



Safety Data Sheet BIRAL FIO (AEROSOL)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : BIRAL FIO (AEROSOL)

Vaporizer : Aerosol

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

Relevant identified uses

Use of the substance/mixture : Grease

Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Name, address, and telephone number of the chemical manufacturer, distributor, importer, or other responsible party:

Advantage Dist. & Lubricants, LLC
3434 Marion Road SE
Rochester, MN 55904
United States of America
www.advantagelubes.com
www.biral-usa.com

Phone number: +01 (800) 420-1414 +01 (507) 289-5555

E-mail address: info@advantagelubes.com

Emergency phone number: CHEMTREC: +1 (800) 424-9300 International: +01 (703) 527-3887

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Aerosol 1 H222;H229

Asp. Tox. 1 H304

Full text of hazard classes and H-statements : see section 16

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

Signal word (CLP) : Danger

Hazard statements (CLP) : H222 - Extremely flammable aerosol
H229 - Pressurised container: May burst if heated

Precautionary statements (CLP) : 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

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
highly refined mineral oil with viscosity additive	(REACH-no) N/A	50 - 70	Asp. Tox. 1, H304
propane (Note U)	(CAS-No.) 74-98-6 (EC-No.) 200-827-9 (EC Index-No.) 601-003-00-5 (REACH-no) 01-2119486944-21	30 - 50	Flam. Gas 1, H220 Press. Gas
butane (Note C)(Note U)	(CAS-No.) 106-97-8 (EC-No.) 203-448-7 (EC Index-No.) 601-004-00-0 (REACH-no) 01-2119474691-32	30 - 50	Flam. Gas 1, H220

Full text of H-statements: see section 16

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

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways.
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4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. In all cases of doubt, or when symptoms persist, seek medical attention.

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

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Extremely flammable aerosol.
Explosion hazard	: Pressurised container: May burst if heated.
Hazardous decomposition products in case of fire	: Carbon oxides (CO, CO ₂).

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper personal protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

General measures	: Concerning personal protective equipment to use, see section 8. No flames, no sparks. Eliminate all sources of ignition. Ensure adequate ventilation, especially in confined areas.
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For non-emergency personnel

Emergency procedures	: Evacuate unnecessary personnel.
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For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
 Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.
 Collect spillage. Store away from other materials.

6.4. Reference to other sections

For further information refer to section 13. See Heading 8. Exposure controls and personal protection.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Precautions for safe handling : Avoid contact with skin and eyes. Do not spray on an open flame or other ignition source.
 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container closed when not in use.
 Incompatible materials : Sources of ignition. Direct sunlight.
 Maximum storage period : 1 year
 Storage temperature : < 50 °C

7.3. Specific end use(s)

No additional data.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

highly refined mineral oil with viscosity additive		
United Kingdom	Local name	Oil mist
United Kingdom	WEL TWA (mg/m³)	1 mg/m³
butane (106-97-8)		
United Kingdom	Local name	Butane
United Kingdom	WEL TWA (mg/m³)	1450 mg/m³
United Kingdom	WEL TWA (ppm)	600 ppm
United Kingdom	WEL STEL (mg/m³)	1810 mg/m³
United Kingdom	WEL STEL (ppm)	750 ppm
United Kingdom	Remark (WEL)	Carc (Capable of causing cancer and/or heritable genetic damage. See paragraphs 49–51), (only applies if Butane contains more than 0.1% of buta-1,3-diene)

8.2. Exposure controls

Appropriate engineering controls : Ensure that there is a suitable ventilation system. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

Personal protective equipment : Gloves. Avoid all unnecessary exposure.

Hand protection : Wear protective gloves. Nitrile rubber gloves. Polyvinylalcohol (PVA). Layer thickness : 0,2 - 0,4 mm. Breakthrough time : 8 (> 480 minutes). EN 374

Eye protection : Use splash goggles when eye contact due to splashing is possible. EN 166

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Extra personal protection: A/P2 filter respirator for organic vapour and harmful dust. Standard EN 141. EN 140. EN 405



Other information : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment. Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: aerosol.
Colour	: Water-white.
Odour	: Oily.
Odour threshold	: Not determined
pH	: Not determined
Relative evaporation rate (butylacetate=1)	: Not determined
Melting point	: Not determined
Freezing point	: Not determined
Boiling point	: Not determined
Flash point	: Not determined
Auto-ignition temperature	: Not determined
Decomposition temperature	: Not determined
Flammability (solid, gas)	: Extremely flammable aerosol, Non flammable
Vapour pressure	: Not determined
Relative vapour density at 20 °C	: Not determined
Relative density	: < 1 g/cm ³
Solubility	: Not determined.
Log Pow	: Not determined
Viscosity, kinematic	: < 20.5 mm ² /s
Viscosity, dynamic	: Not determined
Explosive properties	: Pressurised container: May burst if heated.
Oxidising properties	: Extremely flammable aerosol.
Explosive limits	: Not determined

9.2. Other information

No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable when used at recommended storage and handling conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Avoid heating, source of ignition and direct sunlight. Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

No information.

10.6. Hazardous decomposition products

Thermal decomposition may produce : fume. Carbon monoxide. Carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity : Not classified

propane (74-98-6)

LD50 oral rat	5000 mg/kg
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highly refined mineral oil with viscosity additive

LD50 oral rat	> 2000 mg/kg
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butane (106-97-8)	
LC50 inhalation rat (mg/l)	658 mg/l/4h LC50 inhalation rat (Vapours - mg/l/4h)
Skin corrosion/irritation	: Not classified Based on available data, the classification criteria are not met Repeated exposure may cause skin dryness or cracking pH: Not determined
Serious eye damage/irritation	: Not classified Based on available data, the classification criteria are not met Liquid splashes in the eye may cause irritation. pH: Not determined
Respiratory or skin sensitisation	: Not classified Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
STOT-single exposure	: Not classified Based on available data, the classification criteria are not met
STOT-repeated exposure	: Not classified Based on available data, the classification criteria are not met
Aspiration hazard	: May be fatal if swallowed and enters airways.

BIRAL FIO (AEROSOL)	
Vaporizer	Aerosol
Viscosity, kinematic	< 20.5 mm²/s

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

propane (74-98-6)	
LC50 fish 1	16.9 g/l 96 hours
EC50 Daphnia 1	16.3 g/l (48 hours - Daphnia magna)
highly refined mineral oil with viscosity additive	
LC50 fish 1	> 1000 mg/l
EC50 Daphnia 1	> 1000 mg/l
IC50 algae	> 1000 mg/l

12.2. Persistence and degradability

BIRAL FIO (AEROSOL)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

BIRAL FIO (AEROSOL)	
Log Pow	Not determined
Bioaccumulative potential	Not established.
propane (74-98-6)	
Bioconcentration factor (BCF REACH)	13.18
Log Pow	2.36
highly refined mineral oil with viscosity additive	
Log Pow	> 6
butane (106-97-8)	
BCF fish 1	33.88
Log Pow	2.89

12.4. Mobility in soil

BIRAL FIO (AEROSOL)	
Ecology - soil	insoluble in water.

12.5. Results of PBT and vPvB assessment**BIRAL FIO (AEROSOL)**

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Additional information : Avoid release to the environment

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

Regional legislation (waste) : Dispose as hazardous waste.





Waste treatment methods : Do not discharge into drains.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Ecology - waste materials : Avoid release to the environment. Hazardous waste due to toxicity.

European List of Waste (LoW) code : 14 06 03* - other solvents and solvent mixtures
16 05 04* - gases in pressure containers (including halons) containing dangerous substances**SECTION 14: TRANSPORT INFORMATION**

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	RID
14.1. UN number			
1950	1950	1950	1950
14.2. UN proper shipping name			
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS
Transport document description			
UN 1950 AEROSOLS, 2.1, (D)	UN 1950 AEROSOLS, 2.1		
14.3. Transport hazard class(es)			
2.1	2.1	2.1	2.1
			
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available			

14.6. Special precautions for user**- Overland transport**

Classification code (ADR) : 5F
 Special provisions (ADR) : 190, 327, 344, 625
 Limited quantities (ADR) : 1I
 Excepted quantities (ADR) : E0
 Packing instructions (ADR) : P207, LP02
 Special packing provisions (ADR) : PP87, RR6, L2
 Mixed packing provisions (ADR) : MP9
 Transport category (ADR) : 2
 Special provisions for carriage - Packages (ADR) : V14
 Special provisions for carriage - Loading, unloading and handling (ADR) : CV9, CV12
 Special provisions for carriage - Operation (ADR) : S2
 Tunnel restriction code (ADR) : D

- Transport by sea

Special provisions (IMDG)	: 63, 190, 277, 327, 344, 959
Limited quantities (IMDG)	: SP277
Excepted quantities (IMDG)	: E0
Packing instructions (IMDG)	: P207, LP02
Special packing provisions (IMDG)	: PP87, L2
EmS-No. (Fire)	: F-D
EmS-No. (Spillage)	: S-U
Stowage category (IMDG)	: None

- Air transport

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Y203
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 203
PCA max net quantity (IATA)	: 75kg
CAO packing instructions (IATA)	: 203
CAO max net quantity (IATA)	: 150kg
Special provisions (IATA)	: A145, A167, A802
ERG code (IATA)	: 10L

Rail transport

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

National regulations

EC-regulation 2015/830 /EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: OTHER INFORMATION

Indication of changes:

Regulatory information.

2.1	Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]	Removed	
3.2	Labelling according to Directive 67/548/EEC or 1999/45/EC	Removed	

Data sources : EC-regulation 2015/830 /EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.

Other information : None.

Date of issue : 02/04/2008

Revision date : 30/05/2017

Supersedes : 15/12/2014

Version : 9.0

Signature : A. Åsebø Murel

Full text of H- and EUH-statements:

Aerosol 1	Aerosol, Category 1
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303018		BIRAL FIO (AEROSOL)	30/05/2017
Asp. Tox. 1		Aspiration hazard, Category 1	
Flam. Gas 1		Flammable gases, Category 1	
Press. Gas		Gases under pressure	
H220		Extremely flammable gas	
H222		Extremely flammable aerosol	
H229		Pressurised container: May burst if heated	
H304		May be fatal if swallowed and enters airways	

The information in this safety data sheet is based on information from the manufacturer/supplier, present european and national legislation, and presupposes that the product is used within the specified area of application.