63-0	na	
• Methanol	67-56-1	na	
• Toluene	108-88-3	na	
• Freon 113	76-13-1	na	
• Benzene	71-43-2	na	
• Ethanol	64-17-5	na	Not Listed
• Methylene Chloride	75-09-2	na	
• 2-Butanone	78-93-3	na	
• Trichloroethylene	79-01-6	na	
• 1,2,4-Trimethylbenzene	95-63-6	na	
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	Not Listed
• 1,1-Dichloroethylene	75-35-4	na	
• 1,1,1-Trichloroethane	71-55-6	na	

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

• o-Xylene	95-47-6	na	Not Listed
• m-Xylene	108-38-3	na	Not Listed
• Freon 11	75-69-4	na	Not Listed
• Trans-1,2-Dichloroethylene	156-60-5	na	Not Listed
• Vinyl Chloride	75-01-4	na	
• Freon 114	76-14-2	na	Not Listed
• Chloroform	67-66-3	na	
• Acetone	67-64-1	na	Not Listed
• Freon 12	75-71-8	na	Not Listed
• 4-Methyl-2-pentanone	108-10-1	na	Not Listed
• Isopropyl alcohol	67-63-0	na	Not Listed
• Methanol	67-56-1	na	Not Listed
• Toluene	108-88-3	na	Not Listed
• Freon 113	76-13-1	na	Not Listed
• Benzene	71-43-2	na	
• Ethanol	64-17-5	na	Not Listed
• Methylene Chloride	75-09-2	na	
• 2-Butanone	78-93-3	na	Not Listed
• Trichloroethylene	79-01-6	na	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	na	Not Listed
• Nitrogen	7727-37-9	na	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	na	Not Listed
• 1,1-Dichloroethylene	75-35-4	na	Not Listed
• 1,1,1-Trichloroethane	71-55-6	na	Not Listed

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15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

15.3 Other Information

- WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 16 - Other Information

Relevant Phrases (code & full text)

- H220 - Extremely flammable gas
  H224 - Extremely flammable liquid and vapour
  H225 - Highly flammable liquid and vapour
  H226 - Flammable liquid and vapour
  H270 - May cause or intensify fire; oxidizer
  H301 - Toxic if swallowed
  H304 - May be fatal if swallowed and enters airways
  H312 - Harmful in contact with skin
  H315 - Causes skin irritation
  H319 - Causes serious eye irritation
  H331 - Toxic if inhaled
  H332 - Harmful if inhaled
  H335 - May cause respiratory irritation
  H336 - May cause drowsiness or dizziness
  H340 - May cause genetic defects.

H341 - Suspected of causing genetic defects.
H350 - May cause cancer.
H361d - Suspected of damaging the unborn child.
H370 - Causes damage to organs.
H372 - Causes damage to organs through prolonged or repeated exposure.
H373 - May cause damage to organs through prolonged or repeated exposure.
H411 - Toxic to aquatic life with long lasting effects
H412 - Harmful to aquatic life with long lasting effects
EUH059 - Hazardous to the ozone layer.

R10 - Flammable.
R11 - Highly flammable.
R12 - Extremely flammable.
R20 - Harmful by inhalation.
R20/21 - Harmful by inhalation and in contact with skin.
R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed.
R36 - Irritating to eyes.
R36/37 - Irritating to eyes and respiratory system.
R36/37/38 - Irritating to eyes, respiratory system and skin.
R36/38 - Irritating to eyes and skin.
R37 - Irritating to respiratory system.
R38 - Irritating to skin.
R39/23/24/25 - Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
R40 - Limited evidence of a carcinogenic effect.
R45 - May cause cancer.
R46 - May cause heritable genetic damage.
R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R48/23/24/25 - Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
R51 - Toxic to aquatic organisms.
R52 - Harmful to aquatic organisms.
R53 - May cause long-term adverse effects in the aquatic environment.
R59 - Dangerous for the ozone layer.
R63 - Possible risk of harm to the unborn child.
R65 - Harmful: may cause lung damage if swallowed.
R66 - Repeated exposure may cause skin dryness or cracking.
R67 - Vapours may cause drowsiness and dizziness.
R68 - Possible risk of irreversible effects.

Last Revision Date

- 21/September/2012

Preparation Date

- 22/August/2012

Disclaimer/Statement of Liability

- To the best of Air Liquide's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either express or implied, are provided. The information contained herein relates only to this specific product. If this gas mixture is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.

Key to abbreviations

NDA = No Data Available