

**BRAKE AND PARTS CLEANER**

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	01/11/2017	1203843-00001	Date of first issue: 01/11/2017

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**SECTION 1. IDENTIFICATION**

Product name : BRAKE AND PARTS CLEANER

Product code : 0890991075

**Manufacturer or supplier's details**

Company name of supplier : Wurth USA Inc.

Address : 93 Grant St.  
Ramsey, NJ 07446

Telephone : (201) 825-2710

Telefax : (201) 825-1643

Emergency telephone : +1 800 255 3924

E-mail address : prodsafe@wuerth.com

**Recommended use of the chemical and restrictions on use**

Recommended use : Cleaning agent  
Automotive

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**SECTION 2. HAZARDS IDENTIFICATION****GHS classification in accordance with 29 CFR 1910.1200**

Flammable liquids : Category 2

Skin irritation : Category 2

Specific target organ system toxicity - single exposure : Category 3

Aspiration hazard : Category 1

**GHS label elements**

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H225 Highly flammable liquid and vapor.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H336 May cause drowsiness or dizziness.

Precautionary Statements : **Prevention:**

**BRAKE AND PARTS CLEANER**

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	01/11/2017	1203843-00001	Date of first issue: 01/11/2017

P210 Keep away from heat/sparks/open flames/hot surfaces.  
No smoking.  
P233 Keep container tightly closed.  
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P261 Avoid breathing mist or vapors.  
P264 Wash skin thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves/ eye protection/ face protection.

**Response:**

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.  
P331 Do NOT induce vomiting.  
P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
P362 + P364 Take off contaminated clothing and wash it before reuse.

**Storage:**

P403 + P235 Store in a well-ventilated place. Keep cool.  
P405 Store locked up.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

Vapors may form explosive mixture with air.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Hazardous ingredients**

Chemical name	CAS-No.	Concentration (% w/w)
Heptane	142-82-5	$\geq 90 - \leq 100$
Propan-2-ol	67-63-0	$\geq 5 - < 10$

**SECTION 4. FIRST AID MEASURES**

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.  
When symptoms persist or in all cases of doubt seek medical advice.

**BRAKE AND PARTS CLEANER**

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	01/11/2017	1203843-00001	Date of first issue: 01/11/2017

---

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|---|---|---|
| If inhaled  | : | If inhaled, remove to fresh air.<br>Get medical attention if symptoms occur.  |
| In case of skin contact                                     | : | In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.<br>Get medical attention.<br>Wash clothing before reuse.<br>Thoroughly clean shoes before reuse.        |
| In case of eye contact                                      | : | Flush eyes with water as a precaution.<br>Get medical attention if irritation develops and persists.  |
| If swallowed  | : | If swallowed, DO NOT induce vomiting.<br>If vomiting occurs have person lean forward.<br>Call a physician or poison control center immediately.<br>Rinse mouth thoroughly with water.<br>Never give anything by mouth to an unconscious person. |
| Most important symptoms and effects, both acute and delayed | : | May be fatal if swallowed and enters airways.<br>Causes skin irritation.<br>May cause drowsiness or dizziness.  |
| Protection of first-aiders                                  | : | First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.   |
| Notes to physician  | : | Treat symptomatically and supportively.   |
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**SECTION 5. FIRE-FIGHTING MEASURES**

- |                                       |   |   |
|---------------------------------------|---|---|
| Suitable extinguishing media          | : | Water spray<br>Alcohol-resistant foam<br>Carbon dioxide (CO <sub>2</sub> )<br>Dry chemical  |
| Unsuitable extinguishing media        | : | High volume water jet   |
| Specific hazards during fire fighting | : | Do not use a solid water stream as it may scatter and spread fire.<br>Flash back possible over considerable distance.<br>Vapors may form explosive mixtures with air.<br>Exposure to combustion products may be a hazard to health.             |
| Hazardous combustion products         | : | Carbon oxides   |
| Specific extinguishing methods        | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.<br>Use water spray to cool unopened containers.<br>Remove undamaged containers from fire area if it is safe to do so.<br>Evacuate area. |

**BRAKE AND PARTS CLEANER**

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	01/11/2017	1203843-00001	Date of first issue: 01/11/2017

---

Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.

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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures : Remove all sources of ignition.  
Ventilate the area.  
Use personal protective equipment.  
Follow safe handling advice and personal protective equipment recommendations.

Environmental precautions : Discharge into the environment must be avoided.  
Prevent further leakage or spillage if safe to do so.  
Prevent spreading over a wide area (e.g. by containment or oil barriers).  
Retain and dispose of contaminated wash water.  
Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up : Non-sparking tools should be used.  
Soak up with inert absorbent material.  
Suppress (knock down) gases/vapors/mists with a water spray jet.  
For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container.  
Clean up remaining materials from spill with suitable absorbent.  
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.  
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

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**SECTION 7. HANDLING AND STORAGE**

Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : Use with local exhaust ventilation.  
Use only in an area equipped with explosion proof exhaust ventilation.

Advice on safe handling : Do not get on skin or clothing.  
Do not breathe vapors or spray mist.  
Do not swallow.  
Avoid contact with eyes.  
Handle in accordance with good industrial hygiene and safety practice.  
Non-sparking tools should be used.  
Keep container tightly closed.

**BRAKE AND PARTS CLEANER**

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	01/11/2017	1203843-00001	Date of first issue: 01/11/2017

Keep away from heat and sources of ignition.  
Take precautionary measures against static discharges.  
Take care to prevent spills, waste and minimize release to the environment.

Conditions for safe storage : Keep in properly labeled containers.  
Store locked up.  
Keep tightly closed.  
Keep in a cool, well-ventilated place.  
Store in accordance with the particular national regulations.  
Keep away from heat and sources of ignition.

Materials to avoid : Do not store with the following product types:  
Strong oxidizing agents  
Organic peroxides  
Flammable solids  
Pyrophoric liquids  
Pyrophoric solids  
Self-heating substances and mixtures  
Substances and mixtures which in contact with water emit flammable gases  
Explosives  
Gases

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Ingredients with workplace control parameters**

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Heptane	142-82-5	TWA	85 ppm 350 mg/m <sup>3</sup>	NIOSH REL
		C	440 ppm 1,800 mg/m <sup>3</sup>	NIOSH REL
		TWA	500 ppm 2,000 mg/m <sup>3</sup>	OSHA Z-1
		TWA	400 ppm	ACGIH
		STEL	500 ppm	ACGIH
Propan-2-ol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m <sup>3</sup>	NIOSH REL
		ST	500 ppm 1,225 mg/m <sup>3</sup>	NIOSH REL
		TWA	400 ppm 980 mg/m <sup>3</sup>	OSHA Z-1

**Biological occupational exposure limits**

Ingredients	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Propan-2-ol	67-63-0	Acetone	Urine	End of	40 mg/l	ACGIH

**BRAKE AND PARTS CLEANER**

Version 1.0      Revision Date: 01/11/2017      SDS Number: 1203843-00001      Date of last issue: -  
 Date of first issue: 01/11/2017

				shift at end of work- week		BEI
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**Engineering measures** : Minimize workplace exposure concentrations.  
 Use only in an area equipped with explosion proof exhaust ventilation.  
 Use with local exhaust ventilation.

**Personal protective equipment**

**Respiratory protection** : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

**Hand protection**  
**Material** : Chemical-resistant gloves

**Remarks** : Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Take note that the product is flammable, which may impact the selection of hand protection. Wash hands before breaks and at the end of workday.

**Eye protection** : Wear the following personal protective equipment:  
 Safety glasses

**Skin and body protection** : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.  
 Wear the following personal protective equipment:  
 Flame retardant antistatic protective clothing.  
 Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).

**Hygiene measures** : Ensure that eye flushing systems and safety showers are located close to the working place.  
 When using do not eat, drink or smoke.  
 Wash contaminated clothing before re-use.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**BRAKE AND PARTS CLEANER**

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	01/11/2017	1203843-00001	Date of first issue: 01/11/2017

---

Appearance	:	liquid
Color	:	clear
Odor	:	acetone-like
Odor Threshold	:	No data available
pH	:	No data available
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	> 55 °C
Flash point	:	-9 °C
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable
Flammability (liquids)	:	Not applicable
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	No data available
Density	:	No data available
Solubility(ies)		
Water solubility	:	No data available
Partition coefficient: n-octanol/water	:	Not applicable
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	< 20 mm <sup>2</sup> /s (40 °C)
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Particle size	:	Not applicable

**BRAKE AND PARTS CLEANER**

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	01/11/2017	1203843-00001	Date of first issue: 01/11/2017

---

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**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	:	Not classified as a reactivity hazard.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Highly flammable liquid and vapor. Vapors may form explosive mixture with air. Can react with strong oxidizing agents.
Conditions to avoid	:	Heat, flames and sparks.
Incompatible materials	:	Oxidizing agents
Hazardous decomposition products	:	No hazardous decomposition products are known.

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**SECTION 11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

Inhalation  
Skin contact  
Ingestion  
Eye contact

**Acute toxicity**

Not classified based on available information.

**Ingredients:****Heptane:**

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg Method: OECD Test Guideline 401 Assessment: The substance or mixture has no acute oral toxicity
Acute inhalation toxicity	:	LC50 (Rat): > 29.29 mg/l Exposure time: 4 h Test atmosphere: vapor Method: OECD Test Guideline 403 Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	:	LD50 (Rabbit): > 2,000 mg/kg Method: OECD Test Guideline 402 Assessment: The substance or mixture has no acute dermal toxicity

**Propan-2-ol:**

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): 72.6 mg/l Exposure time: 4 h



**BRAKE AND PARTS CLEANER**

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	01/11/2017	1203843-00001	Date of first issue: 01/11/2017

---

Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rat): &gt; 5,000 mg/kg

**Skin corrosion/irritation**

Causes skin irritation.

**Ingredients:****Heptane:**

Species: Rabbit

Method: OECD Test Guideline 404

Result: Skin irritation

**Propan-2-ol:**

Species: Rabbit

Result: No skin irritation

**Serious eye damage/eye irritation**

Not classified based on available information.

**Ingredients:****Heptane:**

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

Remarks: Based on data from similar materials

**Propan-2-ol:**

Species: Rabbit

Result: Irritation to eyes, reversing within 21 days

**Respiratory or skin sensitization****Skin sensitization**

Not classified based on available information.

**Respiratory sensitization**

Not classified based on available information.

**Ingredients:****Heptane:**

Test Type: Maximization Test

Routes of exposure: Skin contact

Species: Guinea pig

Method: OECD Test Guideline 406

Result: negative

**Propan-2-ol:**

Test Type: Buehler Test

**BRAKE AND PARTS CLEANER**

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	01/11/2017	1203843-00001	Date of first issue: 01/11/2017

---

Routes of exposure: Skin contact  
Species: Guinea pig  
Method: OECD Test Guideline 406  
Result: negative

**Germ cell mutagenicity**

Not classified based on available information.

**Ingredients:****Heptane:**

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro  
Method: OECD Test Guideline 473  
Result: negative

**Propan-2-ol:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo  
cytogenetic assay)  
Species: Mouse  
Application Route: Intraperitoneal injection  
Result: negative

**Carcinogenicity**

Not classified based on available information.

**Ingredients:****Propan-2-ol:**

Species: Rat  
Application Route: inhalation (vapor)  
Exposure time: 104 weeks  
Method: OECD Test Guideline 451  
Result: negative

**IARC**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**Reproductive toxicity**

Not classified based on available information.

**BRAKE AND PARTS CLEANER**

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	01/11/2017	1203843-00001	Date of first issue: 01/11/2017

---

**Ingredients:****Heptane:**

Effects on fertility : Test Type: Two-generation reproduction toxicity study  
Species: Rat  
Application Route: inhalation (vapor)  
Result: negative  
Remarks: Based on data from similar materials

Effects on fetal development : Test Type: Embryo-fetal development  
Species: Mouse  
Application Route: inhalation (vapor)  
Result: negative  
Remarks: Based on data from similar materials

**Propan-2-ol:**

Effects on fertility : Test Type: Two-generation reproduction toxicity study  
Species: Rat  
Application Route: Ingestion  
Result: negative

Effects on fetal development : Test Type: Embryo-fetal development  
Species: Rat  
Application Route: Ingestion  
Result: negative

**STOT-single exposure**

May cause drowsiness or dizziness.

**Ingredients:****Heptane:**

Assessment: May cause drowsiness or dizziness.

**Propan-2-ol:**

Assessment: May cause drowsiness or dizziness.

**STOT-repeated exposure**

Not classified based on available information.

**Repeated dose toxicity****Ingredients:****Heptane:**

Species: Rat  
NOAEL: 12.47 mg/l  
Application Route: inhalation (vapor)  
Exposure time: 16 Weeks

**Propan-2-ol:**

Species: Rat

**BRAKE AND PARTS CLEANER**

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	01/11/2017	1203843-00001	Date of first issue: 01/11/2017

---

NOAEL: 5000 ppm  
Application Route: inhalation (vapor)  
Exposure time: 104 Weeks  
Method: OECD Test Guideline 413

**Aspiration toxicity**

May be fatal if swallowed and enters airways.

**Ingredients:****Heptane:**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

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**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Ingredients:****Heptane:**

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.2 mg/l  
Exposure time: 48 h

M-Factor (Acute aquatic toxicity) : 1

**Propan-2-ol:**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 10,000 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l  
Exposure time: 24 h

Toxicity to microorganisms : EC50 (Pseudomonas putida): > 1,050 mg/l  
Exposure time: 16 h

**Persistence and degradability****Ingredients:****Propan-2-ol:**

Biodegradability : Result: rapidly degradable

**Bioaccumulative potential****Ingredients:****Heptane:**

Partition coefficient: n-octanol/water : log Pow: 4.5

**BRAKE AND PARTS CLEANER**

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	01/11/2017	1203843-00001	Date of first issue: 01/11/2017

---

**Propan-2-ol:**

Partition coefficient: n-octanol/water : log Pow: 0.05

**Mobility in soil**

No data available

**Other adverse effects**

No data available

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**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.  
Empty containers retain residue and can be dangerous.  
Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death.  
If not otherwise specified: Dispose of as unused product.

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**SECTION 14. TRANSPORT INFORMATION****International Regulations****UNRTDG**

UN number : UN 1993  
Proper shipping name : FLAMMABLE LIQUID, N.O.S.  
(Heptane, Propan-2-ol)  
Class : 3  
Packing group : II  
Labels : 3

**IATA-DGR**

UN/ID No. : UN 1993  
Proper shipping name : Flammable liquid, n.o.s.  
(Heptane, Propan-2-ol)  
Class : 3  
Packing group : II  
Labels : Flammable Liquids  
Packing instruction (cargo aircraft) : 364  
Packing instruction (passenger aircraft) : 353

**IMDG-Code**

UN number : UN 1993  
Proper shipping name : FLAMMABLE LIQUID, N.O.S.  
(Heptane, Propan-2-ol)  
Class : 3  
Packing group : II

**BRAKE AND PARTS CLEANER**

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	01/11/2017	1203843-00001	Date of first issue: 01/11/2017

Labels	:	3
EmS Code	:	F-E, <u>S-E</u>
Marine pollutant	:	yes

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

Not applicable for product as supplied.

**Domestic regulation****49 CFR**

UN/ID/NA number	:	UN 1993
Proper shipping name	:	Flammable liquids, n.o.s. (Heptane, Propan-2-ol)
Class	:	3
Packing group	:	II
Labels	:	FLAMMABLE LIQUID
ERG Code	:	128
Marine pollutant	:	yes(Heptane)

**SECTION 15. REGULATORY INFORMATION****EPCRA - Emergency Planning and Community Right-to-Know****CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**

This material does not contain any components with a section 302 EHS TPQ.

<b>SARA 311/312 Hazards</b>	:	Fire Hazard Acute Health Hazard
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<b>SARA 313</b>	:	The following components are subject to reporting levels established by SARA Title III, Section 313:
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Propan-2-ol	67-63-0	5 - 10 %
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<b>Volatile organic compounds (VOC) content</b>	40 CFR Part 59 National VOC Emission Standard For Consumer Products, Subpart C: VOC content: 100 % / 880 g/l
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**US State Regulations****Pennsylvania Right To Know**

Heptane	142-82-5
Propan-2-ol	67-63-0

<b>California Prop. 65</b>	This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.
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**California List of Hazardous Substances**

Heptane	142-82-5
Propan-2-ol	67-63-0

**BRAKE AND PARTS CLEANER**

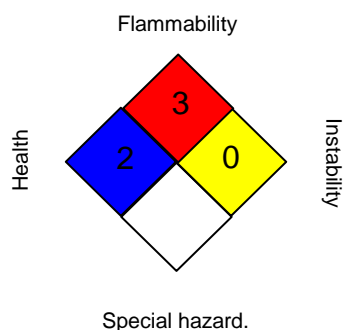
Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	01/11/2017	1203843-00001	Date of first issue: 01/11/2017

**California Permissible Exposure Limits for Chemical Contaminants**

Heptane	142-82-5
Propan-2-ol	67-63-0

**The ingredients of this product are reported in the following inventories:**

TSCA : All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

**SECTION 16. OTHER INFORMATION****Further information****NFPA:****HMIS® IV:**

<b>HEALTH</b>	<b>/</b>	<b>3</b>
<b>FLAMMABILITY</b>		<b>3</b>
<b>PHYSICAL HAZARD</b>		<b>0</b>

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

**Full text of other abbreviations**

ACGIH	: USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI	: ACGIH - Biological Exposure Indices (BEI)
NIOSH REL	: USA. NIOSH Recommended Exposure Limits
OSHA Z-1	: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
ACGIH / TWA	: 8-hour, time-weighted average
ACGIH / STEL	: Short-term exposure limit
NIOSH REL / TWA	: Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST	: STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
NIOSH REL / C	: Ceiling value not be exceeded at any time.
OSHA Z-1 / TWA	: 8-hour time weighted average

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized

**BRAKE AND PARTS CLEANER**

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	01/11/2017	1203843-00001	Date of first issue: 01/11/2017

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System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Sources of key data used to compile the Material Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Revision Date : 01/11/2017

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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