

Safety Data Sheet

PTFE Dry Lubricant

Version 6.0

Revision Date 11/29/2014

Print Date 12/04/2014

SECTION 1. IDENTIFICATION

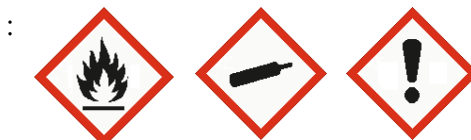
Commercial Product Name : PTFE Dry Lubricant
Product number : 0893550
SDS-Identcode : 10033104
Product Use Description : Anti-friction agent and lubricant
Company : Wurth USA Inc.
93 Grant St.
07446 Ramsey, NJ
USA
Telephone : +1 201 825 27 10
Telefax : +1 201 825 16 43
Responsible/issuing person : prodsafe@wuerth.com
Emergency telephone number : +1 800 255 3924

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Flammable aerosols : Category 1
Gases under pressure : Liquefied gas
Skin irritation : Category 2

GHS Label element

Hazard pictograms



Signal word : Danger

Hazard statements : H222 Extremely flammable aerosol.
H280 Contains gas under pressure; may explode if heated.
H315 Causes skin irritation.

Precautionary statements : **Prevention:**
P210 Keep away from heat/sparks/open flames/hot

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surfaces. - No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Pressurized container: Do not pierce or burn, even after use.

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

Storage:

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Weight percent- Weight percent
butane	106-97-8	>= 50 - < 70
low boiling point hydrogen treated naphtha	64742-49-0	>= 10 - < 20
propane	74-98-6	>= 10 - < 20
isopropanol	67-63-0	>= 1 - < 5
isobutane	75-28-5	>= 1 - < 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 : In case of contact, immediately flush skin with soap and plenty of water. Do NOT use solvents or thinners. If skin

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- Eye contact : irritation persists, call a physician.
: 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.

Notes to physician

- Treatment : Treat symptomatically and supportively.

SECTION 5. FIREFIGHTING MEASURES

- Form : Aerosol containing a liquefied gas
- Flash point : < 0 °C (< 32 °F)
Note: Solvent mixture
- Ignition temperature : 365 °C (689 °F)
- Suitable extinguishing media : Carbon dioxide (CO₂)
Dry powder
Water spray jet
Alcohol-resistant foam
- Unsuitable extinguishing media : High volume water jet
- 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.

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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.
Contaminated surfaces will be extremely slippery.
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 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.

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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.
Do not carry cloths that have come into contact with the product in your clothing.

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 direct sun exposure and temperatures over 50 °C. 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 dry, cool and well-ventilated place.
Please observe the storage instructions for aerosols!

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Advice on common storage : Keep away from food, drink and animal feedingstuffs. Do not store together with oxidizing and self-igniting products.

Storage period : >= 24 Months

Storage temperature : 15 - 35 °C (59 - 95 °F)

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Components	CAS-No.	List	Type:	Value	Update
butane	106-97-8	NIOSH REL	TWA	800 ppm 1,900 mg/m3	2013-10-08
		OSHA P0	TWA	800 ppm 1,900 mg/m3	1989-01-19
		ACGIH	STEL	1,000 ppm	2013-03-01
low boiling point hydrogen treated naphtha	64742-49-0	OSHA Z-1	TWA	500 ppm 2,000 mg/m3	2007-01-01
propane	74-98-6	OSHA Z-1	TWA	1,000 ppm 1,800 mg/m3	1997-08-04
		NIOSH REL	TWA	1,000 ppm 1,800 mg/m3	2013-10-08
		OSHA P0	TWA	1,000 ppm 1,800 mg/m3	1989-01-19
isopropanol	67-63-0	ACGIH	TWA	200 ppm	2013-03-01
		ACGIH	STEL	400 ppm	2013-03-01
		OSHA Z-1	TWA	400 ppm 980 mg/m3	1997-08-04
		NIOSH REL	TWA	400 ppm 980 mg/m3	2013-10-08
		NIOSH REL	ST	500 ppm 1,225 mg/m3	2013-10-08
		OSHA P0	TWA	400 ppm 980 mg/m3	1989-01-19
		OSHA P0	STEL	500 ppm 1,225 mg/m3	1989-01-19
isobutane	75-28-5	NIOSH REL	TWA	800 ppm 1,900 mg/m3	2013-10-08
		ACGIH	STEL	1,000 ppm	2013-03-01

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

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Eye protection : In case of splash hazard, please wear protective goggles.

Hand protection

Glove material : Nitrile rubber

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 : No personal respiratory protective equipment normally required.

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
Physical state : aerosol

Colour : off-white
Odour : very faint
Odour Threshold : No data available
Flash point : < 0 °C (< 32 °F)
Note: Solvent mixture

Ignition temperature : 365 °C (689 °F)

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Thermal decomposition	: No data available
Lower explosion limit	: 0.7 %(V)
Upper explosion limit	: 10.9 %(V)
Flammability	: No data available
Molecular weight	: No data available
pH	: No data available
Melting point/range	: No data available
Boiling point/boiling range	: -43.98 °C (-47.16 °F)
Vapour pressure	: No data available
Relative vapour density	: No data available
Evaporation rate	: No data available
Density	: 0.6 g/cm ³ at 20 °C (68 °F)
Relative density	: No data available
Bulk density	: No data available
Water solubility	: partly miscible
Partition coefficient: n-octanol/water	: No data available
Solubility in other solvents	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Volatile organic compounds (VOC) content	: 98.08 %

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	: Heat, flames and sparks.
Hazardous decomposition products	: fluorinated compounds
Hazardous reactions	: 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

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Skin irritation : slight irritation

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.

Component:

butane	106-97-8	<u>Acute inhalation toxicity:</u> LC50 Mouse Dose: 1,237 mg/l 520400 ppm Exposure time: 2 h
low boiling point hydrogen treated naphtha	64742-49-0	<u>Skin irritation:</u> Result: Severe skin irritation <u>Carcinogenicity:</u> Classified based on benzene content < 0.1% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note P) <u>Mutagenicity:</u> Classified based on benzene content < 0.1% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note P)
isopropanol	67-63-0	<u>Acute oral toxicity:</u> LD50 Rat Dose: 5,045 mg/kg <u>Acute dermal toxicity:</u> LD50 Rabbit Dose: 12,800 mg/kg <u>Acute inhalation toxicity:</u> LC50 Rat Dose: 46.5 mg/l Exposure time: 4 h <u>Eye irritation:</u> Result: Irritating to eyes.
isobutane	75-28-5	<u>Acute inhalation toxicity:</u> LC50 Mouse Dose: 1,237 mg/l Exposure time: 120 min <u>Mutagenicity:</u> Tests on bacterial or mammalian cell cultures did not show mutagenic effects. <u>Reproductive toxicity:</u> No toxicity to reproduction

Carcinogenicity:**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.

OSHA

No component of this product present at levels greater

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than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

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.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity to fish : Harmful to fish.

Adsorbed organic bound halogens (AOX) : not included

Volatile organic compounds (VOC) content : 98.08 %

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

Component:

isopropanol

67-63-0

Toxicity to fish:

LC50

Species: Pimephales promelas (fathead minnow)

Dose: 9,640 mg/l

Exposure time: 96 h

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 in a safe way.

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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 (passenger aircraft) : 203
Packing instruction (passenger aircraft) : Y203
Environmentally hazardous : no

IMDG-Code

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

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SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazards : Fire Hazard
Acute Health Hazard
Sudden Release of Pressure Hazard

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

EPCRA_302 US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

EPCRA_313 US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

<u>Components</u>	<u>CAS-No.</u>
isopropanol	67-63-0

PENN RTK US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

<u>Components</u>	<u>CAS-No.</u>
butane	106-97-8
low boiling point hydrogen treated naphtha	64742-49-0
propane	74-98-6
isopropanol	67-63-0
isobutane	75-28-5

MASS RTK US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

<u>Components</u>	<u>CAS-No.</u>
butane	106-97-8
propane	74-98-6
isopropanol	67-63-0
isobutane	75-28-5

NJ RTK US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

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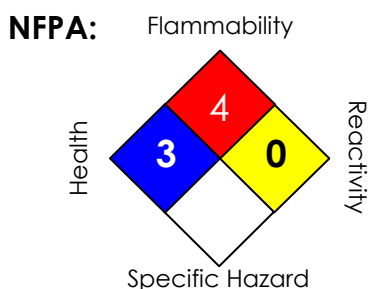
Components	CAS-No.
butane	106-97-8
low boiling point hydrogen treated naphtha	64742-49-0
propane	74-98-6
isopropanol	67-63-0
isobutane	75-28-5

California Prop. 65

: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16. OTHER INFORMATION

Further information



HMIS III:

HEALTH	3
FLAMMABILITY	4
PHYSICAL	2

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

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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