

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® Top-Kett
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation**
 longterm corrosion inhibitor and high-tech lubricant
 Anticorrosion additive
 Lubricant
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 BRUNOX Korrosionsschutz GmbH
 Postfach 100127
 85001 Ingolstadt

 Tel. + 49/ (0) 841 961 29 04
 Fax + 49/ (0) 841 961 29 13
 E-mail: office@brunox.com
- BRUNOX AG
 Tunnelstrasse 6
 CH - 8732 Neuhaus/SG

 Tel. +41/ (0)55 285 80 80
 Fax +41/ (0)55 285 80 81
 E-mail: office@brunox.com
- **Information department:** Abteilung Produktsicherheit: Tel. +41/ (0)79 372 34 44
- **Emergency telephone number:**
 Toxikologisches Informationszentrum
 CH - 8030 Zürich, Freiestrasse 16
 Tel. +41/ 044 251 51 51
 Notruf - CH - : 145 Notruf - D - : Giftnotrufzentrale 030 19240
 Notruf - AT - : 01 4064343 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 | | 25-50% |
| 68608-26-4 sulfonic acids, petroleum, sodium salts | ⚠ H319 | 2.5-10% |

3 Hazards identification

- **Classification of the substance or mixture**



GHS02 Flame

H226 Flammable liquid and vapour.

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

Flammable. 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:**

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

- **Risk phrases:**

Flammable.

Repeated exposure may cause skin dryness or cracking.

- **Safety phrases:**

Keep out of the reach of children.

Keep away from sources of ignition - No smoking.

Do not breathe fumes/aerosol.

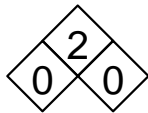
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

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

Use only in well-ventilated areas.

- **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**

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

4 First aid measures

- **Description of first aid measures**

- **After inhalation:** Supply fresh air; consult doctor 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.

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- **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:** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** 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
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
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).
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **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**
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 oxidizing agents.
- **Further information about storage conditions:**
Store under lock and key and out of the reach of children.
Keep receptacle tightly sealed.

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- **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:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
- **Breathing equipment:**
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:**



Protective gloves

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:**



Tightly sealed goggles

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Fluid
Color:	olivegelblich / olive-yellow

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· Odor:	Characteristic
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	176°C (349°F)
· Flash point:	51°C (124°F)
· Ignition temperature:	210°C (410°F)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	0.5 Vol %
Upper:	6.5 Vol %
· Vapor pressure at 20°C (68°F):	2 hPa (2 mm Hg)
· Density at 20°C (68°F):	0.85 g/cm ³ (7.093 lbs/gal)
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
· Segregation coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic at 20°C (68°F):	50 mPas
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	0.1 %
VOC content:	0.1 %
	0.4 g/l / 0.00 lb/gl
Solids content:	39.9 %
· 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:** Starke Oxidationsmittel/strong oxidising agent
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide

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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:**

Inhalation of concentrated vapors as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.

12 Ecological information**· Toxicity****· Aquatic 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

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 be specially treated adhering to official regulations.

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.

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14 Transport information

· DOT regulations:



- Hazard class: 3
- Identification number: UN1268
- Packing group: III
- Proper shipping name (technical name): PETROLEUM DISTILLATES, N.O.S.
- Label: 3

· Land transport ADR/RID (cross-border):



- ADR/RID class: 3 Flammable liquids
- Danger code (Kemler): 30
- UN-Number: 1268
- Packaging group: III
- Label: 3
- UN proper shipping name: 1268 PETROLEUM DISTILLATES, N.O.S.
- Remarks: solvent naphtha

· Maritime transport IMDG:



- IMDG Class: 3
- UN Number: 1268
- Label: 3
- Packaging group: III
- EMS Number: F-E,S-E
- Marine pollutant: No
- Proper shipping name: PETROLEUM DISTILLATES, N.O.S.
- Remarks: solvent naphtha

· Air transport ICAO-TI and IATA-DGR:



- ICAO/IATA Class: 3
- UN/ID Number: 1268
- Label: 3
- Packaging group: III
- Proper shipping name: PETROLEUM DISTILLATES, N.O.S.
- Remarks: solvent naphtha
- UN "Model Regulation": UN1268, PETROLEUM DISTILLATES, N.O.S., 3, III
- Special precautions for user Warning: Flammable liquids

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- 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.
- 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.
- Product related hazard informations:
The product has been classified and marked in accordance with directives on hazardous materials.
- Risk phrases:
Flammable.
Repeated exposure may cause skin dryness or cracking.
- Safety phrases:
Keep out of the reach of children.
Keep away from sources of ignition - No smoking.
Do not breathe fumes/aerosol.

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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.

- **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:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

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)

VOC: Volatile Organic Compounds (USA, EU)

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