



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
GB/T 16483-2008, GB/T 17519-2013

Product Name Air Filter Oil

Issuing Date 18-Nov-2021
(M)SDS Number UL-KN-012B

Revision Date 18-Nov-2021
Revision Number 1

1. Identification

Product identifier

Product Name Air Filter Oil

Other means of identification

Product Code(s) 99-0551

UN/ID no UN1950

Pure substance/mixture Mixture

Details of the supplier of the safety data sheet

Supplier

K&N Engineering, Inc.
Unit 609, 4th Bldg., 1970 Technology Town
Mingzhi, Longhua District, Shenzhen, 518131
0086-755-2376-0296

E-mail address compliance@knfilters.com

Emergency telephone number

Emergency telephone number CHEMTREC (China): 4001-204937

Recommended use of the chemical and restrictions on use

Recommended use Cleaning agent for car air filter

Restrictions on use No information available

2. Hazard(s) identification

Emergency Overview

Extremely flammable aerosol

Appearance Clear liquid

Physical state Aerosol

Odor None

Classification of the substance or mixture

Aerosols

Category 1

Label elements

**Signal word**

Danger

Hazard statements

Extremely flammable aerosol

Pressurized container: May burst if heated

Precautionary statements**Prevention**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Do not pierce or burn, even after use

Do not spray on an open flame or other ignition source

Storage

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

Physical and chemical hazards

Extremely flammable aerosol. Do not puncture or incinerate cans. Containers may explode when heated. Ruptured cylinders may rocket.

Health hazards

Immediate Health Effects: Not applicable.

Chronic effects: Not applicable.

Environmental hazards

Not applicable.

Other hazards which do not result in classification

Not applicable.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No	Weight-%
Butane	106-97-8	10 - 15

4. First-aid measures

Description of necessary first aid measures**General advice**

Show this safety data sheet to the doctor in attendance.

Inhalation

Remove to fresh air.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

	Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
Skin contact	Wash skin with soap and water. Get medical attention if symptoms occur.
Ingestion	Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	None known.
For emergency responders	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8).
Note to physicians	Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO ₂). Water spray.
Unsuitable extinguishing media	DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.
Specific hazards arising from the chemical	Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Cylinders may rupture under extreme heat. Damaged cylinders should be handled only by specialists. Containers may explode when heated.
Special protective actions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Take precautionary measures against static discharges. Avoid breathing dust/fume/gas/mist/vapors/spray.
Other information	Ventilate the area.
For emergency responders	Use personal protection recommended in Section 8.
Environmental precautions	Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.
Methods and material for containment and cleaning up	Keep out of drains, sewers, ditches and waterways. Stop leak if you can do it without risk. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Flood with water to complete polymerization and scrape off floor. Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.
Precautions to prevent secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage

Precautions for safe handling

Use personal protection equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use spark-proof tools and explosion-proof equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Keep in an area equipped with sprinklers. Do not puncture or incinerate cans. Contents under pressure. In case of rupture. Avoid contact with skin and eyes. Avoid breathing vapors or mists.

Conditions for safe storage, including any incompatibilities

Protect from sunlight. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store in a cool, dry area away from potential sources of heat, open flames, sunlight or other chemicals.

Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

8. Exposure controls/personal protection

Occupational exposure limits

Chemical name	China	ACGIH TLV
Butane	-	STEL: 1000 ppm explosion hazard

Monitoring and observation processes

No applicable information was found.

Engineering controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tight sealing safety goggles. Safety glasses with side shields are recommended for medical or industrial exposures.

Skin and body protection

Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

Hand protection

Impervious gloves.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations

Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Clear liquid
Physical state	Aerosol
Color	Red
Odor	None
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH		No data available
Melting point / freezing point		No data available
Initial boiling point and boiling range		No data available
Flash point		No data available
Evaporation rate		No data available
Flammability		No data available
Flammability Limit in Air		
Upper flammability or explosive limits		No data available
Lower flammability or explosive limits		No data available
Vapor pressure		No data available
Vapor density		No data available
Relative density	0.84	
Water solubility	Insoluble in water	
Solubility(ies)		No data available
Partition coefficient		No data available
Autoignition temperature		No data available
Decomposition temperature		No data available
Kinematic viscosity	21.8 mm ² /s	
Dynamic viscosity		No data available
<u>Additional information</u>		
Explosive properties	No information available.	
Oxidizing properties	No information available.	

10. Stability and reactivity

<u>Stability</u>	Stable under normal conditions.
<u>Possibility of hazardous reactions</u>	None under normal processing.
<u>Reactivity</u>	
Sensitivity to static discharge	Yes.
<u>Conditions to avoid</u>	Heat, flames and sparks.
<u>Incompatible materials</u>	Strong acids. Strong bases. Strong oxidizing agents.
<u>Hazardous decomposition products</u>	None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation	Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.
Skin contact	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available. Contact with eyes may cause irritation.
Ingestion	Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms None known.

Acute toxicity

Numerical measures of toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Butane	-	-	= 658 g/m ³ (Rat) 4 h

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

Specific target organ toxicity (single exposure) No information available.

Specific target organ toxicity (repeated exposure) No information available.

Aspiration hazard No information available.

12. Ecological information

Ecotoxicity The environmental impact of this product has not been fully investigated.

Persistence and degradability No information available.

Bioaccumulative potential

Component Information

Chemical name	Partition coefficient
Butane	2.89

Mobility in soil No information available.

13. Disposal considerations

Waste chemicals Should not be released into the environment. Dispose of in accordance with local

regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging

Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

14. Transport information**China**

UN number or ID number UN1950
 UN proper shipping name AEROSOLS
 Transport hazard class(es) 2.1
 Description UN1950, AEROSOLS, 2.1
 Special Provisions 190, 327, 344, 625

IMDG

UN number or ID number UN1950
 UN proper shipping name AEROSOLS
 Description UN1950, AEROSOLS, 2.1
 Transport hazard class(es) 2.1
 Marine pollutant NP
 Special Provisions 63,190, 277, 327, 344, 381, 959
 EmS-No F-D, S-U

IATA

UN number or ID number UN1950
 UN proper shipping name Aerosols, flammable
 Description UN1950, Aerosols, flammable, 2.1
 Transport hazard class(es) 2.1
 Special Provisions A145, A167, A802
 ERG Code 10L

Special precautions for user

Please refer to the applicable dangerous goods regulations for additional information

15. Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Law of the People's Republic of China on Prevention and Control of Occupational Diseases**

Catalog of occupational hazard factors:

Not applicable.

Catalog of occupational diseases:

Not applicable.

Regulations on the Control over Safety of Hazardous ChemicalsInventory of hazardous chemicals

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed.

Weight-% 15

Chemical name	Serial number	Inventory of hazardous chemicals
Butane	2778	Listed

GB 18218-2009 Identification of major hazard installations for dangerous chemicalsCategory

Gases

Threshold quantity (T)

10

Chemical name	Threshold quantity (T)
Butane	50

List of hazardous chemicals under priority management

Not applicable

Regulations on Labor Protection in Workplaces Where Toxic Substances Are Used

Inventory of highly toxic goods Not applicable

Regulations for Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

List of toxic chemicals severely restricted for import and export in China Not applicable

Measures for the Environmental Management of New Chemical Substances**IECSC - China Inventory of Existing Chemical Substances** Contact supplier for inventory compliance status.**International Regulations****The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable**The Stockholm Convention on Persistent Organic Pollutants** Not applicable**The Rotterdam Convention** Not applicable**16. Other information****Issuing Date** 18-Nov-2021**Revision Date** 18-Nov-2021**Revision Note** Initial Release.**Abbreviations and acronyms****Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

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

U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Disclaimer

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End of Safety Data Sheet