

MATERIAL SAFETY DATA SHEET

Sample Name:	Portable car fridge
Sample Model	C15, P8, EP8, C9, C10, C12, C20, C22, C25, C30, C40, C50, C75, B15, B20, B22, FC15, G15, G20, G22, ICE16, T15, T36, T50, T60, K18, K25, K35, MK18, MK18N, MK25, MK25N, MK35, D30, A25, A30, A40, A50, A75, AL42, AR55, ARC22, ARC35, CX30, CX40, CX50, ECX30, ECX40, ECX50, ENX42, ENX52, ENX62, VT50, CF8, CF35, CF45, CF55, NCF35, NCF45, NCF55, NX42, NX52, NX62, NXA42, NXA52, NXA62, TS40, TS50, TS60, TSW40, TSW50, TSW60, E60, E65, E75, E75D, E95, BCD15, BCD15A, BCD20, BCD20A, BCD25, BCD25A, BCD30, BCD30A, BCD35, BCD35A, BCD35AW, BCD35W, BCD80, BCD100, BCD125, BD45, BD60, BD75, BD85, BD108, BD135, TW35, TW45, TW55, TW75, TW75D, TW95, TW95D, TW115, TWW35, TWW45, TWW55, TWW75, TWW95, TWW115, CR50, CR65, CR85, CR141, CR170, BC50, CB40, BCD25W, BCD25AW, BD65, BD110, CF15, CL25, CL30, CL40, CL50, CL75, EC15, EC20, ET36, ET50, ET60, Mini9, M12, MT25, MT35, P15, P18, BP8, BP15, R40, R50, R85, R90, R180, CR130, CR152, CR170, CR226, TD80, TD100, TD120, TDW80, TDW100, TDW120, TF35, TF45, TF55, TFW35, TFW45, TFW55, TS80, TS100, TS120, TSW80, TSW100, TSW120, VT45, AL32, AL52, AL62, FR43, KCD80, KCD100, KCD125, AR60, AR2000, CA2500, CA3000, X30, X40, X50, P20, CR40, CR90, TA35, TA45, TA55, TAW35, TAW45, TAW55, mini11, EP6, P6
Trade mark	Alpicool
Manufacturer Name:	Foshan Alpicool Electric Appliance Co., LTD.
Manufacturer Address:	13A, Xinlong Road, ShilongJiyue Industrial Zone, Xintang Village, Lunjiao Town, Shunde District, Foshan City, Guangdong, China

 Inspected by: Heber He

 Approved by: Kevin Yang
 Technical Manager
 

 Date : Jan.04,2022

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1.PRODUCT AND COMPANY IDENTIFICATION	
Product Identification:	Portable car fridge
Sample Model:	C15, P8, EP8, C9, C10, C12, C20, C22, C25, C30, C40, C50, C75, B15, B20, B22, FC15, G15, G20, G22, ICE16, T15, T36, T50, T60, K18, K25, K35, MK18, MK18N, MK25, MK25N, MK35, D30, A25, A30, A40, A50, A75, AL42, AR55, ARC22, ARC35, CX30, CX40, CX50, ECX30, ECX40, ECX50, ENX42, ENX52, ENX62, VT50, CF8, CF35, CF45, CF55, NCF35, NCF45, NCF55, NX42, NX52, NX62, NXA42, NXA52, NXA62, TS40, TS50, TS60, TSW40, TSW50, TSW60, E60, E65, E75, E75D, E95, BCD15, BCD15A, BCD20, BCD20A, BCD25, BCD25A, BCD30, BCD30A, BCD35, BCD35A, BCD35AW, BCD35W, BCD80, BCD100, BCD125, BD45, BD60, BD75, BD85, BD108, BD135, TW35, TW45, TW55, TW75, TW75D, TW95, TW95D, TW115, TWW35, TWW45, TWW55, TWW75, TWW95, TWW115, CR50, CR65, CR85, CR141, CR170, BC50, CB40, BCD25W, BCD25AW, BD65, BD110, CF15, CL25, CL30, CL40, CL50, CL75, EC15, EC20, ET36, ET50, ET60, Mini9, M12, MT25, MT35, P15, P18, BP8, BP15, R40, R50, R85, R90, R180, CR130, CR152, CR170, CR226, TD80, TD100, TD120, TDW80, TDW100, TDW120, TF35, TF45, TF55, TFW35, TFW45, TFW55, TS80, TS100, TS120, TSW80, TSW100, TSW120, VT45, AL32, AL52, AL62, FR43, KCD80, KCD100, KCD125, AR60, AR2000, CA2500, CA3000, X30, X40, X50, P20, CR40, CR90, TA35, TA45, TA55, TAW35, TAW45, TAW55, mini11, EP6, P6
Trade make:	Alpicool
Supplier:	Foshan Alpicool Electric Appliance Co., LTD. 13A, Xinlong Road, ShilongJiyue Industrial Zone, Xintang Village, Lunjiao Town, Shunde District, Foshan City, Guangdong, China
Emergency Call:	13640116717
E-mail:	michael@alpicool.com

COMPONENT IDENTIFICATION	CAS#
Tetrafluoroethane(R1234yf)	754-12-1

3.HAZARD IDENTIFICATION

Health hazard: basically harmless

Deflagration hazard: Decomposed by heat to produce toxic and corrosive substances. At a certain temperature and pressure, the gaseous product forms a flammable mixture with air.

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4.FIRST AID PROCEDURES

Inhalation: Remove to fresh air. Get medical attention if symptoms persist.

Skin contact: frostbite, treated as hot burns.

Eye contact: Rinse thoroughly with plenty of water immediately.

If irritation persists, seek medical attention. Ingestion: Inadvertently gargle, drink milk or egg white, and seek medical attention.

Rescuer protection: Wear a suitable respirator when ventilation is poor.

5.FIRE AND PROCEDURES

Hazardous characteristics: High temperature heat is used to liberate toxic and corrosive substances: fluorinated atmosphere, carbon oxides.

Fire prevention precautions: All sparks and ignition sources are prohibited and smoking is strictly prohibited. Cool the container/can with misty water. Make sure there is a container to empty the system quickly. In the event of a fire, transfer the container in the fire to a safe place. Firefighter

protection: Wear self-contained breathing apparatus when extinguishing fire.

6.ACCIDENTAL RELEASE MEASURES

Personal protection: Avoid contact with eyes and skin and avoid inhalation of vapors. In enclosed areas: ventilate or wear self-contained breathing apparatus (risk of hypoxia). Eliminate all ignition sources. Smoking is strictly prohibited.

7.HANDLING AND STORAGE

Technical precautions: storage and handling Note: liquefied gases. In the workplace, ensure proper ventilation and ventilation. Safety work recommendations: ignition source is strictly prohibited, contact with hot surfaces is strictly prohibited, and smoking is strictly prohibited.

Technical measures / storage conditions: in a cool, well-ventilated place. Keep away from heat and ignition sources. Keep away from open flames, hot surfaces and ignition sources. Keep the container away from heat and avoid overpressure.

Incompatible materials: basic oxygen oxides, alkaline earth metals, strong oxidants, metal particles (lead, money, bismuth).

Suitable materials for packaging materials: ordinary steel, stainless steel.

Materials to avoid: alloys and plastics with a magnesium content higher than 2%.

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8.PERSONAL PROTECTION

Protection regulations: Ensure that the workplace is fully ventilated and ventilated.

Respiratory protection: Wear a suitable respirator when ventilation is poor. Hand protection: Wear protective gloves.

Eye protection: Wear safety glasses.

Personal hygiene: Avoid contact with skin and eyes and avoid inhalation of vapors. Smoking is strictly prohibited.

9.PHYSICAL PROPERTIES

Physical state : Liquefied gas

Colour : colorless

pH value : Not applicable

Melting point/freezing point : -101°C

Boiling point, initial boiling point and boiling range : -29.4°C

Density : 1091(25°C),990 (50°C),883(70°C)

Molecular weight : 114.0

Decomposition temperature : >370°C

10.STABILITY AND REACTIVITY

Conditions to avoid: principle heat source and ignition source. Avoid contact with open flames and hot metal surfaces.

Substances to avoid contact: alkaline hydroxides, alkaline earth metals, strong oxidants, metal powders (aluminum, manganese, zinc).

Hazardous decomposition products: Decomposition by heat at high temperatures produces corrosive and toxic substances: hydrogen fluoride (hydrofluoric acid), carbon oxides. Other information: This product is stable at ambient temperature. At a certain temperature and pressure, the gaseous product forms a flammable mixture with air.

MATERIAL SAFETY DATA SHEET**11. TOXICOLOGICAL INFORMATION**

Acute toxicity:

Inhalation: Like other volatile aliphatic halogenated compounds, due to vapor accumulation and/or large inhalation, this product can cause: loss of consciousness and heart disease due to stress and hypoxia, and there is a risk of death. Animal test: Inhalation is harmless.

LC50/inhalation/4 hours/rat > 400000 ppm (50%) Inhibition and anesthesia of the central nervous system. Local influence:

Skin contact: Contact with ejected liquefied gas can cause frostbite. Eye contact: Contact with the ejected liquefied gas can cause frostbite. Sensitization:

Skin contact: non-skin sensitizer (guinea pig).

Chronic toxicity: Long-term inhalation experiments in animals indicate no special chronic toxicity effects. Special impact:

Genotoxicity: No genotoxicity based on available experimental data. Carcinogenicity: no carcinogenicity. Animal test (rat / inhalation / oral). Reproductive toxicity:

Embryonic development: There is no congenital teratogenic hazard and embryotoxic hazard at doses where rodents are not toxic to the mother. (rat/rabbit/inhalation)

Fertility: No toxic effects on fertility. (mouse/inhalation)

12. ECOLOGICAL INFORMATION

Mobility: Microabsorption in soil sediments. Log Koc = 1.5 (calculated value). Persistence / degradability:

In water: not easily biodegradable, degraded by 3% after 28 days.

In air: Degradation in the atmosphere, half-life = 8.6 to 16.7 years.

Ozone depletion potential: ODP (R-11=1)=0

Halogen global warming potential: HGWP (R-11=1)=0.3

Bioaccumulation: Basically no bioaccumulation. Log Pow=1.06.

13. DISPOSAL CONSIDERATION

Disposal of the product: Recycling or incineration at the waste disposal site.

14. TRANSPORT INFORMATION

UN number: 3358

Danger code: /

Category: 2.1

Transportation within China is subject to the relevant regulations of the Chinese government.

MATERIAL SAFETY DATA SHEET**15. OTHER INFORMATION / ADDITIONAL COMMENTS**

Reference:/ Dangerous chemical safety management regulations. According to the dangerous chemicals safety use, production,Storage, transport, handling and other aspects have made the corresponding stipulation.

16. Other information

The above information are correct, but does not contain all of the information and only used as a guide. The information in this document is based on our current knowledge, it apply to this product as for the correct safety tips. The information does not guarantee the properties of this product. Our company is not responsible for any damages caused by the products.