

Section 1. Product and Company Identification.

1.1 Model Number; DH240 v1
1.2 Description; 1.5L Automatic Churning Ice Cream Machine, Fast Freeze Compressor Cooling,
 Yoghurt Function
 Refrigerant R600a Isobutane 23 grams.

1.3 Manufacturer;

Dellonda.
 Kempson Way,
 Bury St. Edmunds,
 Suffolk.
 IP32 7AR

1.4 Emergency telephone number; 44 (0) 1284 757 500 (Office Hours)

Date of source compilation; 16/03/2023

Section 2. Hazards Identification.

Not relevant to Model Number identified in 1.1 with Description stated in 1.2.

Section 3. Substances.

3.1 Chemical Name (substance)	3.1 CAS No.	3.2 Concentration Weight	Classification	
			Hazard Class & Category Code	Hazard Statements ¹
Isobutane	75-28-5	100%	Flam. Gas 1 Press. Gas	H220

¹For full text of Statements, see Section 16.

Section 4. First Aid Measures.

4.1 Description of first aid measures

Inhalation

Immediately remove person to fresh air.
 Seek medical attention immediately.

Skin Contact

Flush area with cold water.
 If irritation persists, seek medical attention.

Eye Contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
 If irritation persists, seek medical attention.

Ingestion

Not a primary route of exposure.
 Seek medical attention

Section 5. Fire Fighting Measures.

5.1. Extinguishing media

Water. Carbon Dioxide. Dry Chemical.

5.2. Special hazards arising from the substance or mixture

Gas may travel a considerable distance to an ignition source due to it being heavier than air.

5.3. Advice for fire-fighters

Stop flow of gas.

Use water spray to cool exposed containers.

Increase ventilation.

Extinguish sources of ignition

Section 6. Accidental Release Measures.

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area.

Ventilate area.

Prevent / remove sources of ignition.

6.2. Environmental precautions

No data available

6.3. Methods and material for containment and cleaning up

No data available

6.4. Reference to other sections

See Section 7 for information on Safe Handling

See Section 8 for information of Personal Protective Equipment.

See Section 13 for information on disposal.

Section 7. Handling and Storage.

7.1. Precautions for safe handling

No data available

7.2. Conditions for safe storage, including any incompatibilities

Store in cool, dry, well-ventilated area.

Do not allow temperature to exceed 54 °C. Full and empty containers should be separated.

7.3. Specific end use(s)

Intended for use as the refrigerant gas for the Model Number identified in 1.1 with Description stated in 1.2.

Section 8. Exposure Controls/Personal Protection.

8.1. Control parameters

No data available

8.2. Exposure controls

Appropriate Engineering Controls

Safety shoes to be worn.

Eyewash station.

Eye/Face Protection

Safety goggles that meet specification EN 166

Skin Protection

Protective gloves made from rubber.

Respiratory Protection

Use local exhaust to prevent gas accumulating.

Ventilate area.

Section 9. Physical and Chemical Properties.

9.1. Information on basic physical and chemical properties

The following information is not a technical specification or sales specification.

(a) Appearance:	Colourless
(b) Odour:	Odourless
(c) Odour threshold;	No data available
(d) pH:	No data available
(e) Melting point/freezing point;	-159.6°C (-255.3°F)
(f) Initial boiling point and boiling range;	-11.7°C (10.9°F)
(g) Flash point;	-83°C (-117°F)
(h) Evaporation rate;	No data available
(i) Flammability (solid, gas);	No data available
(j) Upper/lower flammability or explosive limits;	Upper, 8.4 % Lower, 1.8 %
(k) Vapour pressure;	45 psia (@70 F)
(l) Vapour density;	2.06 (Air = 1)
(m) Relative density;	No data available
(n) Solubility(ies);	Slightly soluble in water
(o) Partition coefficient: n-octanol/water;	No data available
(p) Auto-ignition temperature;	420°C (-778°F)
(q) Decomposition temperature;	No data available
(r) Viscosity;	No data available
(s) Explosive properties;	No data available
(t) Oxidising properties.	No data available

9.2 Other information

No data available

Section 10. Stability and Reactivity.

10.1. Reactivity	No data available
10.2. Chemical stability	Stable
10.3. Possibility of hazardous reactions	No data available
10.4. Conditions to avoid	High Temperatures at 435°C (815°F)
10.5. Incompatible materials	Oxidizers
10.6. Hazardous decomposition products	Carbon monoxide and Carbon dioxide

Section 11. Toxicological Information.

11.1. Information on toxicological effects
No data available

Section 12. Ecological Information.

12.1. Toxicity	No data available
12.2. Persistence and degradability	No data available
12.3. Bioaccumulative potential	No data available
12.4. Mobility in soil	No data available
12.5. Results of PBT and vPvB assessment	No data available
12.6. Other adverse effects	No data available

Section 13. Disposal Considerations.

13.1. Waste treatment methods
Return in the shipping container Properly labelled, with any valve outlet plugs or gaps secured and valve protection cap in place to Advanced Gas Technologies for proper handling.

Section 14. Transport Information.

ADR. International Carriage of Dangerous Goods by Road.

14.1. UN number	UN 3358
14.2. Name and Description	Refrigerating machines containing flammable, non-toxic, liquefied gas
14.3. Class	2
14.4. Packing group	-
14.5. Environmental hazards	Does not present an environmental hazard.
14.6. Special precautions for user	No special precautions necessary.

Special Provision 291

Refrigerating machines and refrigerating machine components are not subject to the requirements of ADR if they contain less than 12 kg of gas.

IATA. International Air Transport Association.

14.1. UN number	UN 3358
14.2. UN Proper Shipping Name/Description	Refrigerating machines containing flammable, non-toxic, liquefied gas
14.3. Class or Division	2.1
14.4. Packing group	-
14.5. Environmental hazards	Does not present an environmental hazard.
14.6. Special precautions for user	No special precautions necessary.

Special Provision A103

Refrigerating machines and refrigerating machine components are considered not subject to these Regulations if containing less than 100 g of flammable, non-toxic, liquefied gas.

IMDG. International Maritime Dangerous Goods.

14.1. UN number	UN 3358
14.2. UN proper shipping name	Refrigerating machines containing flammable, non-toxic, liquefied gas
14.3. Class	2.1
14.4. Packing group	-
14.5. Environmental hazards	Does not present an environmental hazard.
14.6. Special precautions for user	No special precautions necessary.
14.7. Transport in bulk – Maritime only.	Bulk transport is not applicable to this product

Special Provision 291

Refrigerating machines and refrigerating machine components are not subject to the provisions of this Code if they contain less than 12 kg of gas.



Section 15. Regulatory Information.

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
 No data available

15.2. Chemical safety assessment
 No data available

Section 16. Additional Information.

Full text of Phrases and Statements used in Section 3;
 H220 Extremely flammable gas.

The above information is believed to be accurate and represents the best information currently available.

No warranty is expressed or implied by the above information.

We assume no liability resulting from use of the above information.

The end user should conduct their own investigations to determine the suitability of the above information for their particular purpose.

Issue level	Date	Revisions
1	21/02/2024	First issue.

End of Safety Data Sheet.