

Safety data sheet According to 91/155 EEC

Printing date 30.11.2010

Revision: 30.11.2010

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
- **Further information obtainable from:** 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 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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· Label elements**· GHS label elements**

The product is classified and labelled according to the Globally Harmonized System (GHS).

· Hazard pictograms

GHS02

· Signal word Warning**· Hazard statements**

H226 Flammable liquid and vapour.

· Precautionary statements

- P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· 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.
- **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.

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- **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 fire - and explosion protection:**
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 container tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients 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 valid during the making 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.

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- **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

- **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

Colour:

olivegelblich / olive-yellow

- **Odour:**

Characteristic

- **Odour threshold:**

Not determined.

- **pH-value:**

Not determined.

- **Change in condition**

Melting point/Melting range:

Undetermined.

Boiling point/Boiling range:

176°C

- **Flash point:**

51°C

- **Ignition temperature:**

210°C

- **Decomposition temperature:**

Not determined.

- **Self-igniting:**

Product is not selfigniting.

- **Danger of explosion:**

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

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- **Explosion limits:**
 - Lower:** 0,5 Vol %
 - Upper:** 6,5 Vol %
- **Vapour pressure at 20°C:** 2 hPa
- **Density at 20°C:** 0,85 g/cm³
- **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:** 50 mPas
 - Kinematic:** Not determined.
- **Solvent content:**
 - Organic solvents:** 0,1 %
 - VOC (EC)** 0,05 %
- **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

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.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.

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- **Persistence and degradability** No further relevant information available.
- **Behaviour 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 (German Regulation) (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 together with household garbage. Do not allow product to reach sewage system.
- **European waste catalogue**
20 01 26* oil and fat other than those mentioned in 20 01 25
20 01 40 metals
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **Land transport ADR/RID (cross-border)**



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

- **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 1268

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- **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.
- **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**
- **GHS label elements**
The product is classified and labelled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS02

- **Signal word** Warning
- **Hazard statements**
H226 Flammable liquid and vapour.
- **Precautionary statements**

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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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

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)

VOC: Volatile Organic Compounds (USA, EU)

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