

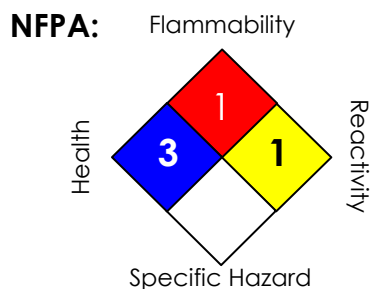
Material Safety Data Sheet

BATTERY POST CLEANER

Version 1.2

Revision Date 07/09/2015

Print Date 07/11/2015


HMIS III:

HEALTH	3
FLAMMABILITY	1
PHYSICAL	1

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

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Commercial Product Name : BATTERY POST CLEANER
 Product code : 890.104150
 SDS-Identcode : 10042199
 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 containing a liquefied gas
 Colour : red

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Odour : amine-like
Odour - Control : No data available
parameters
Hazard Summary : 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 : Causes eye irritation.

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

Skin : May cause skin irritation.
May cause frostbite.
Prolonged or repeated contact may dry skin and cause
irritation.

Target Organs : Eyes
Skin
Central nervous system

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
isobutane	75-28-5	>= 3 - < 5
sodium carbonate	497-19-8	>= 3 - < 5
Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-	9016-45-9	>= 1.5 - < 2

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 : In case of contact, immediately flush skin with soap and plenty of water. Do NOT use solvents or thinners. If skin irritation persists, call a physician.
- Eye contact : Protect unharmed eye. If easy to do, remove contact lens, if worn. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 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 containing a liquefied gas
- Suitable extinguishing media : Dry powder
Foam
Carbon dioxide (CO₂)
Water spray jet
- Unsuitable extinguishing : High volume water jet

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media

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.
If the product contaminates rivers and lakes or drains

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inform respective authorities.

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.

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

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.

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Keep containers tightly closed in a cool, well-ventilated place.

Protect from frost, heat and sunlight.

Keep in an area equipped with alkali resistant flooring.

Please observe the storage instructions for aerosols!

Advice on common storage

: Incompatible with oxidizing agents.

Keep away from food, drink and animal feedingstuffs. Incompatible with acids.

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
isobutane	75-28-5	CA BC OEL	TWA	1,000 ppm	2006-11-29
		CA AB OEL	TWA	1,000 ppm	2009-04-30
		CA ON OEL	TWA	800 ppm	2012-06-12

Engineering measures : Provide sufficient air exchange and/or exhaust in work rooms.

Eye protection : Goggles

Hand protection

Glove material

: Nitrile rubber
Neoprene
PVC

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

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- 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.
Wash contaminated clothing before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Form : Aerosol containing a liquefied gas
Colour : red
Odour : amine-like
pH : 11.8 - 12.4
- Density : 1.038 g/cm³
- Water solubility : completely soluble
- Volatile organic compounds (VOC) content : 5.1 %

SECTION 10. STABILITY AND REACTIVITY

- Conditions to avoid : Heat, flames and sparks.
- Materials to avoid : Strong oxidizing agents
Acids
- Hazardous decomposition products : Carbon oxides
Nitrogen oxides (NO_x)

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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.

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.

Component:

isobutane	75-28-5	<u>Acute inhalation toxicity</u> : LC50 Mouse Dose: 1,237 mg/l
sodium carbonate	497-19-8	<u>Acute oral toxicity</u> : LD50 Rat Dose: 2,800 mg/kg <u>Acute dermal toxicity</u> : LD50 Rabbit Dose: > 2,000 mg/kg <u>Acute inhalation toxicity</u> : LC50 Rat Dose: 2.3 mg/l Exposure time: 2 h <u>Skin irritation</u> : Rabbit Result: No skin irritation Method: OECD Test Guideline 404 <u>Eye irritation</u> : Rabbit Result: Eye irritation
Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.- hydroxy-	9016-45-9	<u>Acute oral toxicity</u> : LD50 Mouse Dose: 4,290 mg/kg <u>Skin irritation</u> : Result: Skin irritation <u>Eye irritation</u> : Result: Eye irritation

SECTION 12. ECOLOGICAL INFORMATION

Volatile organic : 5.1 %

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compounds (VOC)
content

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

Component:

isobutane

75-28-5

Toxicity to fish:

LC50

Species: Fish

Dose: 147.54 mg/l

Exposure time: 96 h

Acute and prolonged toxicity for aquatic invertebrates:

LC50

Species: Daphnia (water flea)

Dose: 46.6 mg/l

Exposure time: 48 h

sodium carbonate

497-19-8

Toxicity to fish:

LC50

Species: Lepomis macrochirus (Bluegill sunfish)

Dose: 300 mg/l

Exposure time: 96 h

Acute and prolonged toxicity for aquatic invertebrates:

EC50

Species: Ceriodaphnia dubia (water flea)

Dose: 200 - 227 mg/l

Exposure time: 48 h

Poly(oxy-1,2-ethanediyl),
.alpha.-(nonylphenyl)-.omega.-
hydroxy-

9016-45-9

Acute and prolonged toxicity for aquatic invertebrates:

LC50

Species: Daphnia (water flea)

Dose: 1.821 mg/l

Exposure time: 48 h

Toxicity to algae:

EC50

Species: Selenastrum capricornutum (green algae)

Dose: 50 mg/l

Exposure time: 48 h

SECTION 13. DISPOSAL CONSIDERATIONSAdequate disposal : In accordance with local and national regulations.
This material and its container must be disposed of as hazardous waste.

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

ID No : UN 1950
Proper shipping name : Aerosols
Class : 2.2
Labels : 2.2
Emergency Response : 126
Guidebook Number

TDGR

ID No : UN 1950
Proper shipping name : AEROSOLS
Class : 2.2
Labels : 2.2

ICAO/IATA-DGR

ID No : UN 1950
Proper shipping name : Aerosols, non-flammable
Class : 2.2
ICAO-Labels : 2.2
Packing instruction (cargo aircraft) : 203
Packing instruction (passenger aircraft) : 203
Packing instruction (passenger aircraft) : Y203
Environmentally hazardous : no

IMDG-Code

ID No : UN 1950
Description of the goods : AEROSOLS

Class : 2.2
IMDG-Labels : 2.2
EmS Number 1 : F-D
EmS Number 2 : S-U

Marine pollutant : no

SECTION 15. REGULATORY INFORMATION

WHMIS Classification : A Compressed Gas

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D1B Toxic Material Causing Immediate and Serious
Toxic Effects
D2B Toxic Material Causing Other Toxic Effects
Compressed Gas
Toxic by inhalation.
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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