

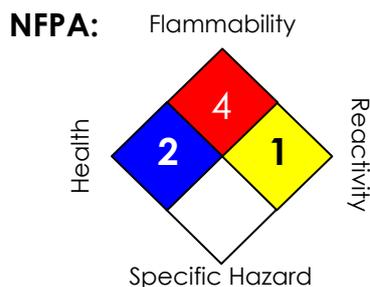
## Material Safety Data Sheet

**HHS-2000**

Version 5.0

Revision Date 11/15/2011

Print Date 12/07/2011


**HMIS III:**

<b>HEALTH</b>	<b>2*</b>
<b>FLAMMABILITY</b>	<b>4</b>
<b>PHYSICAL</b>	<b>1</b>

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

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Commercial Product Name : HHS-2000  
 Product code : 0893106  
 MSDS-Identcode : 10032982  
 Product Use Description : Polishing 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.wurth@sap.com  
 Emergency telephone number : +1 800 255 3924

**SECTION 2. HAZARDS IDENTIFICATION**
**Emergency Overview**

**Regulatory status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Signal Word** : DANGER  
 Form : aerosol  
 Colour : brown  
 Odour : solvent-like  
 Odour - Control parameters : no data available

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Hazard Summary : Extremely flammable.  
May cause fire.  
Possible cancer hazard  
Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C / 122 °F.  
Irritant

**Potential Health Effects**

Target Organs : Eyes  
Skin  
Respiratory system  
Central nervous system

Eyes : May cause eye irritation.

Skin : May cause skin irritation.

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.

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 : low boiling point hydrogen treated naphtha (CAS-No.: 64742-49-0)

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.

CA Prop 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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

Component	CAS-No.	Weight percent- Weight percent
low boiling point hydrogen treated naphtha	64742-49-0	>= 35 - < 40
isobutane	75-28-5	>= 25 - < 35
propane	74-98-6	>= 3 - < 5
n-hexane	110-54-3	>= 1.5 - < 2
butane	106-97-8	>= 1.5 - < 2
PROPENE, 2-METHYL-, POLYMERS	9003-27-4	>= 1 - < 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 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
- Ignition temperature : ca.350 °C (662 °F)
- Lower explosion limit : 1.8 %(V)

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- Upper explosion limit : 11.2 %(V)
- Suitable extinguishing media : Dry powder  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Water mist
- 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.  
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.

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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 : Clean contaminated surface thoroughly.  
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.

CERCLA Hazardous substances and corresponding RQs:

110-54-3	5,000 lbs <i>final</i> RQ
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**SECTION 7. HANDLING AND STORAGE****Handling**

Handling : 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.  
Do not carry cloths that have come into contact with the product in your clothing.  
For personal protection see section 8.

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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!

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

Other data : No decomposition if stored and applied as directed.

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**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**
**Exposure Guidelines**

Components	CAS-No.	List	Type:	Value	Update
low boiling point hydrogen treated naphtha	64742-49-0	OSHA P1	TWA	500 ppm 2,000 mg/m3	2007-01-01
isobutane	75-28-5	ACGIH	TWA	1,000 ppm	2007-01-01
		NIOSH REL	TWA	800 ppm 1,900 mg/m3	2005-09-01
propane	74-98-6	OSHA P1	TWA	1,000 ppm 1,800 mg/m3	1997-08-04
		ACGIH	TWA	1,000 ppm	2007-01-01
		NIOSH REL	TWA	1,000 ppm 1,800 mg/m3	2005-09-01

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n-hexane	110-54-3	ACGIH	TWA	50 ppm	2007-01-01
		OSHA P1	TWA	500 ppm 1,800 mg/m3	1997-08-04
		NIOSH REL	TWA	50 ppm 180 mg/m3	2005-09-01
butane	106-97-8	ACGIH	TWA	1,000 ppm	2007-01-01
		NIOSH REL	TWA	800 ppm 1,900 mg/m3	2005-09-01

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

Eye protection : Tightly fitting safety 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 : 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.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Form	: aerosol
Colour	: brown
Odour	: solvent-like
Ignition temperature	: ca.350 °C (662 °F)
Lower explosion limit	: 1.8 %(V)
Upper explosion limit	: 11.2 %(V)
pH	: not applicable
Boiling point/boiling range	: no data available
Relative vapour density	: no data available
Density	: 0.742 g/cm <sup>3</sup> Active ingredient
Water solubility	: insoluble
Partition coefficient: n-octanol/water	: no data available
Viscosity, dynamic	: no data available
Viscosity, kinematic	: no data available
Volatile organic compounds (VOC) content	: 76.92 %

**SECTION 10. STABILITY AND REACTIVITY**

Conditions to avoid	: Heat, flames and sparks.
Materials to avoid	: Avoid contact with other chemicals.
Hazardous decomposition products	: Build-up of dangerous/toxic fumes possible in cases of fire/high temperature.
Hazardous reactions	: Note: No decomposition if stored and applied as directed.

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**SECTION 11. TOXICOLOGICAL INFORMATION**

Skin irritation	:	Classification: Irritating to skin. Result: Skin irritation
Eye irritation	:	May irritate eyes.
Sensitisation	:	no data available
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:**low boiling point hydrogen  
treated naphtha

64742-49-0

Acute oral toxicity: LD50 rat  
Dose: > 5,000 mg/kgSkin irritation: Classification: Irritating to skin.  
Result: Mild skin irritation

propane

74-98-6

Acute inhalation toxicity: LC50 rat  
Dose: 57000 ppm  
Exposure time: 15 min

n-hexane

110-54-3

Acute oral toxicity: LD50 rat  
Dose: 25,000 mg/kgAcute dermal toxicity: LD50 rabbit  
Dose: > 2,000 mg/kgAcute inhalation toxicity: LC50 rat  
Dose: 171.6 mg/Exposure time: 4 hSkin irritation: Classification: Irritating to skin.  
Result: Skin irritationEye irritation: Classification: Irritating to eyes.  
Result: Mild eye irritation

butane

106-97-8

Acute inhalation toxicity: LC50 rat  
Dose: 658 mg/Exposure time: 4 h

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Skin irritation: Result: Mild skin irritationEye irritation: Result: Mild eye irritation**SECTION 12. ECOLOGICAL INFORMATION**Adsorbed organic bound : not included  
halogens (AOX)Volatile organic : 76.92 %  
compounds (VOC)  
contentAdditional ecological : The product should not be allowed to enter drains, water  
information courses or the soil.**Component:**

n-hexane

110-54-3

Toxicity to fish:

LC50

Species: Pimephales promelas (fathead minnow)

Dose: 2.5 mg/l

Exposure time: 96 h

Acute and prolonged toxicity for aquatic invertebrates:

EC50

Species: Daphnia magna (Water flea)

Dose: 2.1 mg/l

Exposure time: 48 h

PROPENE, 2-METHYL-, POLYMERS 9003-27-4

Toxicity to fish:

LC50

Species: Oncorhynchus mykiss (rainbow trout)

Dose: &gt; 5,600 mg/l

Exposure time: 96 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.

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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  
(low boiling point hydrogen treated naphtha)  
Class : 2.1  
IMDG-Labels : 2.1  
EmS Number 1 : F-D  
EmS Number 2 : S-U  
Marine pollutant : yes

**SECTION 15. REGULATORY INFORMATION**

**OSHA Hazards** : EXTREMELY FLAMMABLE AEROSOL

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Moderate skin irritant  
Carcinogen  
Moderate eye irritant

**SARA 311/312 Hazards** : Fire Hazard  
Acute Health Hazard  
Chronic Health Hazard

**CERCLA Reportable Quantity** : 308,661 lbs

**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
n-hexane	110-54-3
isobutane	75-28-5

**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

The following components are subject to reporting levels established by SARA Title III, Section 313:

<u>Components</u>	<u>CAS-No.</u>
n-hexane	110-54-3

**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)

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**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
propane	74-98-6
n-hexane	110-54-3
isobutane	75-28-5
low boiling point hydrogen treated naphtha	64742-49-0
baseoil - unspecified	90640-95-2

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Unknown substance - without labeling & classification	
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**NJ RTK**

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

<u>Components</u>	<u>CAS-No.</u>
butane	106-97-8
propane	74-98-6
n-hexane	110-54-3
isobutane	75-28-5
low boiling point hydrogen treated naphtha	64742-49-0
baseoil - unspecified	90640-95-2
Unknown substance - without labeling & classification	

**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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