

**Material Safety Data Sheet**  
acc. to ISO/DIS 11014

Printing date 11/30/2010

Reviewed on 11/30/2010

**1 Identification of the substance/mixture and of the company/undertaking****· Product identifier****· Trade name: BRUNOX® Waffenpflege bulk****· Relevant identified uses of the substance or mixture and uses advised against****· Application of the substance / the preparation**

WAFFENPFLEGE

Laufreiniger, Korrosionsschutz, Schmiermittel

GUN CARE

cleaning of the barrel, protection against corrosion and lubrication

Cleaning agent/ Cleaner

Anticorrosion additive

Lubricant

**· Details of the supplier of the safety data sheet****· Manufacturer/Supplier:**

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**· Information department:** Abteilung Produktsicherheit: Tel. +41/ (0)79 372 34 44**· Emergency telephone number:**

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Notruf - CH - : 145

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EUROPÄISCHE NOTRUFNR. : 112

**2 Composition/information on ingredients****· Chemical characterization: Mixtures****· Description:** Mixture of the substances listed below with nonhazardous additions.**· Dangerous components:**

64742-47-8 Distillates (petroleum), hydrotreated light

 H304

50-100%

64742-56-9 Distillates (petroleum), solvent-dewaxed light paraffinic

10-25%

68608-26-4 sulfonic acids, petroleum, sodium salts

 H319

2.5-10%

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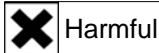
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**3 Hazards identification****· Classification of the substance or mixture**

GHS08 Health hazard

H304 May be fatal if swallowed and enters airways.

H227 Combustible liquid.

**· Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

Harmful

Harmful: may cause lung damage if swallowed.

Repeated exposure may cause skin dryness or cracking.

**· Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of international guidelines.

At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

**· Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

**· Label elements****· Labelling according to EU guidelines:**

Observe the general safety regulations when handling chemicals.

The product has been classified and marked in accordance with directives on hazardous materials.

**· Code letter and hazard designation of product:**

Harmful

**· Hazard-determining components of labelling:**

Distillates (petroleum), hydrotreated light

**· Risk phrases:**

Harmful: may cause lung damage if swallowed.

Repeated exposure may cause skin dryness or cracking.

**· Safety phrases:**

Keep out of the reach of children.

Keep away from food, drink and animal feedingstuffs.

Do not breathe fumes/aerosol.

Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

If swallowed, seek medical advice immediately and show this container or label.

Use only in well-ventilated areas.

**· Hazard description:****· WHMIS-symbols:**

B3 - Combustible liquid



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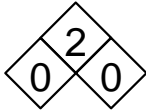
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- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 0  
Fire = 2  
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**

HEALTH	0
FIRE	2
REACTIVITY	0

Health = 0  
Fire = 2  
Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 4 First aid measures

- **Description of first aid measures**
- **After inhalation:**  
Take affected persons into fresh air and keep quiet.  
Seek medical treatment in case of complaints.
- **After skin contact:** If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**  
In case of fire, the following can be released:  
Carbon monoxide (CO)
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information** Cool endangered receptacles with water spray.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation  
Keep away from ignition sources  
Wear protective equipment. Keep unprotected persons away.

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- **Environmental precautions:**
  - Do not allow to penetrate the ground/soil.
  - Do not allow product to reach sewage system or any water course.
  - Inform respective authorities in case of seepage into water course or sewage system.
  - Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Dispose contaminated material as waste according to item 13.
  - Ensure adequate ventilation.
- **Reference to other sections**
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

**7 Handling and storage**

- **Handling:**
- **Precautions for safe handling**
  - Use only in well ventilated areas.
  - Ensure good ventilation/exhaustion at the workplace.
  - Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
  - Keep ignition sources away - Do not smoke.
  - Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:**
  - Store away from foodstuffs.
  - Store away from oxidizing agents.
- **Further information about storage conditions:**
  - Store receptacle in a well ventilated area.
  - Store under lock and key and out of the reach of children.
- **Specific end use(s)** No further relevant information available.

**8 Exposure controls/personal protection**

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
  - 64742-47-8 Distillates (petroleum), hydrotreated light**
  - EL 200 mg/m<sup>3</sup>
  - Skin
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
  - Keep away from foodstuffs, beverages and feed.
  - Wash hands before breaks and at the end of work.
  - Do not inhale gases / fumes / aerosols.

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- **Breathing equipment:**

Filter AX

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- **Protection of hands:**

Use gloves of stable material (e.g. Nitrile) - if necessary tricoted to improve the wearability.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Goggles recommended during refilling.

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

**Form:**

Fluid

**Color:**

Clear

- **Odor:**

Characteristic

- **Odour threshold:**

Not determined.

- **pH-value:**

Not determined.

- **Change in condition**

**Melting point/Melting range:**

-54°C

**Boiling point/Boiling range:**

&gt; 200°C

- **Flash point:**

78°C

- **Ignition temperature:**

210°C

- **Decomposition temperature:**

Not determined.

- **Auto igniting:**

Product is not selfigniting.

- **Danger of explosion:**

Product does not present an explosion hazard.

- **Explosion limits:**

**Lower:**

0.5 Vol %

**Upper:**

6.5 Vol %

- **Vapor pressure at 20°C:**

2 hPa

- **Density at 20°C:**

0.82 g/cm<sup>3</sup>

- **Relative density**

Not determined.

- **Vapour density**

Not determined.

- **Evaporation rate**

Not determined.

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- **Solubility in / Miscibility with**  
**Water at -1°C:** 20 g/l
- **Segregation coefficient (n-octanol/water):** Not determined.
- **Viscosity:**  
**Dynamic at 20°C:** 4 mPas  
**Kinematic:** Not determined.
- **Solvent content:**  
**Organic solvents:** 0.5 %
- **Other information** No further relevant information available.

**10 Stability and reactivity**

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**  
Carbon monoxide  
Carbon dioxide

**11 Toxicological information**

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**  
**on the skin:**  
Bei längeren und/oder häufigem Hautkontakt sind Reizerscheinungen möglich.  
Prolonged skin contact will result in defatting of the skin, leading to irritation, and in some cases, dermatitis.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:

**12 Ecological information**

- **Toxicity**
- **Acquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (Self-assessment): hazardous for water

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Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.

- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

**13 Disposal considerations**

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

**14 Transport information**

- **DOT regulations:**
- **Hazard class:** -
- **TDG (Transport dangerous goods):**
- **TDG class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -
- **UN "Model Regulation":** -
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

**15 Regulatory information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**
- **Section 355 (extremely hazardous substances):**  
None of the ingredients is listed.
- **Section 313 (Specific toxic chemical listings):**  
None of the ingredients is listed.
- **TSCA (Toxic Substances Control Act):**  
All ingredients are listed.
- **Proposition 65**
- **Chemicals known to cause cancer:**  
None of the ingredients is listed.

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- **Chemicals known to cause reproductive toxicity for females:**  
None of the ingredients is listed.
- **Chemicals known to cause reproductive toxicity for males:**  
None of the ingredients is listed.
- **Chemicals known to cause developmental toxicity:**  
None of the ingredients is listed.
- **Carcinogenic categories**
- **EPA (Environmental Protection Agency)**  
None of the ingredients is listed.
- **IARC (International Agency for Research on Cancer)**  
None of the ingredients is listed.
- **NTP (National Toxicology Program)**  
None of the ingredients is listed.
- **TLV (Threshold Limit Value established by ACGIH)**  
None of the ingredients is listed.
- **NIOSH-Ca (National Institute for Occupational Safety and Health)**  
None of the ingredients is listed.
- **OSHA-Ca (Occupational Safety & Health Administration)**  
None of the ingredients is listed.
- **Canadian substance listings:**
- **Canadian Domestic Substances List (DSL)**  
All ingredients are listed.
- **Canadian Ingredient Disclosure list (limit 0.1%)**  
None of the ingredients is listed.
- **Canadian Ingredient Disclosure list (limit 1%)**  
None of the ingredients is listed.
- **Product related hazard informations:**  
Observe the general safety regulations when handling chemicals.  
The product has been classified and marked in accordance with directives on hazardous materials.
- **Hazard symbols:**  
 Harmful
- **Hazard-determining components of labelling:**  
Distillates (petroleum), hydrotreated light
- **Risk phrases:**  
Harmful: may cause lung damage if swallowed.  
Repeated exposure may cause skin dryness or cracking.
- **Safety phrases:**  
Keep out of the reach of children.  
Keep away from food, drink and animal feedingstuffs.  
Do not breathe fumes/aerosol.  
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

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If swallowed, seek medical advice immediately and show this container or label.  
Use only in well-ventilated areas.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### **16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** Abteilung Produktsicherheit
- **Contact:** siehe Seite 1 / see page 1
- **Abbreviations and acronyms:**
  - IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
  - ICAO: International Civil Aviation Organization
  - ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
  - ACGIH: American Conference of Governmental Industrial Hygienists
  - NFPA: National Fire Protection Association (USA)
  - HMIS: Hazardous Materials Identification System (USA)
  - WHMIS: Workplace Hazardous Materials Information System (Canada)

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