



## Safety Data Sheet BIRAL A S - ANTI-SEIZE

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

#### 1.1. Product identifier

Product name : BIRAL A S - ANTI-SEIZE  
Vaporizer : Aerosol

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

##### Relevant identified uses

Use of the substance/mixture : Lubricant.

##### 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
Skin Irrit. 2	H315
STOT SE 3	H336
Asp. Tox. 1	H304
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

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) :



Signal word (CLP) : Danger

Hazardous ingredients : heptane, n-heptane

Hazard statements (CLP) :  
H222 - Extremely flammable aerosol  
H229 - Pressurised container: May burst if heated  
H315 - Causes skin irritation  
H336 - May cause drowsiness or dizziness

Precautionary statements (CLP)	H410 - Very toxic to aquatic life with long lasting effects
	: P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking P211 - Do not spray on an open flame or other ignition source P251 - Pressurized container: Do not pierce or burn, even after use P261 - Avoid breathing mist, spray, vapours P264 - Wash hands thoroughly after handling P273 - Avoid release to the environment P280 - Wear protective gloves P312 - Call a POISON CENTER or doctor/physician if you feel unwell P391 - Collect spillage P403+P233 - Store in a well-ventilated place. Keep container tightly closed P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

### 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]
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 - 60	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 - 60	Flam. Gas 1, H220
heptane, n-heptane (Note C)	(CAS-No.) 142-82-5 (EC-No.) 205-563-8 (EC Index-No.) 601-008-00-2	30 - 60	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
Copper	(CAS-No.) 7440-50-8;7440-50-8 (EC-No.) 231-159-6 (REACH-no) 01-2119480154-42	< 5	Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410

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	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
First-aid measures after skin contact	: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
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 inhalation	: May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways.

### 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<sub>2</sub>).

**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.

**For non-emergency personnel**

Emergency procedures : Evacuate unnecessary personnel.

**For emergency responders**

Protective equipment : Equip cleanup crew with proper protection. Avoid breathing vapours, mist.

Emergency procedures : Ventilate area.

**6.2. Environmental precautions**

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

**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 : 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. Avoid breathing mist, spray, vapours. Use only outdoors or in a well-ventilated area. 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.

Hygiene measures : Wash hands thoroughly after handling.

**7.2. Conditions for safe storage, including any incompatibilities**

Storage conditions : Keep container tightly closed. Store in a well-ventilated place. Keep cool.

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**

butane (106-97-8)		
United Kingdom	Local name	Butane
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	1450 mg/m <sup>3</sup>
United Kingdom	WEL TWA (ppm)	600 ppm
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	1810 mg/m <sup>3</sup>
United Kingdom	WEL STEL (ppm)	750 ppm

<b>butane (106-97-8)</b>		
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)
<b>heptane, n-heptane (142-82-5)</b>		
EU	Local name	n-Heptane
EU	IOELV TWA (mg/m³)	2085 mg/m³
EU	IOELV TWA (ppm)	500 ppm
United Kingdom	Local name	n-Heptane
United Kingdom	WEL TWA (mg/m³)	2085 mg/m³
United Kingdom	WEL TWA (ppm)	500 ppm
<b>Copper (7440-50-8;7440-50-8)</b>		
EU	Local name	Copper
EU	IOELV TWA (mg/m³)	0.01 mg/m³ (respirable fraction)
EU	Notes	SCOEL Recommendations (2014)
United Kingdom	Local name	Copper
United Kingdom	WEL TWA (mg/m³)	0.2 mg/m³ fume (as Cu) 1 mg/m³ and compounds, dusts and mists (as Cu)
United Kingdom	WEL STEL (mg/m³)	2 mg/m³ and compounds, dusts and mists (as Cu)

## 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	: Avoid all unnecessary exposure. Gloves.
Hand protection	: Wear protective gloves. Nitrile rubber gloves. 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
Skin and body protection	: Wear suitable protective clothing
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	: Do not eat, drink or smoke during use. 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.
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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: aerosol.
Colour	: brown.
Odour	: Hydrocarbon.
Odour threshold	: Not determined
pH	: Not determined
Relative evaporation rate (butylacetate=1)	: Not determined
Melting point	: Not determined
Freezing point	: Not determined
Boiling point	: > 315 °C
Flash point	: < 0 °C
Auto-ignition temperature	: Not determined
Decomposition temperature	: Not determined
Flammability (solid, gas)	: Extremely flammable aerosol
Vapour pressure	: Not determined
Relative vapour density at 20 °C	: Not determined

Relative density	: 1.41 g/cm <sup>3</sup>
Solubility	: insoluble in water. soluble in most organic solvents.
Log Pow	: Not determined
Viscosity, kinematic	: < 20.5 mm <sup>2</sup> /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**

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

**10.5. Incompatible materials**

None to our knowledge.

**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

<b>propane (74-98-6)</b>	
LD50 oral rat	5000 mg/kg
<b>butane (106-97-8)</b>	
LC50 inhalation rat (mg/l)	658 mg/l/4h LC50 inhalation rat (Vapours - mg/l/4h)
<b>heptane, n-heptane (142-82-5)</b>	
LD50 oral rat	> 17000 mg/kg
LD50 dermal rabbit	3000 mg/kg
LC50 inhalation rat (Vapours - mg/l/4h)	60 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation. pH: Not determined
Serious eye damage/irritation	: Not classified Based on available data, the classification criteria are not met 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	: May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified Based on available data, the classification criteria are not met Repeated and prolonged exposure to solvents may cause permanent damage to the central nervous system and internal organs such as the liver and kidneys.
Aspiration hazard	: May be fatal if swallowed and enters airways.

BIRAL A S - ANTI-SEIZE	
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

Ecology - water : Very toxic to aquatic life with long lasting effects.

propane (74-98-6)	
LC50 fish 1	16.9 g/l 96 hours
EC50 Daphnia 1	16.3 g/l (48 hours - Daphnia magna)
heptane, n-heptane (142-82-5)	
LC50 fish 1	0.1 mg/l (96 hours - Tilapia mosambica)
LC50 other aquatic organisms 1	1.285 mg/l (96 hours - Rainbow trout)
EC50 Daphnia 1	1.5 mg/l (48 hours - Daphnia magna)
IC50 algae	4.338 mg/l
Copper (7440-50-8;7440-50-8)	
LC50 fish 1	0.017 mg/l (96 hours - Rainbow trout)
EC50 Daphnia 1	0.0065 mg/l (48 hours -Daphnia hyalina)

### 12.2. Persistence and degradability

BIRAL A S - ANTI-SEIZE	
Persistence and degradability	May cause long-term adverse effects in the environment.
heptane, n-heptane (142-82-5)	
Biodegradation	70 %

### 12.3. Bioaccumulative potential

BIRAL A S - ANTI-SEIZE	
Log Pow	Not determined
Bioaccumulative potential	Not established.
propane (74-98-6)	
Bioconcentration factor (BCF REACH)	13.18
Log Pow	2.36
butane (106-97-8)	
BCF fish 1	33.88
Log Pow	2.89
heptane, n-heptane (142-82-5)	
Bioconcentration factor (BCF REACH)	776.25
Log Pow	4.66
Copper (7440-50-8;7440-50-8)	
Bioconcentration factor (BCF REACH)	29

### 12.4. Mobility in soil

BIRAL A S - ANTI-SEIZE	
Ecology - soil	insoluble in water.

### 12.5. Results of PBT and vPvB assessment

BIRAL A S - ANTI-SEIZE	
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
<b>14.1. UN number</b>			
1950	1950	1950	1950
<b>14.2. UN proper shipping name</b>			
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS
<b>Transport document description</b>			
UN 1950 AEROSOLS, 2.1, (D), ENVIRONMENTALLY HAZARDOUS	UN 1950 AEROSOLS, 2.1, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS		
<b>14.3. Transport hazard class(es)</b>			
2.1	2.1	2.1	2.1
			
<b>14.4. Packing group</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>			
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
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 : 31/03/2008

Revision date : 30/05/2017

Supersedes : 15/12/2014

Version : 10.0

Signature : A. Åsebø Murel

Full text of H- and EUH-statements:

Aerosol 1	Aerosol, Category 1
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Asp. Tox. 1	Aspiration hazard, Category 1
Flam. Gas 1	Flammable gases, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
Press. Gas	Gases under pressure
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H220	Extremely flammable gas
H222	Extremely flammable aerosol

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H225		Highly flammable liquid and vapour	
H229		Pressurised container: May burst if heated	
H304		May be fatal if swallowed and enters airways	
H315		Causes skin irritation	
H336		May cause drowsiness or dizziness	
H400		Very toxic to aquatic life	
H410		Very toxic to aquatic life with long lasting effects	

*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.*