

 Safety Data Sheet

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

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Version: 1.5

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ECTION 1: Identification				
.1. Identification				
Product form	: Mixture			
Product name	: Brake Parts Cleaner			
Product code	: 94156			
.2. Recommended use and	restrictions on use			
Use of the substance/mixture	: Brake parts cleaner			
.3. Supplier				
Bardahl Pro 1400 NW 52nd Street Seattle, 98107 - USA T 206-783-4851 - F 206-784-3219 www.bardahl.com Contact:Jackie Leung				
.4. Emergency telephone n	umber			
Emergency number	: 800-424-9300			
ECTION 2: Hazard(s) ider	tification			
.1. Classification of the sub				
HS-US classification				
Skin corrosion/irritation, Category	2 Causes skin i			
Serious eye damage/eye irritation, Reproductive toxicity, Category 2 Specific target organ toxicity — Si Category 3, Narcosis Specific target organ toxicity — Re Category 2	Suspected of May cause dr	damaging fertility or the u owsiness or dizziness.	unborn child. prolonged or repeated expo	osure.
Serious eye damage/eye irritation, Reproductive toxicity, Category 2 Specific target organ toxicity — Si Category 3, Narcosis Specific target organ toxicity — Re Category 2	Suspected of May cause dr	damaging fertility or the u owsiness or dizziness.		osure.
Serious eye damage/eye irritation, Reproductive toxicity, Category 2 Specific target organ toxicity — Si Category 3, Narcosis Specific target organ toxicity — Re Category 2 .2. GHS Label elements, inc HS US labelling	suspected of May cause dr epeated exposure, May cause da	damaging fertility or the u owsiness or dizziness.		osure.
Serious eye damage/eye irritation, Reproductive toxicity, Category 2 Specific target organ toxicity — Si Category 3, Narcosis Specific target organ toxicity — Re Category 2 .2. GHS Label elements, inc HS US labelling Hazard pictograms (GHS US)	suspected of May cause dr epeated exposure, May cause da	damaging fertility or the u owsiness or dizziness.		osure.
Serious eye damage/eye irritation, Reproductive toxicity, Category 2 Specific target organ toxicity — Si Category 3, Narcosis Specific target organ toxicity — Re Category 2 2. GHS Label elements, inc GHS US labelling Hazard pictograms (GHS US) Signal word (GHS US)	Suspected of May cause dr epeated exposure, May cause da cluding precautionary statements : : : : : : : : : : : : : : : : : : :	damaging fertility or the u owsiness or dizziness.		osure.
Serious eye damage/eye irritation, Reproductive toxicity, Category 2 Specific target organ toxicity — Si Category 3, Narcosis Specific target organ toxicity — Re Category 2 .2. GHS Label elements, inc HS US labelling Hazard pictograms (GHS US)	Suspected of May cause dr Pepeated exposure, May cause da Cluding precautionary statements : : : : : : : : : : : : : : : : : : :	damaging fertility or the u owsiness or dizziness. amage to organs through pressure; may explode if n. irritation. iss or dizziness. ging fertility or the unborn	prolonged or repeated expo	osure.

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Get medical advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Dispose of contents/container to hazardous or special waste collection point, in accordance with local regional national and/or international regulation
with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Acetone	(CAS-No.) 67-64-1	30 – 80	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
Toluene	(CAS-No.) 108-88-3	10 – 40	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401
Heptane	(CAS-No.) 142-82-5	1 – 10	Flam. Liq. 2, H225 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

SECTION 4: First-aid measures	
4.1. Description of first aid measures	
First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	 Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effect	cts (acute and delayed)
Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Eye irritation.
4.3. Immediate medical attention and sp	ecial treatment, if necessary
Treat symptomatically.	
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguish	ning media
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Specific hazards arising from the ch	nemical
Fire hazard	: Extremely flammable aerosol.
Explosion hazard	: Pressurised container: May burst if heated.

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fire	dous decomposition products in case of	: Toxic fumes may be released.
.3.	Special protective equipment and pre	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
.1.	Personal precautions, protective equ	ipment and emergency procedures
.1.1.	For non-emergency personnel	
Emerg	ency procedures	: Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe fume/vapours. Avoid contact with skin and eyes.
.1.2.	For emergency responders	
Protec	tive equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
.2.	Environmental precautions	
void re	elease to the environment.	
.3.	Methods and material for containmer	nt and cleaning up
Metho	ds for cleaning up	: Mechanically recover the product. Notify authorities if product enters sewers or public waters.
Other	information	: Dispose of materials or solid residues at an authorized site.
.4.	Reference to other sections	
or furth	ner information refer to section 13.	
ECT	ION 7: Handling and storage	
.1.	Precautions for safe handling	
Preca	utions for safe handling	: 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. Do not pierce or burn, even after use. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe fume/vapours. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.
Hygier	ne measures	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
.2.	Conditions for safe storage, including	g any incompatibilities
Storag	e conditions	: Protect from sunlight. Store in a well-ventilated place. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store locked up. Keep container tightly closed. Keep cool.

ECTION 8: Exposure controls/personal p	protection
.1. Control parameters	
Brake Parts Cleaner	
No additional information available	
Acetone (67-64-1)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (ppm)	250 ppm
ACGIH STEL (ppm)	500 ppm
Toluene (108-88-3)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Toluene
ACGIH TWA (ppm)	20 ppm
Remark (ACGIH)	Visual impair; female repro;
USA - OSHA - Occupational Exposure Limits	
Local name	Toluene
Remark (OSHA)	(2) See Table Z-2.
Heptane (142-82-5)	
No additional information available	

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8.2. Approp	riate engineering controls	
Appropriate eng	ineering controls	: Ensure good ventilation of the work station.
Environmental e	xposure controls	: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and che	emical properties	
Physical state	: Liquid	
Colour	: Colourless	
Odour	: Solvent-like odour	
Odour threshold	: No data available	
pH	: No data available	
Melting point	: -95 °C	
Freezing point	: No data available	
Boiling point	: 56 °C	
Critical temperature	: 235 °C	
Flash point	: -18 °C	
Relative evaporation rate (butylacetate=1)	: No data available	
Flammability (solid, gas)	: Extremely flammable aerosol.	
Vapour pressure	: No data available	
Relative vapour density at 20 °C	: No data available	
Relative density	: 0.795	
Solubility	: Poorly soluble in water.	
Partition coefficient n-octanol/water (Log Pow)	: No data available	
Auto-ignition temperature	: 465 °C	
Decomposition temperature	: No data available	
Viscosity, kinematic	: No data available	
Viscosity, dynamic	: No data available	
Explosive limits	: No data available	
Explosive properties	: Heating may cause an explosion. Pressurised container: May burst if heated.	
Oxidising properties	: No data available	
9.2. Other information		
VOC content	: 45 %	
Gas group	: Compressed gas	

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SECTION 10: Stability and reactivit	у
10.1. Reactivity	
Extremely flammable aerosol. Pressurised con	tainer: May burst if heated.
10.2. Chemical stability	
Stable under normal conditions.	
10.3. Possibility of hazardous reactions	
No dangerous reactions known under normal of	
ç	
10.4. Conditions to avoid	
Avoid contact with hot surfaces. Heat. No flame	es, no sparks. Eliminate all sources of ignition.
10.5. Incompatible materials	
No additional information available	
10.6. Hazardous decomposition produc	ts
Under normal conditions of storage and use, h	azardous decomposition products should not be produced.
SECTION 11: Toxicological information	ation
11.1. Information on toxicological effect	
Acute toxicity (oral)	: Not classified : Not classified
Acute toxicity (dermal) Acute toxicity (inhalation)	: Not classified
Acetone (67-64-1)	
LD50 oral rat	5800 mg/kg (Equivalent or similar to OECD 401, Rat, Female, Experimental value, Oral)
LD50 dermal rabbit	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal)
LC50 inhalation rat (mg/l)	76 mg/l (Other, 4 h, Rat, Female, Experimental value, Inhalation (vapours))
ATE US (oral)	5800 mg/kg bodyweight
ATE US (dermal)	20000 mg/kg bodyweight
ATE US (vapours)	76 mg/l/4h
ATE US (dust,mist)	76 mg/l/4h
Toluene (108-88-3)	
LD50 oral rat	5580 mg/kg bodyweight (Equivalent or similar to EU Method B.1: Acute Toxicity (Oral), Rat, Male, Experimental value, Oral (one dose), 7 day(s))
LD50 dermal rabbit	 > 5000 mg/kg bodyweight (Other, 24 h, Rabbit, Male, Experimental value, Dermal)
LC50 inhalation rat (mg/l)	25.7 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male, Experimental value,
	Inhalation (vapours))
ATE US (oral)	5580 mg/kg bodyweight
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
STOT-single exposure	: May cause drowsiness or dizziness.
Acetone (67-64-1)	
STOT-single exposure	May cause drowsiness or dizziness.
Toluene (108-88-3)	
STOT-single exposure	May cause drowsiness or dizziness.
Heptane (142-82-5)	
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.

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Toluene (108-88-3)		
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.	
Aspiration hazard	: Not classified	
Viscosity, kinematic	: No data available	
Symptoms/effects	: May cause drowsiness or dizziness.	
Symptoms/effects after skin contact	: Irritation.	
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.
Acetone (67-64-1)	
LC50 fish 1	5540 mg/l (EU Method C.1, 96 h, Salmo gairdneri, Static system, Fresh water, Experimental value, Nominal concentration)
Toluene (108-88-3)	
LC50 fish 1	5.5 mg/l (96 h, Oncorhynchus kisutch, Flow-through system, Fresh water, Experimental value)

12.2. Persistence and degradability

Acetone (67-64-1)	
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.43 g O ₂ /g substance
Chemical oxygen demand (COD)	1.92 g O ₂ /g substance
ThOD	2.2 g O_2 /g substance
BOD (% of ThOD)	0.872 (20 day(s), Literature study)
Toluene (108-88-3)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	2.15 g O ₂ /g substance
Chemical oxygen demand (COD)	2.52 g O ₂ /g substance
ThOD	3.13 g O ₂ /g substance
BOD (% of ThOD)	0.69

12.3. Bioaccumulative potential

Acetone (67-64-1)		
BCF fish 1	0.69 (Pisces)	
BCF other aquatic organisms 1	3 (BCFWIN, Calculated value)	
Partition coefficient n-octanol/water (Log Pow)	-0.24 (Test data)	
Bioaccumulative potential	Not bioaccumulative.	
Toluene (108-88-3)		
BCF fish 1	90 (72 h, Leuciscus idus, Static system, Fresh water, Experimental value)	
Partition coefficient n-octanol/water (Log Pow)	2.73 (Experimental value, 20 °C)	
Bioaccumulative potential Low potential for bioaccumulation (BCF < 500).		

12.4. Mobility in soil

Acetone (67-64-1)		
Surface tension	face tension 0.0237 N/m	
Ecology - soil	No (test)data on mobility of the substance available.	
Toluene (108-88-3)		
Surface tension	27.73 N/m (25 °C)	
Ecology - soil	Low potential for adsorption in soil.	

12.5. Other adverse effects

No additional ir	formation available
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Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
ECTION 14: Transport information	1
Department of Transportation (DOT)	
In accordance with DOT	
Not applicable	
Transportation of Dangerous Goods	
Transport by sea	
Transport document description (IMDG)	: UN 1950 AEROSOLS, 2.1
UN-No. (IMDG)	: 1950
Proper Shipping Name (IMDG)	: AEROSOLS
Class (IMDG)	: 2 - Gases
Marine pollutant	: Yes (IMDG only)
Air transport	·

Acetone (67-64-1)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313		
CERCLA RQ	5000 lb	
Toluene (108-88-3)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313		
CERCLA RQ	1000 lb	

15.2. International regulations

CANADA

EU-Regulations

National regulations No additional information available

15.3. US State regulations

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Toluene (108-88	3-3)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
No	Yes	Yes	Yes	7000	
Component			State or local regulation	•	
Component			State or local regulations	•	
Acetone(67-64-1)		U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List			
Toluene(108-88-3)			ght To Know List; U.S New J ; U.S Pennsylvania - RTK (F		

SECTION 16: Other information

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Revision date	: 02/10/2020
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	1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.
Personal protection	: B
	B - Safety glasses, Gloves

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.