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

1.1. Product identifier		
Product Identity	FL-1644 All Fluorescents	
Alternate Names	FL-1644 All Fluorescents	
1.2. Relevant identified uses of the substance or min	xture and uses advised against	
Intended use	See Technical Data Sheet.	
Application Method	See Technical Data Sheet.	
1.3. Details of the supplier of the safety data sheet		
Company Name	Carco, Inc	
	10333 Shoemaker	
	P.O. Box 13859	
	Detroit, Michigan, USA 48213	
Emergency		
24 hour Emergency Telephone No.	ChemTel 1-800-255-3924 (MIS0001475) International +01-813-248-0585	
Customer Service: Carco, Inc	Phone +1 (313) 925-9000 Fax +1 (313) 925-9602 Email: sales@carcousa.net	

2. Hazard identification of the product

2.1. Classification of the substance or mixture

Flam. Liq. 2;H225	Highly Flammable liquid and vapor.
Eye Irrit. 2;H319	Causes serious eye irritation.
STOT SE 3;H336	May cause drowsiness or dizziness.

2.2. Label elements



Danger

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H336 May cause drowsiness and dizziness.

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[Prevention]:

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 / light / equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

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

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P304+312 IF INHALED: Call a POISON CENTER or doctor / physician if you feel unwell.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P337+313 If eye irritation persists: Get medical advice / attention.

P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

[Storage]:

P403+233 Store in a well ventilated place. Keep container tightly closed.

P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Acetone CAS Number: 0000067-64-1	75 - 100	Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336	[1][2]
Titanium dioxide CAS Number: 0013463-67-7	5 - 10	Not Classified	[1][2]
N-Butyl Acetate CAS Number: 0000123-86-4	1 - 5	Flam. Liq. 3;H226 STOT SE 3;H336	[1][2]
Ethanol CAS Number: 0000064-17-5	1 - 5	Flam. Liq. 2;H225 Eye Irrit. 2;H319 (@ > 50%)	[1][2]
Cellulose Nitrate CAS Number: 0009004-70-0	1 - 5	Flam. Sol. 1;H228	[1]

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Isopropyl Alcohol CAS Number: 0000067-63-0	1 - 5	Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336	[1][2]
ETHYL ACETATE, EAC CAS Number: 0000141-78-6	1 - 5	Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336	[1][2]

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

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

*The full texts of the phrases are shown in Section 16.

Section 4. First aid measures

4.1. Description of first aid measures In all cases of doubt, or when symptoms persist, seek medical attention. General Never give anything by mouth to an unconscious person. Inhalation Move the exposed person to fresh air at once. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if any discomfort continues. Eyes Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues. Remove contaminated clothing. Wash skin thoroughly with soap and water or use a Skin recognized skin cleanser. DO NOT INDUCE VOMITING! If swallowed, vomiting may occur spontaneously. If Ingestion vomiting occurs, keep head below hips to prevent aspiration into lungs. Rinse mouth thoroughly. Get medical attention. 4.2. Most important symptoms and effects, both acute and delayed Treat symptomatically. Exposure to solvent vapor concentrations from the component **Overview** solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. See section 2 for further details. Inhalation May cause drowsiness or dizziness. Eyes Causes serious eye irritation.

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Section 5. Fire-fighting measures

5.1. Extinguishing media

Use foam, extinguishing powder, dry chemicals, or carbon dioxide. Water may be ineffective. Water may be used to keep fire exposed containers cool.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: None

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

Keep container tightly closed.

Ground / bond container and receiving equipment.

Use explosion-proof electrical / ventilating / light / equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

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

5.3. Advice for fire-fighters

In the event of fire, wear full protective clothing and NIOSH Approved Self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. Move container from fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapors.

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Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove sources of ignition, do not turn lights or unprotected electrical equipment on or off. In case of a major spill or spillage in a confined space evacuate the area and check that solvent vapor levels are below the Lower Explosive Limit before re-entering.

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Avoid sparks, flames, heat and smoking. Ventilate. Wear necessary protective equipment. Absorb in vermiculite, dry sand or earth and place into containers.

Small Spill: Use a non-combustible material like vermiculite, sand or earth to soak up product and place in a container for later disposal.

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Section 7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

Keep in containers lightly closed in a cool, well ventilated place. Do not store with oxidizing agents or acids. Keep in the original container. Avoid direct sunlight

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

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool dry area, away from heat, sparks and open flame. Keep containers sealed when not in use. Store out of direct sunlight.

Store in a cool dry place.

Incompatible materials: Store away from oxidizers and acids.

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

7.3. Specific end use(s)

No data available.

Section 8. Exposure controls and personal protection

8.1. Control parameters

Exposure					
CAS No.	Ingredient	Source	Value		
0000064-17-5	Ethanol	OSHA	TWA 1000 ppm (1900 mg/m3)		
		ACGIH	No Established Limit		
		NIOSH	TWA 1000 ppm (1900 mg/m3)		
0000067-63-0	Isopropyl Alcohol	OSHA	TWA 400 ppm (980 mg/m3) STEL 500 ppm		
		ACGIH	TWA: 200 ppm STEL: 400 ppm		
		NIOSH	TWA 400 ppm (980 mg/m3) ST 500 ppm (1225 mg/m3)		
0000067-64-1	Acetone	OSHA	TWA 1000 ppm (2400 mg/m3) STEL 2400 mg/m3		
		ACGIH	TWA: 500 ppm STEL: 750 ppm		
		NIOSH	250 ppm (590 mg/m3) TWA		
0000123-86-4	N-Butyl Acetate	OSHA	TWA 150 ppm (710 mg/m3		
		ACGIH	TWA: 20 ppm		
		NIOSH	TWA 150 ppm (710 mg/m3) ST 200 ppm (950 mg/m3)		
0000141-78-6	ETHYL ACETATE, EAC	OSHA	TWA 400 ppm (1400 mg/m3)		
		ACGIH	TWA: 150 ppm		
		NIOSH	TWA 400 ppm (1400 mg/m3)		
0009004-70-0	Cellulose Nitrate	OSHA	No Established Limit		
		ACGIH	No Established Limit		
		NIOSH	No Established Limit		
0013463-67-7	Titanium dioxide	OSHA	TWA 15 mg/m3		
		ACGIH	TWA: 10 mg/m3		

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8.2. Exposure controls	
Respiratory	Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved air-purifying respirator. The following should be effective types of air purifying respirators: Organic vapor cartridge.
Eyes	Wear safety glasses with side shields to protect the eyes. An eye wash station is suggested as a good workplace practice.
Skin	Overalls which cover the body, arms and legs should be worn. Skin should not be exposed. All parts of the body should be washed after contact. Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: Butyl rubber. Polyethylene/ethyl vinyl alcohol laminate ("PE/EVAL"). Examples of acceptable glove barrier materials include: Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). Viton
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
	Do not smoke, or drink in work area. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.
	4.7.1

See section 2 for further details.

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Colored Liquid
Odor	Sweet acetone
Odor threshold	Not determined
рН	Not Measured
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	56 C 132 F
Flash Point	-18C 0F Method (Setaflash)
Evaporation rate (Ether = 1)	5.2 (BU.AC=1)
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: 2.6 (% in air)
	Upper Explosive Limit: 12.8 (% in air)
Vapor pressure (Pa)	< 185 (mm Hg)
Vapor Density	> 2 (air=1)
Specific Gravity	0.810 g/mL Temperature (C) 20
Solubility in Water	Not Measured

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Partition coefficient n-octanol/water (Log Kow) Auto-ignition temperature Decomposition temperature Viscosity (cSt) VOC Content % Volatile 9.2. Other information

No other relevant information.

Not Measured Not Measured Not Measured 94 wt-% Approximately 6.4 lbs/gal 75-85% (%-wt)

Section 10. Stability and reactivity

10.1. Reactivity
Hazardous Polymerization will not occur.
10.2. Chemical stability
Stable under normal circumstances.
10.3. Possibility of hazardous reactions
No data available.
10.4. Conditions to avoid
High temperatures and fires.
10.5. Incompatible materials
Store away from oxidizers and acids.
10.6. Hazardous decomposition products
None

Section 11. Toxicological information

Acute toxicity

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50,	Skin LD50,	Inhalation	Inhalation	Inhalation

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	mg/kg	mg/kg	Vapor LC50, mg/L/4hr	Dust/Mist LC50, mg/L/4hr	Gas LC50, ppm
Acetone - (67-64-1)	5,800.00, Rat - Category: NA	7,426.00, Guinea Pig - Category: NA	76.00, Rat - Category: NA	50.10, Rat - Category: NA	No data available
Titanium dioxide - (13463-67-7)	> 5,000.00, Mouse - Category: NA	10,000.00, Rabbit - Category: NA	No data available	6.82, Rat - Category: NA	No data available
N-Butyl Acetate - (123-86-4)	10,760.00, Rat - Category: NA	17,600.00, Rabbit - Category: NA	No data available	No data available	No data available
Ethanol - (64-17-5)	10,470.00, Rat - Category: NA	20,000.00, Rabbit - Category: NA	124.70, Rat - Category: NA	No data available	No data available
Cellulose Nitrate - (9004-70-0)	5,000.00, Mouse - Category: 5	No data available	No data available	No data available	No data available
Isopropyl Alcohol - (67-63-0)	4,710.00, Rat - Category: 5	12,800.00, Rat - Category: NA	72.60, Rat - Category: NA	No data available	No data available
ETHYL ACETATE, EAC - (141-78-6)	4,934.00, Rabbit - Category: 5	20,001.00, Rabbit - Category: NA	58.60, Rat - Category: NA	No data available	No data available

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000064-17-5	Ethanol	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: Yes; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0000067-63-0	Isopropyl Alcohol	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
0000067-64-1	Acetone	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0000123-86-4	N-Butyl Acetate	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0000141-78-6	ETHYL ACETATE, EAC	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0009004-70-0	Cellulose Nitrate	OSHA	Regulated Carcinogen: No

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		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0013463-67-7	Titanium dioxide	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: Yes; Group 3: No; Group 4: No;

Classification	Category	Hazard Description
Acute toxicity (oral)		Not Applicable
Acute toxicity (dermal)		Not Applicable
Acute toxicity (inhalation)		Not Applicable
Skin corrosion/irritation		Not Applicable
Serious eye damage/irritation	2	Causes serious eye irritation.
Respiratory sensitization		Not Applicable
Skin sensitization		Not Applicable
Germ cell mutagenicity		Not Applicable
Carcinogenicity		Not Applicable
Reproductive toxicity		Not Applicable
STOT-single exposure	3	May cause drowsiness or dizziness.
STOT-single exposure		Not Applicable
STOT-repeated exposure		Not Applicable
Aspiration hazard		Not Applicable

Section 12. Ecological information

12.1. Toxicity

Toxic to aquatic life

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Acetone - (67-64-1)	100.00, Pimephales promelas	10.00, Daphnia magna	20.565 (72 hr), Ulva pertusa
Titanium dioxide - (13463-67-7)	294.00, Oryzias latipes	501.00, Daphnia magna	51.00 (72 hr), Pseudokirchnerella subcapitata
N-Butyl Acetate - (123-86-4)	18.00, Pimephales promelas	44.00, Daphnia sp	246.00 (72 hr), Pseudokirchnerella subcapitata
Ethanol - (64-17-5)	42.00, Oncorhynchus mykiss	2.00, Daphnia magna	17.921 (96 hr), Ulva pertusa
Cellulose Nitrate - (9004-70-0)	Not Available	Not Available	579.00 (96 hr), Pseudokirchneriella subcapitata
Isopropyl Alcohol - (67-63-0)	1,400.00, Lepomis macrochirus	100.00, Daphnia magna	100.00 (72 hr), Scenedesmus subspicatus

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ETHYL ACETATE, EAC - (141-78-6)	230.00, Pimephales	100.00, Daphnia	100.00 (72 hr), Desmodesmus
	promelas	magna	subspicatus

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

Section 13. Disposal considerations

13.1. Waste treatment methods

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

Section 14. Transport information						
	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ІСАО/ІАТА			
14.1. UN number	UN1210	UN1210	UN1210			
14.2. UN proper shipping name	Printing ink	Printing ink	Printing ink			
14.3. Transport	DOT Hazard Class: 3	IMDG: 3	Air Class: 3			
hazard class(es)	DOT Label: 3	Sub Class: Not Applicable EmS: F-E, S-D	Packing Instruction:Cargo Only - 364 Passenger -353			
14.4. Packing group	II	II	II			
14.5. Environmental	hazards					

IMDG Marine Pollutant: No

14.6. Special precautions for user

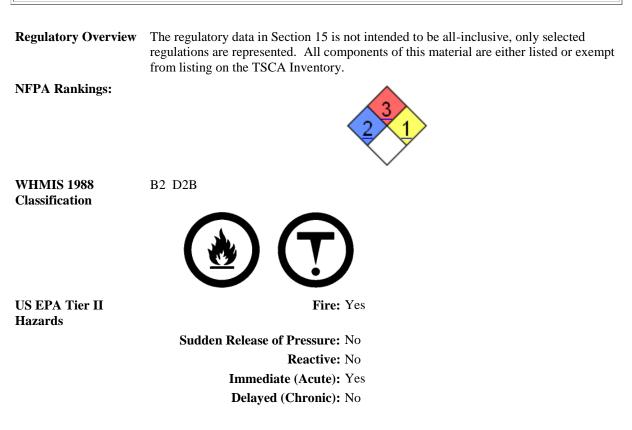
No further information

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not Applicable

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Section 15. Regulatory information



Note: Ethanol (Ethyl alcohol) has been placed on the California Proposition 65 Cancer and Developmental Lists when in alcoholic beverages.

EPCRA 311/312 Chemicals and RQs (lbs):

Acetone (5,000.00)

N-Butyl Acetate (5,000.00)

ETHYL ACETATE, EAC (5,000.00)

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

Ethanol

Isopropyl Alcohol

Proposition 65 - Carcinogens (>0.0%):

Titanium dioxide

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

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To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

Acetone N-Butyl Acetate Cellulose Nitrate Ethanol ETHYL ACETATE, EAC Isopropyl Alcohol Titanium dioxide Pennsylvania RTK Substances (>1%): Acetone N-Butyl Acetate Cellulose Nitrate Ethanol ETHYL ACETATE, EAC

Isopropyl Alcohol

Titanium dioxide

Section 16. Other information

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The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H225 Highly flammable liquid and vapor.

H226 Flammable liquid and vapor.

H228 Flammable solid.

H319 Causes serious eye irritation.

H336 May cause drowsiness and dizziness.

This product is RoHS and REACH compliant. It does not contain any of the RoHS listed substances. It does not contain any chemical from the candidate list of Substances of Very High Concern (SVHC), Annex XIV, or Annex XVII of Reach.

This information is based on our present knowledge. However, it does not constitute a guarantee for any specific

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product properties.

Carco urges the recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. The use of this product is beyond the control Carco or its distributor, therefore, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product.

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