

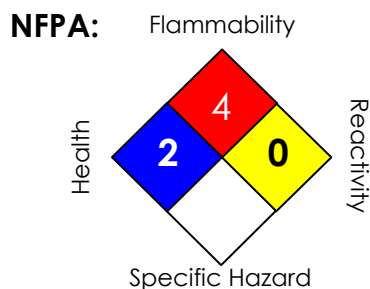
Material Safety Data Sheet

Brake & Parts Cleaner 408gr

Version 1.1

Revision Date 08/20/2014

Print Date 08/22/2014


HMIS III:

HEALTH	2
FLAMMABILITY	4
PHYSICAL	0

0 = Insignificant, 1 = Slight,
 2 = Moderate, 3 = High, 4 = Extreme

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Commercial Product Name : Brake & Parts Cleaner 408gr
 Product code : 890.9107
 SDS-Identcode : 10046740
 Product Use Description : Cleaning agent
 Company : Würth Canada Limited
 345 Hanlon Creek Blvd
 GUELPH, ON N1C 0A1
 Canada

Telephone : +1 (905) 564 6225
 Telefax : +1 (905) 564 3671
 Responsible/issuing person : prodsafe@wuerth.com

Emergency telephone number : In case of emergency please contact: CANUTEC (5:00 pm - 8:00 am):
 +1 (613) 996 6666
 WÜRTH CANADA LIMITED (8:00 am - 5:00 pm):
 +1 (905) 564 6225

SECTION 2. HAZARDS IDENTIFICATION
Emergency Overview

Regulatory status : This product, material or substance is a WHMIS controlled product per Sections 33 - 66, Part IV of the CPR.

Signal Word : DANGER
 Form : aerosol
 Colour : clear, colourless

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Odour : solvent-like
Odour - Control : No data available
parameters
Hazard Summary : Extremely flammable aerosol.
Compressed gas
May cause fire.
Pressurized container. Protect from sunlight and do not
expose to temperatures exceeding 50°C / 122 °F.
Irritant

Potential Health Effects

Eyes : May cause eye irritation.

Skin : May cause skin irritation.

Inhalation : Harmful if inhaled.
May be fatal if inhaled.
May cause drowsiness or dizziness.

Target Organs : Eyes
Skin
Central nervous system

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

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

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

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Weight percent- Weight percent
n-heptane	142-82-5	>= 95 - <= 100
isopropanol	67-63-0	>= 3 - < 5
Carbon dioxide	124-38-9	>= 3 - < 5

SECTION 4. FIRST AID MEASURES

- General advice : If you feel unwell, seek medical advice (show the label where possible). First aider needs to protect himself. Move out of dangerous area. Never give anything by mouth to an unconscious person. Take off contaminated clothing and shoes immediately.
- Inhalation : If breathed in, move person into fresh air. In the case of inhalation of aerosol/mist consult a physician if necessary. Keep patient warm and at rest. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
- Skin contact : Wash off with soap and water. If skin irritation persists, call a physician.
- Eye contact : Protect unharmed eye. If easy to do, remove contact lens, if worn. Rinse with plenty of water. Get medical attention.
- Ingestion : If swallowed, seek medical advice immediately and show this container or label. If swallowed, DO NOT induce vomiting. If a person vomits when lying on his back, place him in the recovery position.

SECTION 5. FIREFIGHTING MEASURES

- Form : aerosol
- Ignition temperature : 246 - 260 °C (475 - 500 °F)
- Lower explosion limit : 1.0 %(V)
- Upper explosion limit : 12.6 %(V)
- Suitable extinguishing media : Water
Carbon dioxide (CO₂)
Dry chemical

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Sand

Specific hazards during firefighting : Do not use a solid water stream as it may scatter and spread fire.
Hazardous decomposition products may be formed under fire conditions (see section 10).
Exposure to decomposition products may be a hazard to health.

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

Further information : Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
In the event of fire and/or explosion do not breathe fumes.
Use water spray to cool unopened containers.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
If the temperature rises there is danger of the vessels bursting due to the high vapor pressure.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Refer to protective measures listed in sections 7 and 8.
Use personal protective equipment.
Remove all sources of ignition.
Avoid contact with skin and eyes.
Ensure adequate ventilation, especially in confined areas.
Immediately evacuate personnel to safe areas.
Avoid inhalation of vapour or mist.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions : Do not flush into surface water or sanitary sewer system.
Prevent further leakage or spillage if safe to do so.

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If the product contaminates rivers and lakes or drains inform respective authorities.

Avoid release to the environment. Refer to special instructions/ Safety data sheets.

Methods for cleaning up : Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.
Clean contaminated surface thoroughly.

SECTION 7. HANDLING AND STORAGE**Handling**

Handling : For personal protection see section 8.
Limit the stocks at work place.
Use only in well-ventilated areas.
Do not breathe vapours or spray mist.
Avoid contact with skin and eyes.
Do not spray on a naked flame or any incandescent material.
Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits.
Take precautionary measures against static discharges.
Use appropriate container to avoid environmental contamination.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.
Vapours are heavier than air and may spread along floors.
Vapours may form explosive mixtures with air.
Keep away from heat and sources of ignition.
Do not smoke.
No sparking tools should be used.
Electrical equipment should be protected to the appropriate standard.

Dust explosion class : Not applicable

Storage

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- Requirements for storage areas and containers : Store in original container.
 BEWARE: Aerosol is pressurized. Keep away from heat.
 Keep away from direct sunlight. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects.
 Keep containers tightly closed in a cool, well-ventilated place.
 Please observe the storage instructions for aerosols!
- Advice on common storage : Incompatible with oxidizing agents.
 Keep away from food, drink and animal feedingsuffs.
 Do not store together with oxidizing and self-igniting products.
- Other data : No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Exposure Guidelines

Components	CAS-No.	List	Type:	Value	Update
n-heptane	142-82-5	CA BC OEL	TWA	400 ppm	2006-11-29
		CA BC OEL	STEL	500 ppm	2006-11-29
		CA QC OEL	TWAEV	400 ppm 1,640 mg/m3	2006-12-29
		CA QC OEL	STEV	500 ppm 2,050 mg/m3	2006-12-29
		CA AB OEL	TWA	400 ppm 1,640 mg/m3	2009-04-30
		CA AB OEL	STEL	500 ppm 2,050 mg/m3	2009-04-30
isopropanol	67-63-0	CA AB OEL	STEL	500 ppm 1,230 mg/m3	2004-04-30
		CA AB OEL	TWA	400 ppm 983 mg/m3	2004-04-30
		CA AB OEL	STEL	400 ppm 984 mg/m3	2009-04-30
		CA AB OEL	TWA	200 ppm 492 mg/m3	2009-04-30
		CA BC OEL	TWA	200 ppm	2006-11-29
		CA BC OEL	STEL	400 ppm	2006-11-29
		CA QC OEL	TWAEV	400 ppm 983 mg/m3	2006-12-29
		CA QC OEL	STEV	500 ppm 1,230 mg/m3	2006-12-29
		Carbon dioxide	124-38-9	CA AB OEL	STEL

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				54,000 mg/m ³	
		CA AB OEL	TWA	5,000 ppm 9,000 mg/m ³	2007-01-01
		CA BC OEL	TWA	5,000 ppm	2006-11-29
		CA BC OEL	STEL	15,000 ppm	2006-11-29
		CA QC OEL	TWAEV	5,000 ppm 9,000 mg/m ³	2006-12-29
		CA QC OEL	STEV	30,000 ppm 54,000 mg/m ³	2006-12-29

- Engineering measures : Provide sufficient air exchange and/or exhaust in work rooms.
- Eye protection : Tightly fitting safety goggles
- Hand protection : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer.
- Skin and body protection : Flame retardant antistatic protective clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Product contains low-boiling liquids. Respiratory protective equipment must be air supplied respirators.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
General industrial hygiene practice.
Do not inhale aerosol.
Avoid contact with skin, eyes and clothing.
When using do not eat, drink or smoke.
Wash hands before breaks and at the end of workday.
Follow the skin protection plan.
Take off all contaminated clothing immediately.
Wash contaminated clothing before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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Form	: aerosol
Colour	: clear, colourless
Odour	: solvent-like
Ignition temperature	: 246 - 260 °C (475 - 500 °F)
Lower explosion limit	: 1.0 %(V)
Upper explosion limit	: 12.6 %(V)
pH	: Not applicable
Boiling point/boiling range	: 83 - 92 °C(181 - 198 °F) Active ingredient
Relative vapour density	: >1 (Air = 1.0)
Density	: 0.68 - 0.72 g/cm ³
Water solubility	: insoluble
Volatile organic compounds (VOC) content	: 96.8 %

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	: Heat, flames and sparks.
Materials to avoid	: Strong oxidizing agents
Hazardous decomposition products	: Carbon monoxide Hydrocarbons Build-up of dangerous/toxic fumes possible in cases of fire/high temperature.
Hazardous reactions	: Note: No decomposition if stored and applied as directed. Vapours may form explosive mixtures with air. If the temperature rises there is danger of the vessels bursting due to the high vapor pressure.

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SECTION 11. TOXICOLOGICAL INFORMATION

Carcinogenicity : No data is available on the product itself.
Reproductive toxicity : No data is available on the product itself.
Teratogenicity : No data is available on the product itself.
Further information : Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Vapours may cause drowsiness and dizziness.

Component:

n-heptane

142-82-5

Acute oral toxicity: LD50 Rat
Dose: > 5,000 mg/kg
Method: OECD Test Guideline 401

Acute dermal toxicity: LD50 Rabbit
Dose: > 2,000 mg/kg
Method: OECD Test Guideline 402

Acute inhalation toxicity: LC50 Rat
Dose: > 29.29 mg/l/Exposure time: 4 h
Method: OECD Test Guideline 403

Skin irritation: Rabbit
Result: irritating
Method: OECD Test Guideline 404

Eye irritation: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405

isopropanol

67-63-0

Acute oral toxicity: LD50 Rat
Dose: 5,045 mg/kg

Acute dermal toxicity: LD50 Rabbit
Dose: 12,800 mg/kg

Acute inhalation toxicity: LC50 Rat
Dose: 46.5 mg/l/Exposure time: 4 h

Eye irritation: Result: Irritating to eyes.

Carbon dioxide

124-38-9

Acute inhalation toxicity: LC50 Rat
Dose: 58750 ppm
Exposure time: 4 h

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SECTION 12. ECOLOGICAL INFORMATION

Volatile organic
compounds (VOC)
content : 96.8 %

Additional ecological
information : The product should not be allowed to enter drains, water
courses or the soil.

Component:

n-heptane

142-82-5

Toxicity to fish:

LC50

Species:

Dose: 5.738 mg/l

Exposure time: 96 h

Calculation

Acute and prolonged toxicity for aquatic invertebrates:

EC50

Species: Daphnia magna (Water flea)

Dose: 1.5 mg/l

Exposure time: 48 h

Toxicity to algae:

EC50

Species:

Dose: 4.338 mg/l

Exposure time: 72 h

Calculation

Toxicity to algae:

NOEC

Species:

Dose: 0.97 mg/l

Exposure time: 72 h

Calculation

Toxicity to bacteria:

EC50

Species: Bacteria

Dose: 22.6 mg/l

Exposure time: 48 h

Calculation

Toxicity to bacteria:

NOEC

Species: Bacteria

Dose: 5.057 mg/l

Exposure time: 48 h

Calculation

isopropanol

67-63-0

Toxicity to fish:

LC50

Species: Pimephales promelas (fathead minnow)

Dose: 9,640 mg/l

Exposure time: 96 h

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Acute and prolonged toxicity for aquatic invertebrates:

EC50

Species: Daphnia magna (Water flea)

Dose: 13,299 mg/l

Exposure time: 48 h

SECTION 13. DISPOSAL CONSIDERATIONS

Adequate disposal : In accordance with local and national regulations.
This material and its container must be disposed of as hazardous waste.

SECTION 14. TRANSPORT INFORMATION**DOT 49 CFR**

ID No : UN 1950
Proper shipping name : Aerosols
Class : 2.1
Labels : 2.1
Emergency Response : 126
Guidebook Number

TDGR

ID No : UN 1950
Proper shipping name : AEROSOLS
Class : 2.1
Labels : 2.1

ICAO/IATA-DGR

ID No : UN 1950
Proper shipping name : Aerosols, flammable
Class : 2.1
ICAO-Labels : 2.1
Packing instruction (cargo aircraft) : 203
Packing instruction : 203
(passenger aircraft)
Packing instruction : Y203
(passenger aircraft)
Environmentally hazardous : no

IMDG-Code

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ID No : UN 1950
Description of the goods : AEROSOLS

Class : 2.1
IMDG-Labels : 2.1
EmS Number 1 : F-D
EmS Number 2 : S-U

Marine pollutant : no

SECTION 15. REGULATORY INFORMATION

WHMIS Classification : A Compressed Gas
B5 Flammable aerosol
Flammable aerosol
Contents under pressure.

D2B Toxic Material Causing Other Toxic Effects
Moderate skin irritant
Moderate eye irritant

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

SECTION 16. OTHER INFORMATION**Further information**

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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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