

**ABRO Air Clean**

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier**

Product Name ABRO Air Clean
Product code AC-100
Unique Formula Identifier (UFI) M5F0-D0KC-V007-J3SF

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Use(s) Air Freshner.
Uses Advised Against Not known.

1.3 Details of the supplier of the safety data sheet**Manufacturer**

Company Identification ABRO Industries Inc
Address of Manufacturer 3580 Blackthorn Court
South Bend
USA
Postal code 46628
Telephone: +1 574-232-8289
Fax Not known.
E-mail abro@abro.com
Office hours

Supplier

Company Identification Granville Oil & Chemicals Ltd
Address of Supplier 29 Goldthorpe Ind. Est.,
Goldthorpe,
Rotherham,
South Yorkshire,
Postal code S63 9BL
Telephone: +44 (0)1709 890099
Fax Not known.
E-mail lab@granvilleoil.com
Office hours 08:00 - 17:00

1.4 Emergency telephone number

Emergency Phone No. +44 111
National response centre NHS Direct

SECTION 2: HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

Regulation (EC) No. 1272/2008 (CLP) Aerosol 1 :Extremely flammable aerosol. Pressurised container: May burst if heated.

2.2 Label elements

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According to Regulation (EC) No. 1272/2008 (CLP)

Product Name ABRO Air Clean
Contains Butane, Propane

Hazard Pictogram(s)



GHS02

Signal Word(s) Danger

Hazard Statement(s)
H222: Extremely flammable aerosol.
H229: Pressurised container: May burst if heated.

Precautionary Statement(s)
P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
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.
P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50° C/ 122° F.

Unique Formula Identifier (UFI) M5F0-D0KC-V007-J3SF

2.3 Other hazards

None known.

2.4 Additional Information

For full text of H/P Statements see section 16.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances**

Not applicable.

3.2 Mixtures

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / REACH Registration No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
butane	106-97-8		2.5 - 10	Flam. Gas 1A H220 Press. Gas H280	GHS02 GHS04
propane	74-98-6		2.5 - 10	Flam. Gas 1A H220 Press. Gas H280	GHS02 GHS04

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sodium nitrite	7632-00-0		0.1 - 1	Ox. Sol. 3 H272 Acute Tox. 3 H301 Aquatic Acute 1 H400	GHS03 GHS06 GHS09
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HAZARDOUS INGREDIENT(S)	CAS No.	Specific Concentration Limit	M-factor	ATE
sodium nitrite	7632-00-0			Acute Tox. 3 (H301) : 100

Contains no non-classified vPvB substances.

Contains no non-classified substances with a Union workplace exposure limit.

For full text of H/P Statements see section 16.

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures**

Inhalation	If symptoms develop move victim to fresh air. Get medical attention if symptoms persist.
Skin Contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye Contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

Direct contact with eyes may cause temporary irritation. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES**5.1 Extinguishing media**

Suitable Extinguishing media	Not available
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Special hazards arising from the substance or mixture

Contents under pressure. Pressurized container may explode when exposed to heat or flame..

5.3 Advice for firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in



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cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

In the event of fire and/or explosion do not breathe fumes.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS

6.2 Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3 Methods and material for containment and cleaning up

Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. For waste disposal, see section 13 of the SDS.

6.4 Reference to other sections

See Also Section 8, 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not reuse empty containers. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Level 1 Aerosol Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50° C/122° F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store away from incompatible materials (see Section 10 of the SDS).

7.3 Specific end use(s)

Not known.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**ABRO Air Clean****8.1 Control parameters**

8.1.1 Occupational Exposure Limits

Occupational Exposure Limits						
SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Butane	106-97-8	600	1450	750	1810	(b)

Region Source
 United Kingdom UK Workplace Exposure Limits EH40/2005 (Fourth edition, published 2020)

Remark Notes
 (b) Carc. (only applies if Butane contains more than 0.1% of buta-1,3-diene)

8.2 Exposure controls

8.2.1. Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

8.2.2. Personal protection equipment When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.



Eye Protection Wear eye protection with side protection (EN166).



Skin protection Not normally required.



Respiratory protection If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.



Thermal hazards None known.

8.2.3. Environmental Exposure Controls Do not allow to enter drains, sewers or watercourses.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Physical state Aerosol
 Colour Not known.
 Odour Not known.
 Melting point/freezing point Not known.

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Boiling point or initial boiling point and boiling range	212 ° F (100 ° C) estimated.
Flammability	Not known.
Lower and upper explosion limit	1.9 % estimated / 9.5% estimated
Flash Point	-156.0 ° F (-104.4 ° C) PROPELLANT estimated.
Auto-ignition temperature	Not known.
Decomposition Temperature	Not known.
pH	Not known.
Kinematic Viscosity	Not known.
Solubility	Solubility (Water) : Not known. Solubility (Other) : Not known.
Partition coefficient n-octanol/water (log value)	Not known.
Vapour pressure	Not known.
Density and/or relative density	0.887 estimated
Relative vapour density	Not known.
Particle characteristics	Not known.
Oxidizing properties	Not oxidizing
9.2 Other information	None.

SECTION 10: STABILITY AND REACTIVITY**10.1 Reactivity**

The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2 Chemical Stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4 Conditions to avoid

Avoid temperatures exceeding the flash point. Contact with incompatible materials.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Acute toxicity - Ingestion	Calculation method : Not classified. Calculation method : Calculated acute toxicity estimate (ATE) Calc ATE - 10000
Acute toxicity - Skin Contact	Calculation method : Not classified.
Acute toxicity - Inhalation	Calculation method : Not classified.
Skin corrosion/irritation	Calculation method : Not classified.
Serious eye damage/irritation	Calculation method : Not classified.

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Skin sensitization data	Calculation method : Not classified.
Respiratory sensitization data	Calculation method : Not classified.
Germ cell mutagenicity	Calculation method : Not classified.
Carcinogenicity	Calculation method : Not classified.
Reproductive toxicity	Calculation method : Not classified.
Lactation	Calculation method : Not classified.
STOT - single exposure	Calculation method : Not classified.
STOT - repeated exposure	Calculation method : Not classified.
Aspiration hazard	Calculation method : Not classified.

11.2 Information on other hazards

Not known.

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity**

	Harmful to aquatic life.
Toxicity - Aquatic invertebrates	Not known.
Toxicity - Fish	Not known.
Toxicity - Algae	Not known.
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.

12.2 Persistence and degradability

Not known.

12.3 Bioaccumulative potential

Not known.

12.4 Mobility in soil

Not known.

12.5 Results of PBT and vPvB assessment

Not known.

12.6 Endocrine disrupting properties

None known.

12.7 Other adverse effects

Not known.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Dispose at suitable refuse site.

13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.

SECTION 14: TRANSPORT INFORMATION**14.1 UN number or ID number**

UN No. 1950

**ABRO Air Clean****14.2 UN proper shipping name**

UN proper shipping name AEROSOLS

14.3 Transport hazard class(es)

ADR/RID

ADR/RID Class 2

ADR Classification Code 5F

Special Provisions 190, 327, 344, 625

Limited Quantities 1 L

Excepted Quantities E0

Emergency Action Code

Mixed Packing Instructions for Packages P207 LP200

Special Packing Provisions for Packages PP87 RR6 L2

Mixed Packing Instructions for Packages MP9

Packing Instructions for Portable Tanks

Special Provisions for Portable Tanks

Tank Code for Tanks

Special Provisions for Tanks

Vehicle for Tank Carriage

ADR Transport Category 2

Tunnel Restriction Code D

Special Provisions for Carriage - Packages V14

Special Provisions for Carriage - Bulk

Special Provisions for Carriage - Loading, Unloading and Handling CV9 CV12

Special Provisions for Carriage - S2

Operation

ADR HIN

IMDG

IMDG Class 2

Special Provisions 190, 327, 344, 625

Limited Quantities 1 L

Excepted Quantities E0

Mixed Packing Instructions for Packages P207 LP200

Special Packing Provisions for Packages PP87 RR6 L2

Packing Instructions for Portable Tanks

Special Provisions for Portable Tanks

IMDG EMS F-D, S-U

Stowage and Handling SW1 SW22

Segregation SG69

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Marine Pollutant

ICAO/IATA

IATA Proper Shipping Name AEROSOLS

Excepted Quantities E0

Passenger and Cargo Aircraft Limited Y203

Quantities Packing Instructions

Passenger and Cargo Aircraft Limited 30Kg

Quantities Max net Qty

Passenger and Cargo Aircraft Packing 203

Instructions

Passenger and Cargo Aircraft Max net 75Kg

Qty

Cargo Aircraft Packing Instructions 203

Cargo Aircraft Max net Qty 150Kg

Special Provisions A145, A167, A802

Emergency Response Guidebook (ERG) 10L

Code

Labels

Labels 2.1

**14.4 Packing group**

Packing group

14.5 Environmental hazards

Environmental hazards Not classified as a Marine Pollutant.

14.6 Special precautions for user

Special precautions for user Not known.

14.7 Maritime transport in bulk according to IMO instruments

No information available

SECTION 15: REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very High Concern for Authorisation Not listed

High Concern for Authorisation

REACH: ANNEX XIV list of substances Not listed

subject to authorisation

REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Carcinogens: category 1A (106-97-8), propane (74-98-6), sodium nitrite (7632-00-0)

use of certain dangerous substances,

mixtures and articles

Community Rolling Action Plan (CoRAP) Not listed

(CoRAP)

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Regulation (EU) N° 2019/1021 of the European Parliament and of the Council on persistent organic pollutants

Regulation (EC) N° 1005/2009 on substances that deplete the ozone layer

Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals

National regulations

Other Not known.

15.2 Chemical Safety Assessment

A REACH chemical safety assessment has not been carried out.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

LEGEND

Hazard Pictogram(s)



GHS02

GHS03: GHS: Flame over circle

GHS04: GHS: Gas cylinder

GHS06: GHS: Skull and crossbones

GHS09: GHS: Environment

Hazard classification

Flam. Gas 1A : Flammable gas Category 1A

Aerosol 1 : Aerosol, Category 1

Ox. Sol. 3 : Oxidising solid, Category 3

Press. Gas : Gases under pressure

Acute Tox. 3 : Acute toxicity, Category 3

Aquatic Acute 1 : Hazardous to the aquatic environment, Acute, Category 1

Hazard Statement(s)

H220: Extremely flammable gas.

H222: Extremely flammable aerosol.

H229: Pressurised container: May burst if heated.

H272: May intensify fire; oxidiser.

H280: Contains gas under pressure; may explode if heated.

H301: Toxic if swallowed.

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H400: Very toxic to aquatic life.

Precautionary Statement(s)

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.

P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50° C/ 122° F.

Acronyms

ADN : European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE : Acute Toxicity Estimate

CAS : Chemical Abstracts Service

CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

DNEL : Derived No Effect Level

EC : European Community

EINECS : European Inventory of Existing Commercial Chemical Substances

IATA : International Air Transport Association

IBC : Intermediate Bulk Container

ICAO : International Civil Aviation Organization

IMDG : International Maritime Dangerous Goods

LTEL : Long term exposure limit

PBT : Persistent, Bioaccumulative and Toxic

PNEC : Predicted No Effect Concentration

REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals

RID : Regulations concerning the International Carriage of Dangerous Goods by Rail

STEL : Short term exposure limit

STOT : Specific Target Organ Toxicity

UN : United Nations

vPvB : very Persistent and very Bioaccumulative

Key literature references and sources
for data used to compile the SDS

Regulation (EC) No. 1272/2008 (CLP)

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SAFETY DATA SHEET

Date of Revision:
14-12-2022

ABRO Air Clean