

## Auto air conditioning gas replacement (hydro-carbon replacement for R134A)

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### PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** Auto air conditioning gas replacement  
**SDS Number:** 1030  
**Revision Date:** 01/08/2020  
**Version:** 2.0  
**Product Description:** Refrigerant

**Company:** JD Car Sales  
Crossoaks Farm, Crossoaks Lane, Shenley WD6  
5PH  
**Emergency:** CHEMTREC 1-800-424-9300PH

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### HAZARDS IDENTIFICATION

#### Classification of the Substance or Mixture

##### GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

Physical, Flammable Gases, 1  
Physical, Gases Under Pressure, Compressed Gas  
Health, Skin sensitization, 1  
Health, Skin corrosion/irritation, 2

#### GHS Label Elements, Including Precautionary Statements

**GHS Signal Word:** DANGER

**GHS Hazard Pictograms:**



**GHS Hazard Statements:**

H220 - Extremely flammable gas  
H280 - Contains gas under pressure; may explode if heated  
H317 - May cause an allergic skin reaction  
H315 - Causes skin irritation  
OSHA-HO! - MAY DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION.

**GHS Precautionary Statements:**

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.  
P272 - Contaminated work clothing should not be allowed out of the workplace.  
P280 - Wear respiratory protection, cold insulating gloves, eye protection, protective clothing.  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.  
P321 - Specific treatment (see section 4).  
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P362 + P364 - Take off contaminated clothing and wash it before reuse.  
P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely.  
P381 - In case of leakage, eliminate all ignition sources, if safe to do so.  
P403 - Store in a well-ventilated place.  
P410 + P403 - Protect from sunlight. Store in a well-ventilated place.  
P501 - Dispose of contents/container according to local, regional, national, and international regulations.

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## COMPOSITION/INFORMATION OF INGREDIENTS

Chemical Ingredients:		
CAS#	%	Chemical Name:
68476-85-7	99%	Petroleum gases, liquefied
-40-7	1%	Proprietary

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## FIRST AID MEASURES

- Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Immediately call a POISON CENTER or doctor/physician.
- Skin Contact:** If frostbite or freezing occurs, immediately flush with plenty of lukewarm water to GENTLY warm the affected area. Do not use hot water. Do not rub affected area. Get immediate medical attention.
- Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
- Ingestion:** Do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.

### 4.1. Description of First Aid Measures

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

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

**Symptoms/Injuries:** Gas can be toxic as a simple asphyxiant by displacing oxygen from the air.

**Ingestion:** An unlikely route of exposure for a gas.

**Inhalation:** Asphyxiant gas.

**Skin Contact:** May cause frostbite. Exposure may produce an allergic reaction.

**Eye Contact:** Contact with the liquefied gas causes frostbite.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

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## FIRE FIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Water spray, dry powder, or carbon dioxide can be directed at flame area to reduce fire intensity.

**Unsuitable Extinguishing Media:** Do not extinguish flames unless leak can be stopped.

### 5.2. Special Hazards Arising from the Substance or Mixture

**Fire Hazard:** Extremely flammable gas.

**Explosion Hazard:** Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

**Reactivity:** Contains gas under pressure; may explode if heated.

### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** If possible, stop flow of gas. Use water to cool fire-exposed tanks, surroundings, and to protect personnel working on shut off. If leak cannot be stopped, evacuate area. Fight fire remotely due to the risk of explosion.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

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## ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray). Use special care to avoid static electric charges. Keep away from heat, sparks, open flames, hot surfaces. No smoking.

#### 6.1.1. For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

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**Emergency Procedures:** Evacuate unnecessary personnel.

### 6.1.2. For Emergency Responders

**Protective Equipment:** Equip clean up crew with proper protection.

**Emergency Procedures:** Stop Leak if safe to do so. Eliminate ignition sources. Ventilate area.

### 6.2. Environmental Precautions

Avoid release to the environment.

### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. **Methods for Cleaning Up:** Contact competent authorities after a spill.

### 6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

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## HANDLING AND STORAGE

### Handling Precautions:

#### 7.1. Precautions for Safe Handling

**Precautions for Safe Handling:** Personnel should be trained to regularly inspect equipment such as pumps, hoses, and valves. Do not breathe gas. Ensure there is adequate ventilation. Close valve after each use and when empty. Open valve slowly to avoid pressure shock.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

### Storage Requirements:

#### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations. Keep at temperatures below 52 °C/125 °F.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep in fireproof place. Store locked up.

**Incompatible Products:** Heat sources. Oxidizers.

**Special Rules on Packaging:** Store in containers fitted with suitable release valve.

#### 7.3. Specific End Use(s):

Refrigerant

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## EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering Controls:

#### 8.1. Control Parameters

Petroleum gases, liquefied (68476-85-7)

USA ACGIH	ACGIH TWA (ppm)	:1000ppm
USA NIOSH	NIOSH REL (TWA) (mg/m3)	:1800mg/m3
USA NIOSH	NIOSH REL (TWA) (ppm)	:10000ppm
USA IDLH	US IDLH (ppm)	:2100ppm (10% LEL)
USA OSHA	OSHA PEL (TWA) (mg/m3)	:1800mg/m3
USA OSHA	OSHA PEL (TWA) (ppm)	:1000ppm

### Personal Protective Equipment:

HMIS PP, J | Splash Goggles, Gloves, Apron, Dust and Vapor Resp

HMIS PP, H | Splash Goggles, Gloves, Apron, Vapor Respirator

HMIS PP, 0 | Face Shield & Eye Protection

HMIS PP, K | Full Face Respirator, Gloves, Full Suit, Boots

Petroleum gases, liquefied cas#:(68476-85-7) [99%]

PPE



#### Personal Protective Equipment

**Eye/Face Protection:** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin Protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Full Contact:** Material: Fluorinated rubber Minimum layer thickness: 0.7 mm Break through time: 480 min  
Material tested:Vitoject (KCL 890 / Aldrich 2677698, Size M)

**Splash Contact:** Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 60 min Material tested:Camatril (KCL 730 / Aldrich 2677442, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49

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(0)6659 87300, e-mail sales@kcl.de, test method:EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection:** Impervious clothing, Flame retardant anti-static protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory Protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of Environmental Exposure:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Proprietary - Odorant and Dye cas#:(-40-7) [1%]

**Eye/Face Protection:** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

**Skin Protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

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Petroleum gases, liquefied (68476-85-7)

USAACGIH	ACGIH TWA (ppm)	: 1000ppm
USANIOSH	NIOSH REL (TWA) (mg/m3)	: 1800mg/m3
USANIOSH	NIOSH REL (TWA) (ppm)	: 1000ppm
USAIDLH	USIDLH (ppm)	: 2100ppm (10% LEL)
USA OSHA	OSHA PEL (TWA) (mg/m3)	: 1800mg/m3
USA OSHA	OSHA PEL (TWA) (ppm)	: 1000ppm

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### PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Clear, colorless gas	<b>Odor:</b>	Odor added
<b>Physical State:</b>	Gas	<b>Solubility:</b>	N/A
<b>Odor Threshold:</b>	N/A	<b>Freezing/Melting Pt.:</b>	- 176.67 °C (- 286 °F)
<b>Spec Grav./Density:</b>	0.53	<b>Flash Point:</b>	N/A
<b>Viscosity:</b>	N/A	<b>Vapor Density:</b>	0.53 (water=l)
<b>Boiling Point:</b>	- 37.8 °C (- 36.1 °F)	<b>Auto-Ignition Temp:</b>	644.44 ° (1246 ° F)
<b>Partition Coefficient:</b>	N/A	<b>UFL/LFL:</b>	9 %/2.6 %
<b>Vapor Pressure:</b>	482.6 kPa (70) psi @ 21.1 °C (70 °F)		
<b>pH:</b>	N/A		

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Evap. Rate:	N/A
Decomp Temp:	N/A

### 10 STABILITY AND REACTIVITY

<b>Reactivity:</b>	Contains gas under pressure; may explode if heated. Vapor may ignite if exposed to static discharge.
<b>Chemical Stability:</b>	Stable under recommended handling and storage conditions (see section 7).
<b>Conditions to Avoid:</b>	Direct sunlight. Extremely high or low temperatures. Open flame. Heat. Sparks. Static Discharge.
<b>Materials to Avoid:</b>	Oxidizing agents such as chlorine, permanganates and dichromates.
<b>Hazardous Decomposition:</b>	Carbon oxides (CO, CO <sub>2</sub> ).
<b>Hazardous Polymerization:</b>	Hazardous polymerization will not occur.

### 11 TOXICOLOGICAL INFORMATION

#### 11.1 Information On Toxicological Effects

**Acute Toxicity:** Not classified  
Petroleum gases, liquefied (68476-85-7)  
LC50 Inhalation Rat (mg/l): 658 mg/l/4h

**Skin Corrosion/Irritation:** Not classified  
**Serious Eye Damage/Irritation:** Not classified  
**Respiratory or Skin Sensitization:** May cause an allergic skin reaction.  
**Germ Cell Mutagenicity:** Not classified  
**Carcinogenicity:** Not classified  
**Reproductive Toxicity:** Not classified  
**Specific Target Organ Toxicity (Single Exposure):** Not classified  
**Specific Target Organ Toxicity (Repeated Exposure):** Not classified  
**Aspiration Hazard:** Not classified  
**Symptoms/Injuries After Ingestion:** An unlikely route of exposure for a gas.  
**Symptoms/Injuries After Inhalation:** Asphyxiant gas.  
**Symptoms/Injuries After Skin Contact:** May cause frostbite. Exposure may produce an allergic reaction.  
**Symptoms/Injuries After Eye Contact:** Contact with the liquefied gas causes frostbite.

### 12 ECOLOGICAL INFORMATION

**12.1. Toxicity:** Harmful to aquatic life with long lasting effects.  
**12.2. Persistence and Degradability:** No additional information available  
**12.3. Bioaccumulative Potential**  
Enviro-Safe Refrigerant with Dye 5 oz  
Log Pow: < 1  
Petroleum gases, liquefied (68476-85-7)  
Log Pow: 2.3  
**12.4. Mobility in Soil:** No additional information available  
**12.5. Other Adverse Effects**  
No additional information available

### 13 DISPOSAL CONSIDERATIONS

**13.1. Waste Treatment Methods**  
**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.  
**Additional Information:** Empty containers may contain flammable or combustible vapors. Do not reuse without adequate precautions.

### 14 TRANSPORT INFORMATION

In Accordance with ICAO/IATA/IMDG/DOT

#### 14.1. In Accordance with DOT

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**Proper Shipping name:** 1D8000, Consumer commodity, 9

**DOT Special Provision:** DOT-SP 11917 or DOT-SP 15593

### 14.2. In Accordance with IMDG

**Proper Shipping Name:** PETROLEUM GASES, LIQUEFIED

**Hazard Class:** 2

**Identification Number:** UN1075

**Label Codes:** 2.1

**EmS-No. (Fire):** F-D

**EmS-No. (Spillage):** S-U 14.3.

### In Accordance with IATA

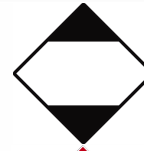
**Proper Shipping Name:** PETROLEUM GASES, LIQUEFIED

**Identification Number:** UN1075

**Hazard Class:** 2

**Label Codes:** 2.1 ERG

**Code (IATA):** IOL



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## REGULATORY INFORMATION

[%] RQ (CAS#) Substance - Reg Codes

[99%] Petroleum gases, liquefied (68476-85-7) MASS, OSHAWAC, PA, TSCA, TXAIR

[1 %] Proprietary (-40-7)

This product does not contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

Regulatory Code Legend

MASS= MA Massachusetts Hazardous Substances List

OSHAWAC= OSHA Workplace Air Contaminants

PA= PA Right-To-Know List of Hazardous Substances

TSCA= Toxic Substances Control Act

TXAIR= TX Air Contaminants with Health Effects Screening Level

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## OTHER INFORMATION

### GHS Full Text Phrases

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard Category 3

Flam. Gas 1: Flammable gases Category 1

Flam. Liq. 3: Flammable liquids Category 3

Liquefied gas: Gases under pressure Liquefied gas

Simple Asphy: Simple Asphyxiant

Skin Irrit. 2: Skin corrosion/irritation Category 2

Skin Sens. 1: Skin sensitization Category 1

H220: Extremely flammable gas

H226: Flammable liquid and vapor

H280: Contains gas under pressure; may explode if heated

H315: Causes skin irritation

H317: May cause an allergic skin reaction

H410: Very toxic to aquatic life with long lasting effects

H412: harmful to aquatic life with long lasting effects

**Revision Date:** 01/08/2020

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1/1/2020

