

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 08/24/2017 Revision date: 02/18/2020 Supersedes: 11/27/2019 Version: 1.7

SECTION 1: Identification 1.1. Identification Product form : Mixture Product name : Brake Anti-Squeal Product code : 94160 Recommended use and restrictions on use 1.2. Use of the substance/mixture : Brake pad treatment **Supplier** 1.3. Bardahl Pro 1400 NW 52nd Street Seattle, 98107 - USA T 206-783-4851 - F 206-784-3219 www.bardahl.com Contact:Jackie Leung

1.4. Emergency telephone number

Emergency number

: 800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Flammable liquids, Category 2 Serious eye damage/eye irritation, Category 2 Specific target organ toxicity — Single exposure, Category 3, Narcosis Highly flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness or dizziness.

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US)

Signal word (GHS US)	: Danger
Hazard statements (GHS US)	: Highly flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness or dizziness.
Precautionary statements (GHS US)	 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing fume, gas, vapours. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection, protective clothing, protective gloves. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a doctor if you feel unwell. If eye irritation persists: Get medical advice/attention. In case of fire: Use alcohol resistant foam, BC-powder, carbon dioxide (CO2) to extinguish. Store in a well-ventilated place. Keep cool. Store in a well-ventilated place. Keep cool. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/container to hazardous or special waste collection point, in accordance
02/18/2020	EN (English) Page 1

Brake Anti-Squeal Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

with local, regional, national and/or international regulation.

hhe o	itional information available				
.4.	Unknown acute toxicity (GHS U	5)			
	blicable	3)			
	ION 3: Composition/informa	ation on ingre	edients		
3.1.	Substances				
• •	blicable				
3.2.	Mixtures				
Nan	ne		Product identifier	%	GHS-US classification
Isopi	ropyl Alcohol		(CAS-No.) 67-63-0	10 – 30	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
	t of hazard classes and H-statements	s : see section 16			
SECT 4.1.	ION 4: First-aid measures	S	poison center or a doctor if	you feel unwell.	
SECT 4.1. First-a	ION 4: First-aid measures Description of first aid measures	s : Call a p		,	
SECT 4.1. First-a First-a	ION 4: First-aid measures Description of first aid measures aid measures general	s : Call a p : Remov : Take of	poison center or a doctor if e person to fresh air and k	eep comfortable fo nd wash it before re	
SECT 4.1. First-a First-a First-a	ION 4: First-aid measures Description of first aid measures aid measures general aid measures after inhalation	s : Call a p : Remov : Take of off imm : Rinse c	poison center or a doctor if e person to fresh air and k ff contaminated clothing ar rediately all contaminated o	eep comfortable fo nd wash it before re clothing. veral minutes. Rer	r breathing. euse. Rinse skin with water/shower. Take nove contact lenses, if present and easy to
SECT 4.1. First-a First-a First-a	ION 4: First-aid measures Description of first aid measures aid measures general aid measures after inhalation aid measures after skin contact	s : Call a p : Remov : Take of off imm : Rinse of do. Cor	poison center or a doctor if e person to fresh air and k ff contaminated clothing ar rediately all contaminated o cautiously with water for se	eep comfortable fo nd wash it before re clothing. veral minutes. Rer on persists: Get me	r breathing. euse. Rinse skin with water/shower. Take nove contact lenses, if present and easy to
SECT 4.1. First-a First-a First-a First-a	ION 4: First-aid measures Description of first aid measures aid measures general aid measures after inhalation aid measures after skin contact aid measures after eye contact	s : Call a p : Remov : Take of off imm : Rinse o do. Cor : Call a p	poison center or a doctor if e person to fresh air and k ff contaminated clothing ar rediately all contaminated of cautiously with water for se ntinue rinsing. If eye irritation poison center or a doctor if	eep comfortable fo nd wash it before re clothing. veral minutes. Rer on persists: Get me	r breathing. euse. Rinse skin with water/shower. Take nove contact lenses, if present and easy to
SECT 4.1. First-a First-a First-a First-a First-a	ION 4: First-aid measures Description of first aid measures aid measures general aid measures after inhalation aid measures after skin contact aid measures after eye contact aid measures after ingestion	s : Call a p : Remov : Take of off imm : Rinse o do. Cor : Call a p	poison center or a doctor if e person to fresh air and k ff contaminated clothing ar rediately all contaminated of cautiously with water for se ntinue rinsing. If eye irritation poison center or a doctor if	eep comfortable fo nd wash it before re clothing. veral minutes. Rer on persists: Get me you feel unwell.	r breathing. euse. Rinse skin with water/shower. Take nove contact lenses, if present and easy to
SECT 4.1. First-a First-a First-a First-a First-a Symp	ION 4: First-aid measures Description of first aid measures aid measures general aid measures after inhalation aid measures after skin contact aid measures after eye contact aid measures after ingestion Most important symptoms and e toms/effects	s : Call a p : Remov : Take of off imm : Rinse c do. Cor : Call a p effects (acute an : May ca	poison center or a doctor if e person to fresh air and k ff contaminated clothing ar lediately all contaminated o cautiously with water for se ntinue rinsing. If eye irritatio poison center or a doctor if ad delayed) use drowsiness or dizzine	eep comfortable fo nd wash it before re clothing. veral minutes. Rer on persists: Get me you feel unwell.	r breathing. euse. Rinse skin with water/shower. Take nove contact lenses, if present and easy to
SECT 4.1. First-a First-a First-a First-a First-a Symp	ION 4: First-aid measures Description of first aid measures aid measures general aid measures after inhalation aid measures after skin contact aid measures after eye contact aid measures after ingestion Most important symptoms and e	s : Call a p : Remov : Take of off imm : Rinse of do. Cor : Call a p effects (acute an : May ca : Eye irri	poison center or a doctor if e person to fresh air and k ff contaminated clothing ar rediately all contaminated of cautiously with water for se ntinue rinsing. If eye irritatio poison center or a doctor if Id delayed) use drowsiness or dizzine tation.	eep comfortable fo nd wash it before re clothing. veral minutes. Rer on persists: Get me you feel unwell.	r breathing. euse. Rinse skin with water/shower. Take nove contact lenses, if present and easy to

SECT	ON 5: Fire-fighting measures		
5.1.	Suitable (and unsuitable) extinguishing media		
Suitab	le extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.	
5.2.	Specific hazards arising from the che	emical	
Fire ha	azard	: Highly flammable liquid and vapour.	
Hazar fire	dous decomposition products in case of	: Toxic fumes may be released.	
5.3.	Special protective equipment and pro	ecautions for fire-fighters	
Protec	tion during firefighting	 Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. 	
SECT	ION 6: Accidental release meas	ures	
SECT 6.1.	ION 6: Accidental release meas Personal precautions, protective equ		
6.1. 6.1.1.	Personal precautions, protective equ		
6.1. 6.1.1.	Personal precautions, protective equ For non-emergency personnel	ipment and emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing fume,	
6.1. 6.1.1. Emerg 6.1.2.	Personal precautions, protective equ For non-emergency personnel ency procedures	ipment and emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing fume,	

Avoid release to the environment.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.3.	Methods and material for contain	ment and cleaning up
Metho	ods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other	information	: Dispose of materials or solid residues at an authorized site.
6.4.	Reference to other sections	
For fur	ther information refer to section 13.	
SECT	FION 7: Handling and storage	
7.1.	Precautions for safe handling	
Preca	autions for safe handling	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing fume, gas, vapours. Avoid contact with skin and eyes.
Hygie	ene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2.	Conditions for safe storage, inclu	ding any incompatibilities
Techi	nical measures	: Ground/bond container and receiving equipment.

: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Storage conditions

Brake Anti-Squeal			
USA - ACGIH - Occupational Exposure Limits			
ACGIH TWA (ppm)	200 ppm Isopropanol		
ACGIH STEL (ppm)	400 ppm Isopropanol		
USA - OSHA - Occupational Exposure Limits			
OSHA PEL (TWA) (ppm)	400		
USA - NIOSH - Occupational Exposure Limits			
NIOSH REL (TWA) (ppm)	400 ppm Isopropanol		
NIOSH REL (STEL) (ppm)	500 ppm Isopropanol		
Isopropyl Alcohol (67-63-0)			
USA - ACGIH - Occupational Exposure Limits	USA - ACGIH - Occupational Exposure Limits		
Local name	2-Propanol		
ACGIH TWA (ppm)	200 ppm		
ACGIH STEL (ppm)	400 ppm		
Remark (ACGIH)	Eye & URT irr; CNS impair		
USA - OSHA - Occupational Exposure Limits			
Local name	Isopropyl alcohol		
OSHA PEL (TWA) (mg/m³)	980 mg/m³		
OSHA PEL (TWA) (ppm)	400 ppm		

8.2. Appropriate engineering controls

- Appropriate engineering controls
- : Ensure good ventilation of the work station.
- Environmental exposure controls : Avoid
- : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Protective clothing. Gloves. Safety glasses.

Hand protection:

- Protective gloves
- Eye protection:

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical pr	operties
9.1. Information on basic physical and ch	emical properties
Physical state	: Liquid
Appearance	: Liquid.
Colour	: Black
Odour	: Solvent-like odour
Odour threshold	: No data available
рН	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: 112.5 °C
Flash point	: 12 °C
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: 0.05
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: 2 – 12.7 vol %
Explosive properties	: No data available
Oxidising properties	: No data available
9.2. Other information	
No additional information available	
SECTION 10: Stability and reactivity	

SECTI	ON 10: Stability and reactivity
10.1.	Reactivity
Highly fla	ammable liquid and vapour.
10.2.	Chemical stability
Stable ur	nder normal conditions.
10.3.	Possibility of hazardous reactions
No dang	erous reactions known under normal conditions of use

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information	n
11.1. Information on toxicological effects	
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Brake Anti-Squeal	
LD50 oral rat	> 5 g/kg
LD50 dermal rabbit	> 2 g/kg
LC50 inhalation rat (mg/l)	> 5 mg/l
Isopropyl Alcohol (67-63-0)	
LD50 oral rat	5840 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	16400 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Experimental value, Dermal, 14 day(s))
LC50 inhalation rat (ppm)	> 10000 ppm (Equivalent or similar to OECD 403, 6 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
ATE US (oral)	5840 mg/kg bodyweight
ATE US (dermal)	16400 mg/kg bodyweight
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause drowsiness or dizziness.
Isopropyl Alcohol (67-63-0)	
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after eye contact	: Eye irritation.

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general :	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Brake Anti-Squeal	
LC50 fish 1	5770 – 7450 mg/l 96 hr flow through test, Fathead Minnow (Pimepahles promelas)
LC50 other aquatic organisms 1	> 10000 mg/l 24 hr static test, Water flea (Daphnia Magna)
Isopropyl Alcohol (67-63-0)	
LC50 fish 1	9640 – 10000 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow- through system, Fresh water, Experimental value, Lethal)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.2. Persistence and degradability		
Isopropyl Alcohol (67-63-0)		
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.	
Biochemical oxygen demand (BOD)	1.19 g O ₂ /g substance	
Chemical oxygen demand (COD)	2.23 g O ₂ /g substance	
ThOD	2.4 g O ₂ /g substance	
2.3. Bioaccumulative potential		
Brake Anti-Squeal		
Partition coefficient n-octanol/water (Log Pow)	0.05	
Isopropyl Alcohol (67-63-0)		
Partition coefficient n-octanol/water (Log Pow)	0.05 (Weight of evidence approach, 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	

12.4. Mobility in soil

Isopropyl Alcohol (67-63-0)	
Surface tension	0.021 N/m (25 °C)
Partition coefficient n-octanol/water (Log Koc)	0.185 – 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

12.5. Other adverse effects

Other information

: Avoid release to the environment.

SECTION 13: Disposal consideration	ations
13.1. Disposal methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information	: Flammable vapours may accumulate in the container.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not applicable

Transportation of Dangerous Goods

Transport by sea

Transport document description (IMDG)	: UN 1993 FLAMMABLE LIQUID, N.O.S. (ISOPROPYL ALCOHOL), 3, II
UN-No. (IMDG)	: 1993
Proper Shipping Name (IMDG)	: FLAMMABLE LIQUID, N.O.S.
Class (IMDG)	: 3 - Flammable liquids
Packing group (IMDG)	: II - substances presenting medium danger
Limited quantities (IMDG)	: 1L

Air transport

SECTION 15: Regul	tory information

15.1. US Federal regulations

Isopropyl Alcohol (67-63-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

15.2. International regulations

CANADA

EU-Regulations

National regulations

No additional information available

15.3. US State regulations

Component	State or local regulations
Isopropyl Alcohol(67-63-0)	U.S New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date	: 02/18/2020
NFPA health hazard	: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
NFPA fire hazard	: 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.
Hazard Rating	
Health	: 2 Moderate Hazard - Temporary or minor injury may occur
Flammability	3 Serious Hazard - Materials capable of ignition under almost all normal temperature conditions. Includes flammable liquids with flash points below 73 F and boiling points above 100 F. as well as liquids with flash points between 73 F and 100 F. (Classes IB & IC)
Physical	: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal protection	: C
	C - Safety glasses, Gloves, Synthetic apron

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.