

Safety data sheet

according to 1907/2006/EC, Article 31



Printing date 07.07.2015

Version number 2

Revision: 07.07.2015

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: **SurTec 131**

Article number: S05617, S02706, S02703

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

Application of the substance / the mixture Metal surface treatment

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

SurTec Deutschland GmbH
SurTec-Str. 2
D-64673 Zwingenberg

Tel.: +49-(0)6251-171-700
Fax: +49-(0)6251-171-800
e-mail: mail@surtec.com
internet: www.surtec.com
EHS@surtec.com

Competent person acc. to Regulation (EC) No. 1907/2006:

Further information obtainable from:

Technical center

Tel.: +49-6251-171-744, Fax: +49-6251-171-844

1.4 Emergency telephone number:

Between the usual hours of business:

Monday - Thursday, between 8.00 - 12.00 o'clock

and between 13.00 - 16.00 o'clock

Friday, between 8.00 - 12.00 o'clock

Tel.: +49-6251-171-700

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Eye Irrit. 2 H319 Causes serious eye irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS07

Signal word Warning

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

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- **Dangerous components:**

CAS: 7320-34-5	tetrapotassium pyrophosphate	5-10%
EINECS: 230-785-7	Eye Irrit. 2, H319	
Reg.nr.: 01-2119489369-18-XXXX		

- **Regulation (EC) No 648/2004 on detergents / Labelling for contents**

phosphates	15 - 30%
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- **Additional information:** For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**

- **General information:** Immediately remove any clothing soiled by the product.

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

- **After skin contact:**

Rinse with warm water.

If skin irritation continues, consult a doctor.

- **After eye contact:**

Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

A person vomiting while laying on their back should be turned onto their side.

- **4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

- **Information for doctor:**

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

- **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**

- **Suitable extinguishing agents:**

The product is not flammable.

Use fire extinguishing methods suitable to surrounding conditions.

- **5.2 Special hazards arising from the substance or mixture**

After evaporation of water (in case of a mass fire for example) the following substances may be formed, if heating goes on:

Carbon dioxide (CO₂)

Incomplete combustion may cause Carbon monoxide, toxic fumes and smouldering gases.

Phosphorus oxides

- **5.3 Advice for firefighters**

- **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

- **Additional information**

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Particular danger of slipping on leaked/spilled product.

- **6.2 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 penetrate the ground/soil.

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In case of seepage into the ground inform responsible authorities.

· **6.3 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.

For large amounts: Pump off product.

· **6.4 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.

* **SECTION 7: Handling and storage**

· **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.

· **Information about fire - and explosion protection:**

The product is not flammable.

No special measures required.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:** Prevent any seepage into the ground.

· **Information about storage in one common storage facility:** Store away from foodstuffs.

· **Further information about storage conditions:**

Keep container tightly sealed.

The shelf life stated on the label is subject to correct storage of the product.

· **Recommended storage temperature:** Not store under -12 °C - less sensitive to freeze

· **7.3 Specific end use(s)** No further relevant information available.

* **SECTION 8: Exposure controls/personal protection**

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

7664-38-2 phosphoric acid (3-7%)

WEL Short-term value: 2 mg/m³

Long-term value: 1 mg/m³

· **DNELs**

7320-34-5 tetrapotassium pyrophosphate

Inhalative DNEL 2.79 mg/m³ (worker long-term)

0.68 mg/m³ (general population long-term)

· **PNECs**

7320-34-5 tetrapotassium pyrophosphate

PNEC 50 mg/l (sewage treatment plant)

0.005 mg/l (water (marine water))

0.05 mg/l (water (freshwater))

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not eat, drink, smoke or sniff while working.

· **Respiratory protection:** Not necessary if room is well-ventilated.

· **Protection of hands:**

Rubber gloves or plastic gloves recommended during refilling.

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

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

- **Material of gloves**

- Butyl rubber, BR

- Nitrile rubber, NBR

- Natural rubber, NR

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:** Safety glasses with side-shields (frame goggles) (e.g. EN 166)

- **Body protection:**

Choose personal protective equipment according to activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to DIN-EN 465).

SECTION 9: Physical and chemical properties

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

- **General Information**

- **Appearance:**

- Form:

Fluid

- Colour:

Colourless

Clear

- **Odour:**

Odourless

- **Odour threshold:**

Not determined.

- **pH-value at 20 °C:**

7

- **Change in condition**

- Melting point/Melting range:

Undetermined.

- Boiling point/Boiling range:

> 100 °C

- **Flash point:**

Not applicable.

- **Flammability (solid, gaseous):**

Not applicable.

- **Ignition temperature:**

Not applicable

- **Decomposition temperature:**

Not determined.

- **Self-igniting:**

Product is not selfigniting.

- **Danger of explosion:**

Product does not present an explosion hazard.

- **Explosion limits:**

- Lower:

Not determined.

- Upper:

Not determined.

- **Vapour pressure at 20 °C:**

23 hPa

- **Density at 20 °C:**

1.276 g/cm³

- **Relative density**

Not determined.

- **Vapour density**

Not determined.

- **Evaporation rate**

Not determined.

- **Solubility in / Miscibility with water:**

Fully miscible.

- **Partition coefficient (n-octanol/water):** Not determined.

- **Viscosity:**

- Dynamic:

Not determined.

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Kinematic: Not determined.**· Solvent content:****Organic solvents:** 0.0 %**VOC (EC)** 0,00 %**· 9.2 Other information**

No further relevant information available.

SECTION 10: Stability and reactivity**· 10.1 Reactivity** No further relevant information available.**· 10.2 Chemical stability****· Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

· 10.3 Possibility of hazardous reactions

No dangerous reactions if handled and stored according to regulations and instructions.

· 10.4 Conditions to avoid No further relevant information available.**· 10.5 Incompatible materials:** No further relevant information available.**· 10.6 Hazardous decomposition products:**

None if used correctly.

Concerning decomposition products in the event of fire, see Chapter 5.

SECTION 11: Toxicological information**· 11.1 Information on toxicological effects****· Acute toxicity****· LD/LC50 values relevant for classification:****7320-34-5 tetrapotassium pyrophosphate**

Oral LD 50 >2000 mg/kg (mouse)

Dermal LD 50 > 7940 mg/kg (rabbit)

· Primary irritant effect:**· Skin corrosion/irritation** Based on available data, the classification criteria are not met.**· Serious eye damage/irritation**

Causes serious eye irritation.

· Respiratory or skin sensitisation Based on available data, the classification criteria are not met.**· CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)****· Germ cell mutagenicity** Based on available data, the classification criteria are not met.**· Carcinogenicity** Based on available data, the classification criteria are not met.**· Reproductive toxicity** Based on available data, the classification criteria are not met.**· STOT-single exposure** Based on available data, the classification criteria are not met.**· STOT-repeated exposure** Based on available data, the classification criteria are not met.**· Aspiration hazard** Based on available data, the classification criteria are not met.**SECTION 12: Ecological information****· 12.1 Toxicity****· Aquatic toxicity:****7320-34-5 tetrapotassium pyrophosphate**

LC 50 (48h) > 100 mg/l (Daphnia magna) (OECD 202)

LC 50 (96h) > 100 mg/l (Oncorhynchus mykiss)

· 12.2 Persistence and degradability The organic portion of the product is biodegradable.**· 12.3 Bioaccumulative potential** No further relevant information available.**· 12.4 Mobility in soil** No further relevant information available.**· Additional ecological information:****· AOX-indication:** The product does not contain organically bonded halogen compounds.**· General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow product to reach ground water, water course or sewage system.

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

SECTION 13: Disposal considerations

- **13.1 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.
- **Waste disposal key:**
The mentioned waste codes are recommendations based on the product application as suggested by the manufacturer. Special applications and special disposal conditions at the applier's place may however require another waste code.
- **European waste catalogue**
16 03 04 inorganic wastes other than those mentioned in 16 03 03
12 03 01 aqueous washing liquids
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, ADN, IMDG, IATA** Void
- **14.2 UN proper shipping name**
- **ADR, ADN, IMDG, IATA** Void
- **14.3 Transport hazard class(es)**
- **ADR, ADN, IMDG, IATA**
- **Class** Void
- **14.4 Packing group**
- **ADR, IMDG, IATA** Void
- **14.5 Environmental hazards:**
- **Marine pollutant:** No
- **14.6 Special precautions for user** Not applicable.
- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.
- **Transport/Additional information:** Not dangerous according to the above specifications.
- **UN "Model Regulation":** -

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations:**
- **Information about limitation of use:**
Employment restrictions concerning juveniles must be observed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 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.

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· Relevant phrases

H319 Causes serious eye irritation.

· Department issuing MSDS: Product Safety Department**· Contact:**

Mr. Dr. B. Höferth, Tel.: +49-6251-171-754

Mrs. Dipl. Ing. S. Brechenser, Tel.: +49-6251-171-758

· 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)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

· * Data compared to the previous version altered.

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Printing date 27.02.2014

Version number 1

Revision: 27.02.2014

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: **SurTec 471**

Article number: S05822, S02052, S04959

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

Application of the substance / the mixture Rust remover/ rust-removing agent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

SurTec Deutschland GmbH
SurTec-Str. 2
D-64673 Zwingenberg

Tel.: +49-(0)6251-171-700

Fax: +49-(0)6251-171-800

e-mail: mail@surtec.com

internet: www.surtec.com

EHS@surtec.com

Competent person acc. to Regulation (EC) No. 1907/2006:

Further information obtainable from:

Technical center

Tel.: +49-6251-171-744, Fax: +49-6251-171-844

1.4 Emergency telephone number:

Between the usual hours of business:

Monday - Thursday, between 8.00 - 12.00 o'clock

and between 13.00 - 16.00 o'clock

Friday, between 8.00 - 12.00 o'clock

Tel.: +49-6251-171-700

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Met. Corr.1 H290 May be corrosive to metals.

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

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

C; Corrosive

R34: Causes burns.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

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· Hazard pictograms

GHS05

· Signal word Danger**· Hazard-determining components of labelling:**

phosphoric acid

4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine

· Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H412 Harmful to aquatic life with long lasting effects.

· Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P406 Store in corrosive resistant container with a resistant inner liner.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Additional information:

Contains 1,3-diethyl-2-thiourea. May produce an allergic reaction.

· 2.3 Other hazards**· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****· 3.2 Chemical characterization: Mixtures****· Description:** Mixture of substances listed below with nonhazardous additions.**· Dangerous components:**

CAS: 7664-38-2	phosphoric acid	50-80%
EINECS: 231-633-2	C R34	
Index number: 015-011-00-6	Met. Corr.1, H290; Skin Corr. 1B, H314	
Reg.nr.: 01-2119485924-24-XXXX		
CAS: 61827-42-7	Fatty alcohol ethoxylated	1<3%
Polymer	Xn R22; Xi R41	
	Eye Dam. 1, H318; Acute Tox. 4, H302	
CAS: 3010-23-9	4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine	1<3%
EINECS: 221-133-2	C R34; N R50/53	
	Skin Corr. 1B, H314; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	
CAS: 68411-63-2	Formaldehyde, reaction products with o-toluidine	<1%
EINECS: 270-136-5	Xi R41; N R50	
	Eye Dam. 1, H318; Aquatic Acute 1, H400	

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· **Regulation (EC) No 648/2004 on detergents / Labelling for contents**

phosphates	≥ 30%
non-ionic surfactants	< 5%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information:** Immediately remove any clothing soiled by the product.

· **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· **After eye contact:**

Rinse opened eye for several minutes under running water. Then consult a doctor.

Protect unharmed eye.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

· **4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

· **Information for doctor:**

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents:**

Use fire extinguishing methods suitable to surrounding conditions.

The product is not flammable.

· **5.2 Special hazards arising from the substance or mixture**

After evaporation of water (in case of a mass fire for example) the following substances may be formed, if heating goes on:

Incomplete combustion may cause Carbon monoxide, toxic fumes and smouldering gases.

Carbon dioxide (CO₂)

Phosphorus oxides

Sulphur oxides (SO_x)

Nitrogen oxides (NO_x)

· **5.3 Advice for firefighters**

· **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

· **Additional information**

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Use respiratory protective device against the effects of fumes/dust/aerosol.
- **6.2 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 penetrate the ground/soil.
In case of seepage into the ground inform responsible authorities.
- **6.3 Methods and material for containment and cleaning up:**
Use neutralizing agent.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
For large amounts: Pump off product.
- **6.4 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.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** The product is not flammable.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
Requirements to be met by storerooms and receptacles: Provide acid-resistant floor.
- **Information about storage in one common storage facility:**
Do not store together with alkalis (caustic solutions).
Store away from foodstuffs.
- **Further information about storage conditions:**
Keep container tightly sealed.
The shelf life stated on the label is subject to correct storage of the product.
- **Recommended storage temperature:** Not store under -12 °C - less sensitive to freeze
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
7664-38-2 phosphoric acid (50-80%)
WEL Short-term value: 2 mg/m³
Long-term value: 1 mg/m³
- **DNELs**
7664-38-2 phosphoric acid
Inhalative DNEL 2.92 mg/m³ (worker long-term)
0.73 mg/m³ (general population long-term)

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- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 - Keep away from foodstuffs, beverages and feed.
 - Immediately remove all soiled and contaminated clothing
 - Wash hands before breaks and at the end of work.
 - Avoid contact with the eyes and skin.
 - Do not eat, drink, smoke or sniff while working.
 - Use skin protection cream for skin protection.
 - Do not inhale gases / fumes / aerosols.
- **Respiratory protection:** Use suitable respiratory protective device only when aerosol or mist is formed.
- **Recommended filter device for short term use:** filter FFP2
- **Protection of hands:**
 - Acid resistant gloves
 - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- **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.
 - Nitrile rubber, NBR
 - Chloroprene rubber, CR
- **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:** Gauze goggles
- **Body protection:**
 - Acid resistant protective clothing
 - Choose personal protective equipment according to activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to DIN-EN 465).

SECTION 9: Physical and chemical properties

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

Form:	Fluid
Colour:	Yellow
Odour:	Acidic
- **pH-value:** < 1 (10g/l)
- **Change in condition**
 - Melting point/Melting range:** Undetermined.
 - Boiling point/Boiling range:** > 100 °C
- **Flash point:** Not applicable.
- **Self-igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Vapour pressure:** Not determined.
- **Density at 20 °C:** 1.54 g/cm³

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- **Solubility in / Miscibility with water:** Fully miscible.
- **Viscosity:** fluid, watery
- **Solvent content:**
 - Organic solvents:** 0.9 %
 - VOC (EC)** 0,90 %
- **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**
No dangerous reactions if handled and stored according to regulations and instructions.
Reacts with alkali (lyes).
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** lyes
- **10.6 Hazardous decomposition products:**
None if used correctly.
Concerning decomposition products in the event of fire, see Chapter 5.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values relevant for classification:**

7664-38-2 phosphoric acid

Oral	LD 50	1530 mg/kg (rat)
Dermal	LD 50	2740 mg/kg (rabbit)
Inhalative	LC 50 (1h)	1.69 mg/l (rat)
	NOEC (48h)	56 mg/l (Daphnia magna)

3010-23-9 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine

Oral	LD 50	> 2000 mg/kg (rat) (OECD 401)
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- **Primary irritant effect:**
- **on the skin:** Caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:**

7664-38-2 phosphoric acid

Oral NOAEL 250 mg/kg (rat) (ORCD 422)
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Corrosive
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

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SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

7664-38-2 phosphoric acid

EC 50 (48h) > 100 mg/l (Daphnia magna) (OECD 202)

EC 50 (72h) > 100 mg/l (Desmodesmus subspicatus) (OECD 201)

LC 50 (96h) 138 mg/l (Gambusia affinis)

NOEC (72h) 100 mg/l (Desmodesmus subspicatus) (OECD 201)

3010-23-9 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine

EC 50 (48h) 0.29 mg/l (Daphnia magna) (OECD 202)

LC 50 (96h) 0.35 mg/l (Fisch) (OECD 203)

12.2 Persistence and degradability No further relevant information available.

Other information: no data available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

Ecotoxicological effects:

Remark: Harmful to fish

Additional ecological information:

General notes:

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Harmful to aquatic organisms

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 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.

Waste disposal key:

The mentioned waste codes are recommendations based on the product application as suggested by the manufacturer. Special applications and special disposal conditions at the applicator's place may however require another waste code.

European waste catalogue

11 01 05 pickling acids

16 03 03 inorganic wastes containing dangerous substances

Uncleaned packaging:

Recommendation:

Disposal must be made according to official regulations.

Empty contaminated packaging thoroughly. They may be recycled after thorough and proper cleaning.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

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SECTION 14: Transport information

- 14.1 UN-Number UN1805
- ADR, IMDG, IATA
- 14.2 UN proper shipping name 1805 PHOSPHORIC ACID, SOLUTION
- ADR PHOSPHORIC ACID, SOLUTION
- IMDG, IATA
- 14.3 Transport hazard class(es)
- ADR
- 
- Class 8 (C1) Corrosive substances.
- Label 8
- IMDG, IATA
- 
- Class 8 Corrosive substances.
- Label 8
- 14.4 Packing group III
- ADR, IMDG, IATA
- 14.5 Environmental hazards:
- Marine pollutant: No
- 14.6 Special precautions for user Warning: Corrosive substances.
- Danger code (Kemler): 80
- EMS Number: F-A,S-B
- Segregation groups Acids
- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.
- Transport/Additional information:
- ADR
- Limited quantities (LQ) 5L
- Transport category 3
- Tunnel restriction code E
- UN "Model Regulation": UN1805, PHOSPHORIC ACID, SOLUTION, 8, III

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations:
- Information about limitation of use: Employment restrictions concerning juveniles must be observed.
- Class Share in %
- NK <1
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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SECTION 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.

- **Relevant phrases**

H290 May be corrosive to metals.
 H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H318 Causes serious eye damage.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.

R22 Harmful if swallowed.

R34 Causes burns.

R41 Risk of serious damage to eyes.

R50 Very toxic to aquatic organisms.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Department issuing MSDS:** Product Safety Department

- **Contact:**

Mr. Dr. B. Höferth, Tel.: +49-6251-171-754

Mrs. Dipl. Ing. S. Brechenser, Tel.: +49-6251-171-758

- **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)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Met. Corr. 1: Corrosive to metals, Hazard Category 1

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

- **Data compared to the previous version altered.**

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**SECTION 1: Identification of the substance/mixture and of the company/
undertaking**

• **1.1 Product identifier**

• Trade name: **SurTec 650**

• Article number: S05554, S05555, S05850

• **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.

• **Application of the substance / the mixture** Passivator

• **1.3 Details of the supplier of the safety data sheet**

• **Manufacturer/Supplier:**

SurTec Deutschland GmbH
SurTec-Str. 2
D-64673 Zwingenberg

Tel.: +49-(0)6251-171-700

Fax: +49-(0)6251-171-800

e-mail: mail@surtec.com

internet: www.surtec.com

EHS@surtec.com

Competent person acc. to Regulation (EC) No. 1907/2006:

• **Further information obtainable from:**

Technical center

Tel.: +49-6251-171-744, Fax: +49-6251-171-844

• **1.4 Emergency telephone number:**

Between the usual hours of business:

Monday - Thursday, between 8.00 - 12.00 o'clock

and between 13.00 - 16.00 o'clock

Friday, between 8.00 - 12.00 o'clock

Tel.: +49-6251-171-700

SECTION 2: Hazards identification

• **2.1 Classification of the substance or mixture**

• **Classification according to Regulation (EC) No 1272/2008**

The product is not classified according to the CLP regulation.

• **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.

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

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

• **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

• **2.2 Label elements**

• **Labelling according to Regulation (EC) No 1272/2008** Void

• **Hazard pictograms** Void

• **Signal word** Void

• **Hazard statements** Void

• **2.3 Other hazards**

• **Results of PBT and vPvB assessment**

• **PBT:** Not applicable.

• **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

• **3.2 Chemical characterization: Mixtures**

• **Description:** Mixture of substances listed below with nonhazardous additions.

• **Dangerous components:** Void

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- **Additional information:** For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Rinse with warm water.
Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Information for doctor:**
Treat according to symptoms (decontamination, vital functions), no known specific antidote.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
Use fire extinguishing methods suitable to surrounding conditions.
The product is not flammable.
- **5.2 Special hazards arising from the substance or mixture**
After evaporation of water (in case of a mass fire for example) the following substances may be formed, if heating goes on:
Hydrogen fluoride (HF)
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information**
Collect contaminated fire fighting water separately. It must not enter the sewage system.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 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 penetrate the ground/soil.
In case of seepage into the ground inform responsible authorities.
- **6.3 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.
- **6.4 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.

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SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Prevent formation of aerosols.
- **Information about fire - and explosion protection:** The product is not flammable.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
The shelf life stated on the label is subject to correct storage of the product.
- **Recommended storage temperature:** Not store under -12 °C - less sensitive to freeze
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 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.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
Wash hands before breaks and at the end of work.
Use skin protection cream for skin protection.
- **Respiratory protection:**
Use suitable respiratory protective device only when aerosol or mist is formed.
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.
- **Recommended filter device for short term use:** filter FFP2
- **Protection of hands:**
Rubber gloves or plastic gloves recommended during refilling.
To avoid skin problems reduce the wearing of gloves to the required minimum.
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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Goggles recommended during refilling
- **Body protection:**
Choose personal protective equipment according to activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to DIN-EN 465).

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SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Fluid
Colour:	Green
	Clear
	-
	Cloudy

· Odour:	Nearly odourless
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· pH-value at 20 °C:	3.8
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· Change in condition

Melting point/Melting range:	Undetermined.
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Boiling point/Boiling range:	> 100 °C
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· Flash point:	Not applicable.
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· Self-igniting:	Product is not selfigniting.
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· Danger of explosion:	Product does not present an explosion hazard.
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· Vapour pressure at 20 °C:	23 hPa
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· Density at 20 °C:	1.005 g/cm ³
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· Solubility in / Miscibility with water:	Fully miscible.
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· Viscosity:	fluid, watery
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· Solvent content:

Organic solvents:	0.0 %
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VOC (EC)	0,00 %
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· 9.2 Other information	No further relevant information available.
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SECTION 10: Stability and reactivity

· 10.1 Reactivity

· 10.2 Chemical stability

· Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· 10.3 Possibility of hazardous reactions

No dangerous reactions if handled and stored according to regulations and instructions.

· 10.4 Conditions to avoid

No further relevant information available.

· 10.5 Incompatible materials:

No further relevant information available.

· 10.6 Hazardous decomposition products:

None if used correctly.

Concerning decomposition products in the event of fire, see Chapter 5.

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects

· Acute toxicity:

· Primary irritant effect:

· on the skin:	No irritant effect.
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· on the eye:	No irritating effect.
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- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** Heavily biodegradable
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **AOX-indication:** The product does not contain organically bonded halogen compounds.
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow product to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 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.
- **Waste disposal key:**
The mentioned waste codes are recommendations based on the product application as suggested by the manufacturer. Special applications and special disposal conditions at the applier's place may however require another waste code.
- **European waste catalogue**
11 01 99 wastes not otherwise specified
16 03 04 inorganic wastes other than those mentioned in 16 03 03
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, ADN, IMDG, IATA** Void
- **14.2 UN proper shipping name**
- **ADR, ADN, IMDG, IATA** Void
- **14.3 Transport hazard class(es)**
- **ADR, ADN, IMDG, IATA**
- **Class** Void
- **14.4 Packing group**
- **ADR, IMDG, IATA** Void

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- **14.5 Environmental hazards:**
- **Marine pollutant:** No
- **14.6 Special precautions for user** Not applicable.
- **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **Transport/Additional information:** Not dangerous according to the above specifications.
- **UN "Model Regulation":** -

* SECTION 15: Regulatory information

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

* SECTION 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:** Product Safety Department
- **Contact:**
Mr. Dr. B. Höferth, Tel.: +49-6251-171-754
Mrs. Dipl. Ing. S. Brechenser, Tel.: +49-6251-171-758
- **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)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
- *** Data compared to the previous version altered.**

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