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

1.1. Product identifier			
Product Identity	XX-1346 Marking Fluid, Black		
Alternate Names	XX-1346 Marking Fluid, Black		
1.2. Relevant identified uses of the substance or	mixture and uses advised against		
Intended use	See Technical Data Sheet.		
1.3. Details of the supplier of the safety data she	eet		
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 Eye Dam. 2A;H319 STOT SE 3;H336 **2.2. Label elements** 

Highly Flammable liquid and vapor. Causes serious eye irritation. May cause drowsiness or dizziness.



H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H336 May cause drowsiness and dizziness.

## [Prevention]:

P210 Keep away from heat, sparks, open flames, and other ignition sources - No smoking.

P233 Keep container tightly closed.

P240 Ground, bond container and receiving equipment.

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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 or 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 or 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 or container in accordance with local and 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]
N-Butyl Acetate CAS Number: 0000123-86-4	5 - 10	Flam. Liq. 3;H226 STOT SE 3;H336	[1][2]
Ethanol CAS Number: 0000064-17-5	1 - 5	Flam. Liq. 2;H225	[1][2]
Cellulose Nitrate CAS Number: 0009004-70-0	1 - 5	Flam. Sol. 1;H228	[1]
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]

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Carbon black CAS Number: 0001333-86-4	1 - 5	Not Classified	[1][2]
		1	

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 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

Description of mot a	in incustines
General	In all cases of doubt, or when symptoms persist, seek medical attention. 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.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	DO NOT INDUCE VOMITING! If swallowed, vomiting may occur spontaneously. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Rinse mouth thoroughly. Get medical attention.
4.2. Most important symp	ptoms and effects, both acute and delayed
Overview	Treat symptomatically. 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. See section 2 for further details.
Inhalation	May cause drowsiness or dizziness.
Eyes	Causes serious eye irritation.

#### 4.1. Description of first aid measures

## 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, and other ignition sources - No smoking.

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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.

## 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.

Store in a well ventilated place

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

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

No data available.

## Section 8. Exposure controls / 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: 150 ppm, STEL 200 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)			
0001333-86-4	Carbon black	OSHA	TWA 3.5 mg/m3			
		ACGIH	TWA: 3 mg/m3			
		NIOSH	TWA 3.5 mg/m3 Ca TWA 0.1 mg PAHs/m3 [in presence of polycyclic aromatic hydrocarbons (PAHs)]			
0009004-70-0	Cellulose Nitrate	OSHA	No Established Limit			
		ACGIH	No Established Limit			
		NIOSH	No Established Limit			

## 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

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	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.
Other Work Practices	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.

See section 2 for further details.

## Section 9. 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	56C 132F
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)
Relative Density	0.810 g/mL Temperature (C) 20
Solubility in Water	Not Measured
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured
VOC Content	94 wt-% Approximately 6.4 lbs/gal
% Volatile	75-85% (%-wt)
9.2. Other information	
No other relevant information.	

## Section 10. Stability and reactivity

## 10.1. Reactivity

Hazardous Polymerization will not occur.

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#### **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, mg/kg	Skin LD50, mg/kg	<i>,</i>		Inhalation Gas LC50, ppm	
Acetone - (67-64-1)	5,800.00, Rat -	7,426.00, Rabbit -	76.00, Rat -	50.10, Rat -	No data	
	Category: NA	Category: NA	Category: NA	Category: NA	available	
N-Butyl Acetate - (123-86-4)	10,760.00, Rat -	17,600.00, Rabbit	No data	No data	No data	
	Category: NA	- Category: NA	available	available	available	
Ethanol - (64-17-5)	10,470.00, Rat -	17,100.00, Rabbit	124.70, Rat -	No data	No data	
	Category: NA	- Category: NA	Category: NA	available	available	
Cellulose Nitrate - (9004-70-0)	5,000.00, Mouse -	No data	No data	No data	No data	
	Category: 5	available	available	available	available	
Isopropyl Alcohol - (67-63-0)	5,840.00, Rat -	12,800.00, Rabbit	72.60, Rat -	No data	No data	
	Category: NA	- Category: NA	Category: NA	available	available	
ETHYL ACETATE, EAC - (141-78-6)	4,934.00, Rat -	20,001.00, Rabbit	58.60, Rat -	No data	No data	
	Category: 5	- Category: NA	Category: NA	available	available	
Carbon black - (1333-86-4)	10,001.00, Rat -	No data	No data	No data	No data	
	Category: NA	available	available	available	available	

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## Carcinogen Data

CAS No.	Ingredient	Source		Value	
0000064-17-5	Ethanol	OSHA	Regulated C	Carcinogen: No	
		NTP	Known: No	; Suspected: No	
		IARC	Group 1: Y	es; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;	
		ACGIH	A3		
0000067-63-0	Isopropyl Alcohol	OSHA	Regulated C	Carcinogen: No	
		NTP	Known: No; Suspected: No		
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;		
		ACGIH	A4		
0000067-64-1	Acetone	OSHA	Regulated C	Carcinogen: No	
		NTP	Known: No	; Suspected: No	
		IARC	Group 1: N	o; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;	
		ACGIH	A4		
0000123-86-4	N-Butyl Acetate	OSHA	Regulated C	Carcinogen: No	
		NTP	Known: No	; Suspected: No	
		IARC	Group 1: N	o; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;	
		ACGIH	No Establis	hed Limit	
0000141-78-6	ETHYL ACETATE, EAC	OSHA	Regulated C	Carcinogen: No	
		NTP	Known: No	; Suspected: No	
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;		
		ACGIH	No Establis	hed Limit	
0001333-86-4	Carbon black	OSHA		Carcinogen: No	
		NTP	Known: No; Suspected: No		
		IARC	Group 1: No; Group 2a: No; Group 2b: Yes; Group 3: No; Group 4: No;		
		ACGIH	A3		
0009004-70-0	Cellulose Nitrate	OSHA	Regulated Carcinogen: No		
		NTP		; Suspected: No	
		IARC	-	o; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;	
		ACGIH	No Establis	hed Limit	
Classificatior	1	Ca	tegory	Hazard Description	
Acute toxicity	v (oral)			Not Applicable	
Acute toxicity	(dermal)			Not Applicable	
Acute toxicity				Not Applicable	
Skin corrosio	· · · ·			Not Applicable	
Serious eye damage/irritation			2A	Causes serious eye irritation.	
Respiratory sensitization				Not Applicable	
Skin sensitization				Not Applicable	
Germ cell mutagenicity				Not Applicable	
Carcinogenici				Not Applicable	
Reproductive	•			Not Applicable	
STOT-single exposure			3	May cause drowsiness or dizziness.	

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STOT-single exposure	 Not Applicable
STOT-repeated exposure	 Not Applicable
Aspiration hazard	 Not Applicable

## Section 12. Ecological information

## 12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data. Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Acetone - (67-64-1)	8,120.00, Pimephales promelas	8,800.00, Daphnia pulex	7,000.00 (96 hr), Pseudokirchneriella 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)	15,400.00, Lepomis macrochirus	10,001.00, 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)	10,000.00, Pimephales promelas	Not Available	Not Available
ETHYL ACETATE, EAC - (141-78-6)	230.00, Pimephales promelas	100.00, Daphnia magna	101.00 (72 hr), Desmodesmus subspicatus
Carbon black - (1333-86-4)	1,000.00, Danio rerio	Not Available	10,001.00 (72 hr), Desmodesmus 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.

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## Section 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	UN1210	UN1210	UN1210
14.2. UN proper shipping name	g Printing ink	Printing ink	Printing ink
14.3. Transport hazard class(es)	<b>DOT Hazard Class:</b> 3 <b>DOT Label:</b> 3	IMDG: 3 Sub Class: Not Applicable EmS: F-E, S-D	Air Class: 3 Packing Instruction: Cargo Only - 364, Passenger -353
14.4. Packing group	II	II	П
14.5. Environmental hazards			
IMDG	Marine Pollutant: No		
14.6. Special precautions for user			
	Not Applicable		
	No further information		
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code			
	Not Applicable		
Section 15. Regulatory information			
Regulatory Overview	<b>ry Overview</b> The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented. All components of this material are either listed or exempt from listing on the TSCA Inventory.		
NFPA Rankings:		3	



**US EPA Tier II Hazards** 

Fire: Yes Sudden Release of Pressure: No Reactive: No Immediate (Acute): Yes Delayed (Chronic): No

**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)

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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%):

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

#### **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%):**

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

## 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.

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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 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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