Safety Data Sheet

Section 1: Identification

1.1 Product Identifier

Product Name : HFC Free Air Duster

Fellowes Item Number : 99748

UFI : M8T1-N0N1-C009-3M2P

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Use of the substance/mixture : Provides quick and effective computer and electronic maintenance.

1.3 Details of the Supplier of the Safety Data Sheet

Company : Fellowes United Kingdom Ltd.

Address : Unit 2, Ontario Drive
New Rossington, Doncaster
DN11 OBF
UK

Telephone : +44 (0) 1302 836800

Fax : +44 (0) 1302 836899

Website : fellowes.com

1.4 Emergency Telephone Number

Company : Fellowes United Kingdom Ltd.

Hours of Operation : Monday – Friday 8:00 AM – 500 PM

SECTION 2: Hazard(s) Identification

2.1 Classification of the Substance or Mixture

Flammable aerosol, Category 1 (Aerosol 1, H222 – H229).
This mixture does not present a health hazard with the exception of possible occupational exposure thresholds (see paragraph 3 and 8).
This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2 Label Elements

Mixture for aerosol application

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard Pictograms

GHS02

Signal Word : DANGER

Hazard Statements	: H222 – Extremely flammable aerosol. H229 – Pressurized container: May burst if heated.
Precautionary Statements General	: P101 – If medical advice is needed, have product container or label at hand. P102 – Keep out of the reach of children.
Precautionary Statements Prevention	: P210 – Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211 – Do not spray on an open flame or other ignition source. P251 – Do not pierce or burn, even after use.
Precautionary Statement Storage	: P410+P412 – Protect from sunlight. Do not expose to temperatures exceeding 50° C.

2.3 Other Hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European Chemical Agency (ECHA) under Article 57 of REACH: https://echa.europa.eu/candidate-list-table

The mixture does not contain substances identified as having endocrine disrupting properties according to Regulation (EU) 2017/2100.

The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with Annex XIII of REACH Regulations EC 1907/2006.

International misuse of the preparation by concentrating and inhaling the vapors can be harmful or fatal.

Rapid evaporation of the liquid may cause frostbite.

SECTION 3: Composition / Information on Ingredients

3.1 Substance

Chemical Name	CAS No.	EC No.	Reach Registration No.	Conc. (%w/w)	Classification according to Regulation (EC) No 1278/2008 (CLP)	SCL, M-factor, ATE
BUTANE (<0,1 % 1,3-BUTADIENE)	106-97-8	203-448-7	01-2119474691-32-XXXX	25 <= x < 50	Flam. Gas 1, H220 Press. Gas, H280	N/A
PROPANE	74-98-6	200-827-9	01-2119486944-21-XXXX	25<= x <50	Flam. Gas 1, H220 Press. Gas, H280	N/A

Substance for which maximum workplace exposure limits are available.

3.2 Information On Ingredients

Substance for which maximum workplace exposure limits are available.

SECTION 4: First-Aid Measures

4.1 Description of First Aid Measures

As a general rule, in case of doubt or if symptoms persist, always call a doctor.
NEVER induce swallowing by an unconscious person.

Inhalation	: Move to fresh air. If recovery is not rapid, obtain medical attention. If breathing has stopped, begin artificial respiration immediately. Obtain medical attention without delay.

Skin contact	: In the event of cold burns obtain medical advice. Cover the wounds with sterile dressings only. Do not apply ointments or powders.
Eye contact	: Rinse thoroughly with plenty of clean water for 15 minutes holding the eyelids. In the case of cold burns involving the eye, obtain medical attention without delay.
Ingestion	: Seek medical attention, showing the label. As this product is a gas, refer to the inhalation section.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

See section 11.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label if possible). If symptoms persist, always call a doctor.

SECTION 5: Fire-Fighting Measures

Flammable
Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

5.1 Extinguishing Media

If the aerosols are exposed to a fire: keep containers cool by spraying with water from a protected position.

Suitable Extinguishing Media
In the event of a fire, use:
-Sprayed water or water mist
-Water with AFFF (Aqueous Film Forming Foam) additive
-Foam
-Multipurpose ABC powder
-BC powder
-Carbon dioxide (CO2)

Prevent the effluent of fire-fighting measures from entering drains or waterways.

Unsuitable Extinguishing Media
In the event of a fire, DO NOT use:
-Water jet

5.2 Special Hazards Arising from the Substance or Mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health. Do not breathe in smoke.

In the event of a fire, the following may be formed:
-Carbon monoxide (CO)
-Carbon dioxide (CO2)

In a fire or if heated, a pressure increase will occur and the container may burst. Burning aerosol containers may be propelled for a fire at high speed.
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

5.3 Advice For Firefighters

Fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.
If possible, stop the product stream. Spray from a protected position till the containers are cool. If possible, take the aerosol outside. Keep public at a distance.

SECTION 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Consult the safety measures listed under heading 7 and 8.

For non-first aid workers
Because of the organic solvents contained in the mixture, eliminate source of ignition and ventilate the area.

For first aid worker
First aid workers will be equipped with suitable personal protective equipment (see Section 8).

6.2 Environmental Precautions

Evacuate area. Stop flow. Eliminate all source of ignition.

6.3 Methods and Materials for Containment and Clean Up

Not applicable.

6.4 Reference to Other Sections

No data available.

SECTION 7: Handling and Storage

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1 Precautions for Safe Handling

Always wash hands after handling.
Ensure that there is adequate ventilation, especially in confined areas.

Fire prevention:
Handle in well-ventilated areas.
Vapors are heavier than air. They can spread along the ground and form mixtures that are explosive with air.
Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.
Do not spray on a naked flame or any incandescent materials.
Do not pierce or burn, even after use.
Use the mixture in premises free of naked flames or other source of ignition and ensure that electrical equipment is suitably protected.
Keep packages tightly closed and away from sources of heat, sparks and naked flames.
Do not use tools which may produce sparks, Do not smoke.
Prevent access by unauthorized personnel.

Recommended equipment and procedures:
For personal protection, see section 8.
Observe precautions stated on label and also industrial safety regulations.
Do not breathe in aerosol.
Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures:
No smoking, eating or drinking in areas where the mixture is used.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

No data available.

Storage:
Keep out of reach of children.
Keep away from all sources of ignition – do not smoke.
Keep well away from all sources of ignition, heat and direct sunlight.
The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50° C.
Storage in a dry, frost-free and well-ventilated place.

Packaging:
Always keep in packaging made of an identical material to the original.

7.3 Special End Use(s)

No data available.

SECTION 8: Exposure Controls / Personal Protection

8.1 Control Parameters

Occupational exposure limits:

Country	CAS	TWA:	STEL:	Definition
UK	106-97-8	600 ppm	750 ppm	Carc
Ireland	106-97-8	1000 ppm		
	74-98-6	1000 ppm		

8.2 Exposure Controls

Personal protection measures, such as personal protective equipment.
Pictogram(s) including the obligation of wearing personal protective equipment (PPE):

Use personal protective equipment that is clean and has been properly maintained.
Store personal protective equipment in a clean place, away from the work area.
Never eat, drink, or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

-Eye / face protection.
Avoid contact with eyes.
Use eye protection designed to protect against liquid splashes.
Before handling, wear safety goggles in accordance with standard EN166.
Do not spray in the direction of the eyes.

-Hand protection
Wear suitable protective gloves in the event of prolonged or repeated skin contact.
Type of gloves recommended:
-Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
-PVA)Polyvinyl alcohol)
Not necessary at efficient use. Wash your hands after contact with skin.

-Body protection
Work clothing worn by personnel shall be laundered regularly.
After contact with the product, all parts of the body that have been soiled must be washed.
Not necessary at efficient use. Product in contact with skin may cause frostbite. Wash skin that has been in contact with the product, with water and
soap.

-Respiratory protection
Anti-gas and vapor filter(s) (Combined filters) in accordance with standard EN14387:
-A1 (Brown)
Do not breathe spray. Use only in well-ventilated areas.

Exposure controls linked to environmental protection
Emissions form ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection
legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and Chemical Properties

9.1 Information On Basic Physical and Chemical Properties

General information:

Physical State	: Fluid liquid. Spray.
Color	: Colorless
Odor	: Alcohol
Melting point/freezing point	: No data available
Boiling point or initial boiling point and boiling range	: No data available
Flammability	: Extremely flammable
Lower and upper explosion limit	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
pH	: No data available
Kinematic viscosity	: No data available
Vapor density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water	: No data available

(log value)	: No data available
Vapor pressure	: No data available
Relative density	: 0.545 g/cm³
Relative vapor density	: No data available
Particle characteristics	: Not applicable to liquids

9.2 Other Information

No data available.

SECTION 10: Stability and Reactivity

10.1 Reactivity

No data available.

10.2 Chemical Stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3 Possibility of Hazardous Reactions

When exposed to high temperature, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions To Avoid

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

Avoid:
-Heat
-Flames and hot surfaces.
-Frost

Protect from sunlight and do not expose to temperatures exceeding 50° C. Keep away from heat and sources of ignition. Store in a dry, frost-free and
well ventilated place.

10.5 Incompatible Materials

May react with strong oxidizing agents.

10.6 Hazardous Decomposition Products

The thermal decomposition may release/form:
-Carbon monoxide (CO)
-Carbon dioxide (CO2)

The product is stable. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological Information

11.1 Information on Hazard Classes as Defined in Regulation (EC) No. 1272/2008

No test data on mixture.

Acute toxicity:

PROPANE (CAS: 74-98-6)

Inhalation route (n/a): LC50 > 10 mg/l

BUTANE (<0,1 % 1,3-BUTADIENE) (CAS: 106-97-8)

Inhalation route (n/a): LC50 > 10 mg/l

Skin corrosion/skin irritation:

Butane/Isobutane/Propane: Based on available data, the classification criteria are not met.

Serious damage to eye/eye irritation:

Butane/Isobutane/Propane: Based on available data, the classification criteria are not met.

Respiratory or skin sensitsation:

Butane/Isobutane/Propane: Based on available data, the classification criteria are not met.

Germ cell mutagenicity:

PROPANE (CAS: 74-98-6)

No mutagenic effect.

BUTANE (<0,1 % 1,3-BUTADIENE) (CAS: 106-97-8)

No mutagenic effect.

Carcinogenicity:

PROPANE (CAS: 74-98-6)

No carcinogenicity effect.

BUTANE (<0,1 % 1,3-BUTADIENE) (CAS: 106-97-8)

Carcinogenicity Test: Negative.

No carcinogenicity effect.

Reproductive toxicity:

PROPANE (CAS: 74-98-6)

No toxic effect for reproduction.

BUTANE (<0,1 % 1,3-BUTADIENE) (CAS: 106-97-8)

No toxic effect for reproduction.

Specific target organ systemic toxicity – single exposure:
Butane/Isobutane/Propane: Based on available data, the classification criteria are not met.

Specific target organ systemic toxicity – repeated exposure:

Butane/Isobutane/Propane: Based on available data, the classification criteria are not met.

Aspiration hazard:

Butane/Isobutane/Propane: Not applicable to gases and gas mixtures.

11.2 Information on Other Hazards

No information available.

SECTION 12: Ecological Information

12.1 Toxicity

12.2 Persistence and Degradability

Butane/Isobutane/Propane: Expected to be readily biodegradable.

12.3 Bioaccumulative Potential

Butane/Isobutane/Propane: Not expected to be dangerous for the aquatic environment.

12.4 Mobility In Soil

Butane/Isobutane/Propane: If released into the environment, the product will rapidly disperse into the atmosphere where it will undergo photochemical degradation.

12.5 Results of PBT and vPvB Assessment

This mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine Disrupting Properties

Product does not contain anyt substances > 0.1% considered to be endocrine disrupting.

12.7 Other Adverse Effects

No data available.

12.8 Addition Information

No data available.

SECTION 13: Disposal Considerations

13.1 Waste Treatment Methods

Proper waste management of the mixture and/or it container must be determined in accordance with Directive 2008/98/EC.

13.1.1 Product / Packaging Disposal

Disposal of the product (the unused product, residual quantities, the cured product, emptied but uncleaned packaging): preferably by an approved waste collector or specialist disposal company. Suitable containers and methods of waste treatment should be used.

Soiled packaging:

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

Codes of wastes (Decision 2014/955/EC, Directive 2008/98/EEC on hazardous waste):

15 01 10* packaging containing residues of or contaminated by dangerous substances

13.1.2 Waste Treatment Methods

Do not pour into drains or waterways.

Waste:

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

13.1.3 Sewage Disposal-Relevant Information

Do not pour into drains or waterways.

13.1.4 Other Disposal Recommendations

No information available.

SECTION 14: Transport Information

Transport product in compliance with provision of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2013-IMDG 2012 – ICAO/IATA 2013).

14.1 UN Number

1950

14.2 UN Proper Shipping Name

UN1950=AEROSOLS, flammable

14.3 Transport Hazard Class(es)

-Classification: 2.1
ADR/RID Label: Limited Quantity: 2.1 is not applicable.

14.4 Packing Group

-

14.5 Environmental Hazards

-

14.6 Special Precautions for User

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	2	5F	-	2.1	-	1 L	190 327 344 625	E0	2	D

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ
	2.1	See SP63	-	See SP277	F-D,S-U	63 190 277 327 344 959	E0

IATA	Class	2°Label	Pack gr.	Passenger	Passenger	Cargo	Cargo	note	EQ
	2.1	-	-	203	75 kg	203	150 kg	A145 A167 A145 A167 A802	E0
	2.1	-	-	Y203	30 kg G	-	-	A145 A167 A802	E0

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.
For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

14.7 Maritime Transport in Bulk According to IMO Instruments

No data available.

SECTION 15: Regulatory Information

15.1 Safety, Health and Environmental Regulation/Legislation Specific for The Substance or Mixture

-Classification and labelling information included in section 2:
The following regulations have been used:
-Directive 75/324/CEE modified by Directive 2013/10/UE
-EU Regulation No. 1272/2008 amended by EU Regulation No. 2020/217 (ATP 14)

-Container information:
No data available

-Particular provisions:
No data available.

15.2 Chemical Safety Assessment

The product does not contain substances for which a chemical safety assessment has been performed.

SECTION 16: Other Information

Since the user's working conditions are not known by us, the information supplied on this Safety Data Sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this Safety Data Sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Title for H, EUH and R indications mentioned in section 3:

H220 Extremely flammable gas.
H280 Contains gas under pressure; may explode if heated.

Abbreviations:

ADR	: European agreement concerning the international carriage of dangerous goods by road
IMDG	: International Maritime Dangerous Goods
IATA	: International Air Transport Association
ICAO	; International Civil Aviation Organization
RID	: Regulations concerning the international carriage of Dangerous goods by rail
WGK	: Wassergefahrdungsklasse (Water Hazard Class)
GHS02	: Flame
PBT	: Persistent, boaccumulable and toxic.
vPvB	: Very persistent, very bioaccumulable.
SVHC	: Substance of very high concern.

Further Information

The information contained in the Safety Data Sheet is believed to be correct and used as a guide.