

REVISION DATE 27/07/2011



F2 CHEMICALS LIMITED
SAFETY DATA SHEET
Perfluorobutane

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME	Perfluorobutane
CAS-NO.	355-25-9
EC (EINECS) NO.	206-580-3
SYNONYMS, TRADE NAMES	Decafluorobutane
APPLICATION	Medical Gas
SUPPLIER	F2 Chemicals Ltd. Lea Lane Lea Town Preston Lancs PR4 0RZ UK Tel: +44(0) 1772 775804 Fax: +44(0) 1772 775809 e-Mail: safety@f2chemicals.com
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2 HAZARDS IDENTIFICATION

Not Classified as PBT/vPvB by current EU criteria.

CLASSIFICATION (67/548) Not classified.

CLASSIFICATION (EC 1272/2008)

Physical and Chemical Hazards	Liquef. Gas - H280
Human health	Not classified.
Environment	Not classified.

LABEL IN ACCORDANCE WITH (EC) NO. 1272/2008



SIGNAL WORD Warning

HAZARD STATEMENTS

H280 Contains gas under pressure; may explode if heated.

PRECAUTIONARY STATEMENTS

P410+403 Protect from sunlight. Store in a well-ventilated place.

PHYSICAL AND CHEMICAL HAZARDS

Gas or vapour displaces oxygen available for breathing (asphyxiant).

3 COMPOSITION/INFORMATION ON INGREDIENTS

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4 FIRST-AID MEASURES

GENERAL INFORMATION

Non-hazardous substance.

NOTES TO THE PHYSICIAN

No specific first aid measures noted.

5 FIRE-FIGHTING MEASURES

REVISION DATE 27/07/2011

Perfluorobutane

EXTINGUISHING MEDIA

This product is not flammable.

UNUSUAL FIRE & EXPLOSION HAZARDS

If heated, volume and pressure increases strongly, resulting in explosion of container.

PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Non-hazardous substance.

ENVIRONMENTAL PRECAUTIONS

Avoid release to the environment.

SPILL CLEAN UP METHODS

Not relevant

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Provide good ventilation.

STORAGE PRECAUTIONS

Pressurised container: Must not be exposed to temperatures above 50°C.

STORAGE CLASS

Unspecified storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENT COMMENTS

No exposure limits noted for ingredient(s).

PROTECTIVE EQUIPMENT

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Clear liquid.
COLOUR	Colourless.
ODOUR	Odourless.
SOLUBILITY	Insoluble in water
MOL. WEIGHT	238
BOILING POINT (°C)	-1.6
MELTING POINT (°C)	-94.5
RELATIVE DENSITY	1.517
VAPOUR DENSITY (air=1)	9.7
VAPOUR PRESSURE	380 kPa @20C
CRITICAL TEMPERATURE (°C)	107
DECOMPOSITION TEMPERATURE (°C)	>400

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions.

CONDITIONS TO AVOID

Avoid excessive heat for prolonged periods of time. >400°C

HAZARDOUS POLYMERISATION

Will not polymerise.

REVISION DATE 27/07/2011

Perfluorobutane

MATERIALS TO AVOID

Alkali metals.

HAZARDOUS DECOMPOSITION PRODUCTS

Fire creates: Hydrogen fluoride (HF).

11 TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION

Non-hazardous substance.

12 ECOLOGICAL INFORMATION

MOBILITY

The product is insoluble in water.

BIOACCUMULATION

Bioaccumulation is unlikely to be significant because of the low water solubility of this product.

DEGRADABILITY

The product is not readily biodegradable.

ACUTE FISH TOXICITY

Not considered toxic to fish.

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements. Incinerate with provision for removal of effluent gases by scrubber.

14 TRANSPORT INFORMATION



PROPER SHIPPING NAME	Liquidified gas, n.o.s.
ENVIRONMENTALLY HAZARDOUS SUBSTANCE/MARINE POLLUTANT	No.
UN NO. ROAD	3163
ADR CLASS NO.	2.2
ADR CLASS	Class 2.2: Non-flammable, non-toxic gases.
UN NO. SEA	3163
UN NO. AIR	3163
AIR CLASS	2.2

15 REGULATORY INFORMATION

EU DIRECTIVES

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

16 OTHER INFORMATION

REVISION DATE	27/07/2011
REV. NO./REPL. SDS GENERATED	2

Perfluorobutane

DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.