

Safety data sheet

according to 1907/2006/EC, Article 31



Printing date 28.01.2020


Version number 6

Revision: 28.01.2020

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

- **1.1 Product identifier**
- **Trade name: SurTec 650 V**
- **Article number:** S02200, S02202
- **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:** Tel.: +49-(0)6251-171-899

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
Skin Sens. 1 H317 May cause an allergic skin reaction.
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.
- **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-determining components of labelling:**
2-methyl-2H-isothiazol-3-one
1,2-benzisothiazol-3(2H)-one
- **Hazard statements**
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**
P273 Avoid release to the environment.
P280 Wear protective gloves.
P302+P352 IF ON SKIN: Wash with plenty of water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- **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: 7446-20-0	Zinc sulphate, heptahydrate	<1%
EINECS: 231-793-3	Eye Dam. 1, H318; Aquatic Acute 1, H400;	
Index number: 030-006-00-9	Aquatic Chronic 1, H410; Acute Tox. 4, H302	
Reg.nr.: 01-2119474684-27-XXXX		
CAS: 16923-95-8	dipotassium hexafluorozirconate	<1%
EINECS: 240-985-6	Acute Tox. 3, H301; Eye Dam. 1, H318	
Reg.nr.: 01-2119978269-18-xxxx		
CAS: 2682-20-4	2-methyl-2H-isothiazol-3-one	0.0015-<0.1%
EINECS: 220-239-6	Acute Tox. 3, H301; Acute Tox. 2, H330; Skin	
Index number: 613-326-00-9	Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Acute	
	1, H400 (M=10); Aquatic Chronic 2, H411; Skin	
	Sens. 1A, H317	
	Specific concentration limit: Skin Sens. 1A; H317:	
	C ≥ 0.0015 %	

· **Additional information:** For the wording of the listed hazard 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.

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

· **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. If symptoms persist, 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:

Hydrogen fluoride (HF)

Sulphur oxides (SO_x)

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

Carbon dioxide (CO₂)

Nitrogen oxides (NO_x)

· **5.3 Advice for firefighters**

· **Protective equipment:**

Wear fully protective suit.

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Wear self-contained respiratory protective device.

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** Not required.
- **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.
 - 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** Open and handle receptacle with care.
- **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:**
 - 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:**

 - 16923-95-8 dipotassium hexafluorozirconate**
 - WEL (Great Britain) Short-term value: 10 mg/m³
 - Long-term value: 5 mg/m³
 - as Zr
- **DNELs**

 - 16923-95-8 dipotassium hexafluorozirconate**
 - Dermal DNEL - short term exposure, systemic effects 89 mg/kg bw/d (worker)
 - 44.5 mg/kg bw/d (general population)
 - DNEL - long term exposure, systemic effects 89 mg/kg bw/d (worker)
 - 44.5 mg/kg bw/d (general population)
 - Inhalative DNEL - short term exposure, systemic effects 6.2 mg/m³ (worker)
 - DNEL - long term exposure, local effects 6.2 mg/m³ (worker)
 - DNEL - long term exposure, systemic effects 6.2 mg/m³ (worker)

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- **PNECs**

- **16923-95-8 dipotassium hexafluorozirconate**

- PNEC - Aquatic 5.77 mg/l (sediment marine water)
 - 0.163 mg/l (water (marine water))
 - 0.163 mg/l (water (freshwater))
 - 0.107 mg/l (water (intermittent releases))

- PNEC - STP 1.77 mg/l (sewage treatment plant)

- PNEC - sediment 28.86 mg/kg dw (sediment freshwater)
 - 22.5 mg/kg dw (water (marine water))

- PNEC - Soil 22.5 mg/kg dw (soil)

- **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.

- Keep away from foodstuffs, beverages and feed.

- Wash hands before breaks and at the end of work.

- Avoid contact with the eyes and skin.

- Do not inhale gases / fumes / aerosols.

- Use skin protection cream for skin protection.

- **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:**

- Protective gloves

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

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

- To avoid skin problems reduce the wearing of gloves to the required minimum.

- **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.

- Chloroprene rubber, CR

- Nitrile rubber, NBR

- Natural rubber, NR

- **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) (CEN: EN 166-2001)

- **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:** Green

- Clear

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- Cloudy

- **Odour:** Odourless

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· Odour threshold:	Not determined.
· pH-value at 20 °C:	3.4
· Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	100 °C
· Flash point:	Not applicable.
· Flammability (solid, gas):	Not applicable.
· Ignition temperature:	Not applicable
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	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:	1.011 g/cm ³
· 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:	fluid, watery
· Dynamic:	Not determined.
· Kinematic:	Not determined.
· Solvent content:	
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** Contact with strong acids releases hydrogen fluoride.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Acids
- **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** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.

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- **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:**
-
- 16923-95-8 dipotassium hexafluorozirconate**
- NOEC (21d) 3.7 mg/l (Daphnia magna)
- NOEC (48h) (static) 100 mg/l (Daphnia magna) (OECD 202)
- LC 50 (96h) 172.4 mg/l (Brachydanio rerio) (OECD 203)
- EC 50 (48h) (static) 151.4 mg/l (Daphnia magna) (OECD 202)
- EC 50 (72h) 10.66 mg/l (Pseudokirchneriella subcapitata)
- NOEC (96h) 100 mg/l (Brachydanio rerio) (OECD 203)
- 2682-20-4 2-methyl-2H-isothiazol-3-one**
- EC 50 (3h) 34.6 mg/l (Belebtschlamm) (DIN 38412-3 TTC-Test)
- **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.
 - **Ecotoxicological effects:**
 - **Behaviour in sewage processing plants:**
-
- 2682-20-4 2-methyl-2H-isothiazol-3-one**
- EC 20 (3h) 2.8 mg/l (Belebtschlamm) (DIN 38412-3 (TTC-Test))
- **Additional ecological information:**
 - **AOX-indication:** The product does not contain organically bonded halogen compounds.
 - **General notes:** 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 not be disposed together with household garbage. Do not allow product to reach sewage system.
Must be specially treated adhering to official regulations.
 - **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 98* other wastes containing hazardous substances
- 16 03 03* inorganic wastes containing hazardous substances
- **Uncleaned packaging:**
 - **Recommendation:**
Disposal must be made according to official regulations.
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

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- **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":** Void

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **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.

- **Relevant phrases**
 - H301 Toxic if swallowed.
 - H302 Harmful if swallowed.
 - H314 Causes severe skin burns and eye damage.
 - H317 May cause an allergic skin reaction.
 - H318 Causes serious eye damage.
 - H330 Fatal if inhaled.
 - H400 Very toxic to aquatic life.
 - H410 Very toxic to aquatic life with long lasting effects.
 - H411 Toxic to aquatic life with long lasting effects.
- **Classification according to Regulation (EC) No 1272/2008** Calculation method
- **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)

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DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 2: Acute toxicity – Category 2
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1A: Skin sensitisation – Category 1A
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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

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