

SAFETY DATA SHEET

Product: F10 Sterilant with Rust Inhibitor RTU

Revision date: 2022-09-26

EXPLANATORY NOTES

This Safety Data Sheet has been compiled in accordance to the ECHA Guidelines (2020), European Regulation (EC) No. 1272/2008 (CLP), and Globally Harmonized System of Classification and Labelling of Chemicals (GHS) (2021).

This Safety Data Sheet in its entirety applies to the product as a packed concentrate.

All packed products (sizes up to 5l) contain tamper proof heat induction seals.

Section 3 Hazard classification refers to the 100% raw material pure substance classification in the mixture and not the product mixture or the dilutions.

Section 16 Hazard statements are as per ECHA Pure Substance Classification and refers to the 100% raw material pure substance classification as specified in Section 3 and not the product mixture or dilutions.

SECTION 1: Chemical product and company identification

Product identifier

Product form Mixture
Trade name(s) F10 Sterilant with Rust Inhibitor RTU (Ready to Use)

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses For the rapid sterilization of heat-sensitive devices and surgical instruments. For the disinfection of all hard surfaces, non-porous surface and equipment in industrial, domestic and institutional areas. Safe for use on metals, plastics, rubber and latex.

Details of the supplier of the safety data sheet

Manufacturer Health and Hygiene (Pty) Ltd.
Address Corner Leader and Hoefsmid Street, Stormill Ext. 10, Roodepoort, 1709, South Africa
Telephone number +27 (0) 11 474 1668
E- mail address info@healthandhygiene.co.za / info@f10products.com
Emergency contact number(s) +27 (0) 11 474 1668

| Country | Organisation | Website | Emergency number |
|----------------|--|---|----------------------------|
| Australia | Poisons Information Centre | https://www.health.gov.au/contacts/poisons-information-centre | 13 11 26 |
| Belgium | Centre Anti-Poisons/ Antigifcentrum | https://www.poisoncentre.be/ | +32 70 245 245 |
| Canada | BC Drug and Poison Information Center | https://info-poison.ca/centres/ | +1 604 707 2789 |
| China | National Poison Control Center | https://www.chinacdc.cn/en/ | +86 24 25718881 |
| Czech Republic | Toxicological Information Centre | https://www.cenia.cz/odborna-podpora/reach/bezpecnostni-listy/ | +420 22 49 192 93 |
| Finland | Poison Information Centre | https://www.hus.fi/en/medical-care/medical-services/Poison%20Information%20Centre/Pages/default.aspx | 0800 147 111 09 471 977 |

| | | | |
|---|---------------------|----------------------------------|---------------------------|
| Product: F10 Sterilant with Rust Inhibitor RTU | Version: 002 | Revision Date: 2022-09-26 | Page: Page 1 of 12 |
|---|---------------------|----------------------------------|---------------------------|

SAFETY DATA SHEET

Product: F10 Sterilant with Rust Inhibitor RTU

Revision date: 2022-09-26

| | | | |
|-----------------------------|---|---|--|
| France | Centre antipoison et de toxicovigilance de Paris | https://reach-info.ineris.fr/Numero_orfila | +33 (0)1 45 42 59 59 |
| Germany | Clinical Toxicology and Berlin Poison Information Centre | https://www.reach-clp-biozid-helpdesk.de/DE/REACH/Sicherheitsdatenblatt/Sicherheitsdatenblatt-EN/Emergency-Telephone-number.html | +49 30 192 40 |
| Hong Kong | Hong Kong Poison Information Centre | https://www.hkpcn.org.hk/eng/HKPIC.html | +852 3949 5089 |
| Iceland | Eitrunarmiðstöð Landspítali | http://www.landspitali.is/?PageID=14556 | +354 543 22 22 |
| Iraq | Poisoning consultation centre | | +964 (0)780 191 3821 |
| Ireland | National Poison Information Centre | https://www.poisons.ie | +353 1 8092566 |
| Italy | Poison Centre – Catholic University School of Medicine | https://preparatipericolosi.iss.it/cav.aspx | +39 06 305 43 43 |
| Malta | Medicines & Poisons Info Office | https://deputyprimeminister.gov.mt/en/Pages/health/asp | 112 |
| Netherlands | Nationaal Vergiftigingen Informatie Centrum Uitsluitend bestemd om artsen te informeren bij accidentele vergiftigingen | https://www.umcutrecht.nl/nl/Subsites-nl/Nationaal-Vergiftigingen-Informatie-Centrum-(NVIC)/Productinformatie/Informationsheet-product-notificatie | +31 30 274 88 88 +31 (0)88 755 8000 |
| New Zealand | The National Poisons Centre | https://poisons.co.nz/ | 0800 764 766 0800 POISON |
| Philippines | National Poison Management & Control Center | https://m.facebook.com/upnpmcc | +632 544 8400 local 3726 |
| Qatar | Qatar Poison Centre | | +974 4003 1111 |
| Saudi Arabia | Drug and Poison Information Center | https://beta.sfda.gov.sa/en/toxicinfo-dept | +966 11 232 4180 |
| South Africa | Tygerberg Poison Information Centre | https://www.sun.ac.za/english/faculty/healthsciences/Clinical%20Pharmacology/poison-information-centre | +27 (0)861 555 777 |
| Spain | Servicio de Información Toxicológica | https://www.miteco.gob.es/es/calidad-y-evaluacion-ambiental/temas/productos-quimicos/portal-reach-clp/novedades/detalle_novedades.aspx?id=tcm:30-193752-16 | +34 91 562 0420 |
| Switzerland | Swiss Toxicological Information Centre | https://toxinfo.ch/startseite_en | +41 44 251 51 51 (in Switzerland dial 145) |
| United Arab Emirates | Health Poison and Drug Information Center | https://u.ae/en/information-and-services/justice-safety-and-the-law/handling-emergencies | +971 8 449 3333 |
| United Kingdom | National Poisons Information Service | https://www.npis.org/ | 844 892 0111 |
| USA | National Capital Poison Center | https://www.poison.org/ | 1-800-222-1222 |

| | | | |
|---|---------------------|----------------------------------|---------------------------|
| Product: F10 Sterilant with Rust Inhibitor RTU | Version: 002 | Revision Date: 2022-09-26 | Page: Page 2 of 12 |
|---|---------------------|----------------------------------|---------------------------|

SAFETY DATA SHEET

Product: F10 Sterilant with Rust Inhibitor RTU

Revision date: 2022-09-26

In the case of country not listed above, contact your nearest local Poison Centre.

For further information refer to ECHA website for Poison Centres (<https://poisoncentres.echa.europa.eu/>).

SECTION 2: Hazards identification

Classification of the substance or mixture

Not classified

Label elements

Labelling according to Regulation (EC) No 1272/ 2008 [CLP]

Hazard pictogram(s)

None

Signal word

None

Hazard statements

None

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. |
| P264 | — | Wash hands thoroughly after handling. |
| P305 + P351 + P338 | — | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P337 + P317 | — | If eye irritation persists: Get emergency medical help. |
| P273 | — | Avoid release to the environment. |
| P391 | — | Collect spillage. |
| P501 | — | Dispose of container in suitable manner as is required by country legislation. |

Supplemental Hazard information

Not applicable

Other hazards

None

SECTION 3: Composition and information on ingredients

Substances

Not applicable

| | | | |
|---|---------------------|----------------------------------|---------------------------|
| Product: F10 Sterilant with Rust Inhibitor RTU | Version: 002 | Revision Date: 2022-09-26 | Page: Page 3 of 12 |
|---|---------------------|----------------------------------|---------------------------|

SAFETY DATA SHEET

Product: F10 Sterilant with Rust Inhibitor RTU

Revision date: 2022-09-26

Mixtures

| Substance name | CAS No EC No | Classification according Regulation (EC) No 1278/ 2008 [CLP] (100% raw material pure substance classification) | Formulated Concentration (packed product) (% w/w) |
|--|-------------------------|---|--|
| Di-decyl dimethyl-ammonium Chloride | 7173-51-5 230-525-2 | Acute Tox.; 3; H301/ Skin Corr.; 1B; H314 Aquatic Acute; 1; H400 | 0.005 – 0.05 % |
| Benzyl (C12-16) Alkyl Dimethyl Ammonium chloride | 68424-85-1 270-325-2 | Acute Tox.; 4; H302/ Skin Corr.; 1B; H314 Aquatic Acute; 1; H400/ Aquatic Chronic; 1; H410 | 0.005 – 0.05 % |
| Poly (hexamethylene biguanide) Hydrochloride | 27083-27-8 | Acute Tox.; 4; H302/ Acute Tox.; 2; H330 Eye Dam.; 1; H318/ Skin Sens.; 1B; H317/ Carc.; 2; H351/ STOT RE1; H372/ Aquatic Acute; 1; H400/ Aquatic Chronic; 1; H410 | 0.001 – 0.007 % |
| Ingredients determined not to be hazardous | | | Balance |

Additional information:

For full text of H- and EUH-statements, refer to SECTION 16.

SECTION 4: First aid measures

Description of first aid measures

General information

In case of concern or doubt, call a doctor or physician.

Following inhalation

Move the person to fresh air. Contact a physician if required.

Following skin contact

Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse or discard.

Following eye contact

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses if present. Continue flushing for at least 15 minutes, or until advised to stop by the Poisons Information Centre or a doctor. Seek immediate medical attention.

Following ingestion

Do not induce vomiting. Wash out mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

Symptoms/ effects following inhalation

None

Symptoms/ effects following skin contact

None

| | | | |
|---|---------------------|----------------------------------|---------------------------|
| Product: F10 Sterilant with Rust Inhibitor RTU | Version: 002 | Revision Date: 2022-09-26 | Page: Page 4 of 12 |
|---|---------------------|----------------------------------|---------------------------|

SAFETY DATA SHEET

Product: F10 Sterilant with Rust Inhibitor RTU

Revision date: 2022-09-26

Symptoms/ effects following eye contact

May be some pain and reddening of the eye which will moderate after some time.

Symptoms/ effects following ingestion

Ingestion of the concentrate may cause irritation to mouth, throat and digestive tract.

Indication of any immediate medical attention and special treatment needed

If you feel unwell, seek medical advice immediately and show label if possible.

Note to the doctor/ physician

Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media

Use appropriate fire extinguisher for surrounding environment.

Unsuitable extinguishing media

Do not extinguish with water under high pressure.

Special hazards arising from the substance or mixture

Hazardous combustion products

This product is non-combustible. However, heating can cause expansion or decomposition leading to violent rupture of containers.

Advice for firefighters

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe distance and location.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Wear appropriate personal protective equipment and clothing to prevent exposure to clothing, skin and eyes. Increase ventilation.

For emergency responders

Have a copy of the SDS available. Use appropriate personal protective equipment.

Environmental precautions

In case of entry into sewers or waterways, inform the responsible authorities in accordance with relevant regulations.

SAFETY DATA SHEET

Product: F10 Sterilant with Rust Inhibitor RTU

Revision date: 2022-09-26

Methods and material for containment and cleaning up

For containment

Contain the spill with appropriate material and techniques.

For cleaning up

Clean spillages immediately. Do not dilute material but contain it. Place inert absorbent material onto spillage. Collect the material and place into a suitable container.

Reference to other sections

Refer to SECTIONS 8 and 13 for exposure control/ personal protection equipment and disposal considerations.

SECTION 7: Handling and storage

Precautions for safe handling

Avoid skin and eye contact. Keep containers sealed when not in use. Use in well-ventilated area. Wash hands and other exposed areas with soap and water prior to eating, drinking and smoking. Handle in accordance with good hygiene and safety procedures.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area. Protect from direct sunlight. Store in suitable, labelled containers. Keep containers tightly closed. Ensure that storage conditions comply with applicable local and national regulations.

Specific end use(s)

Refer to SECTION 1 for identified end use(s).

SECTION 8: Exposure controls and personal protection

Control parameters

Occupational exposure limits

No exposure standards have been established for the mixture. However, over-exposure to some chemicals may result in enhancement of pre-existing medical conditions and/ or allergic reactions and should be kept to the least possible levels.

Biological limit values

No biological limits allocated.

Exposure limits at intended use

DNEL/ PNEC – values — No data available

Exposure controls

Appropriate engineering controls

Handle in premises with good ventilation. Eye rinsing facilities shall be available at the workplace.

SAFETY DATA SHEET

Product: F10 Sterilant with Rust Inhibitor RTU

Revision date: 2022-09-26

Personal protection equipment

Eye and face protection

None required. Care should be exercised to prevent contact with eyes.

Skin protection

None required. Care should be exercised to prevent contact with skin.

Respiratory protection

No respiratory protection required.

Environmental exposure controls

Refer to SECTION 12 for limitations on environmental exposure.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

| | | |
|---------------------------------|---|--------------------------|
| Appearance | — | clear, colourless liquid |
| Odour | — | characteristic odour |
| Odour threshold | — | not available |
| Melting point/ freezing point | — | not available |
| Boiling point | — | 100°C |
| Flammability | — | not combustible |
| Lower and upper explosion limit | — | not available |
| Flash point | — | not available |
| Auto-ignition temperature | — | not available |
| Decomposition temperature | — | not available |
| pH (undiluted) | — | 7.5 |
| Viscosity | — | not available |
| Solubility in water | — | soluble |
| Partition coefficient | — | not known |
| Vapour pressure | — | not available |
| Density | — | 1.0g/cm ³ |
| Vapour density (air = 1) | — | not available |

Other information

No other data available

| | | | |
|---|---------------------|----------------------------------|---------------------------|
| Product: F10 Sterilant with Rust Inhibitor RTU | Version: 002 | Revision Date: 2022-09-26 | Page: Page 7 of 12 |
|---|---------------------|----------------------------------|---------------------------|

SAFETY DATA SHEET

Product: F10 Sterilant with Rust Inhibitor RTU

Revision date: 2022-09-26

SECTION 10: Stability and reactivity

Reactivity

The product contains no substances which could lead to hazardous reactions during normal use, handling and storage.

Chemical stability

Stable when handled and stored under normal ambient conditions.

Possibility of hazardous reactions

No hazardous reactions when handled and stored under normal ambient conditions.

Conditions to avoid

Protect from direct sunlight.

Incompatible materials

Do not mix with anionic detergents and other chemicals.

Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

Information on hazard classes as defined in Regulation (EC) No 1272/ 2008 & EPA Guidelines**

| | | | | | | |
|----|------------|---|---------------|------------|---|-------------------|
| ** | Category 1 | — | High Toxicity | Category 2 | — | Moderate Toxicity |
| | Category 3 | — | Low Toxicity | Category 4 | — | Very Low Toxicity |

Data as per non-diluted Packed Concentrated Product

| | | |
|-----------------------------------|---|--|
| Acute toxicity (oral) (rat) | — | None |
| Acute toxicity (dermal) (rat) | — | None |
| Skin corrosion/ irritation | — | None |
| Serious eye damage/ irritation | — | None |
| Respiratory or skin sensitisation | — | None |
| Germ cell mutagenicity | — | None predicted based on data for the raw materials |
| Carcinogenicity | — | None predicted based on data for the raw materials |
| Reproductive toxicity | — | None predicted based on data for the raw materials |
| STOT-single exposure | — | No known hazards for occasional exposure |
| STOT-repeated exposure | — | No known hazards for repeated exposure |
| Aspiration hazard | — | Not expected to be an aspiration hazard |
| Inhalation toxicity | — | > 2 mg / L for 4-hour exposure |

SAFETY DATA SHEET

Product: F10 Sterilant with Rust Inhibitor RTU

Revision date: 2022-09-26

Information on other hazards

None

SECTION 12: Ecological information

Toxicity

| | | |
|------------------------------|---|------|
| Acute (short-term) toxicity | — | None |
| Chronic (long-term) toxicity | — | None |

Persistence and degradability

Product is readily biodegradable, and the product is neither persistent nor problematic metabolites are produced. The product is hydrolytically stable, and hydrolytic processes do not contribute to its degradation in the environment, it is neither volatile nor is it expected to be present in the air. It can be considered immobile in soil.

Bioaccumulative potential

No additional information available.

Mobility in soil

Not mobile in soil.

Results of PBT vPvB assessment

None of the substances in this mixture is considered to be persistent, bioaccumulating and toxic or considered to be very persistent and very bioaccumulating.

Endocrine disrupting properties

No additional information available.

Other adverse effects

No additional information available.

SECTION 13: Disposal considerations

Waste treatment methods

Waste should not be disposed of by release to sewers. Dispose of this material and its container in a safe manner in accordance with relevant and applicable local and national regulations and/ or legislation. Avoid release to the environment.

SECTION 14: Transport information

UN number or ID number

None allocated. Not classified as dangerous goods.

SAFETY DATA SHEET

Product: F10 Sterilant with Rust Inhibitor RTU

Revision date: 2022-09-26

UN proper shipping name

None allocated.

Transport hazard class(es)

None allocated.

Packing group

Not applicable.

Environmental hazards

Not applicable.

Special precautions for user

None necessary.

Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

Safety, health and environmental regulations/ legislation specific for the substance or mixture

Classified as Hazardous according to SANS 10234:2019 Globally Harmonised System of Classification and Labelling of Chemicals (GHS).

Safety, health and environmental regulations/ legislation specific for the substance or mixture:

South Africa — NRCS VC8054:2017 — Compulsory Specification for Chemical Disinfectants

United Kingdom — HSE Health Directorate HD D4 (Biocides and Pesticides Assessment Unit) — Safety of raw materials

During international product registration (refer countries below), of the F10® product range, all safety, health and environmental aspects are considered by the relevant authorities.

| | | | | |
|-------------------|---------------------------|----------------------------------|----------------|----------------------|
| Australia (APVMA) | China | Czech Republic | France (ANSES) | Germany (BAUA) |
| Hong Kong | Iraq (Ministry of Health) | Kuwait | Namibia | Philippines |
| Qatar | Singapore | UAE (Dubai Municipality, MoChAe) | | United Kingdom (HSE) |
| USA (EPA, FDA) | | | | |

Chemical safety assessment

Chemical Safety Assessment based on study data of base formulation and dilutions.

SECTION 16: Other information

Indication of changes

New format to comply with all international legislation.

| | | | |
|---|---------------------|----------------------------------|----------------------------|
| Product: F10 Sterilant with Rust Inhibitor RTU | Version: 002 | Revision Date: 2022-09-26 | Page: Page 10 of 12 |
|---|---------------------|----------------------------------|----------------------------|

SAFETY DATA SHEET

Product: F10 Sterilant with Rust Inhibitor RTU

Revision date: 2022-09-26

Addition of explanatory notes.

Section 15 revised.

Abbreviations and acronyms

| | | |
|-------|---|---|
| CAS | — | Chemical Abstracts Service Number |
| CLP | — | Classification Labelling Packaging Regulation |
| DNEL | — | Derived No Effect Level |
| EC | — | European Community |
| EPA | — | Environmental Protection Agency |
| ECHA | — | European Chemicals Agency |
| GHS | — | Globally Harmonized System |
| HSE | — | Health and Safety Executive |
| IMO | — | International Maritime Organisation |
| NRCS | — | National Regulator for Compulsory Specifications |
| OPPTS | — | Office of Prevention, Pesticides and Toxic Substances |
| PBT | — | Persistent Bioaccumulative and Toxic Substance |
| PNEC | — | Predicted No Effect Concentration(s) |
| SANS | — | South African National Standards |
| SDS | — | Safety Data Sheet |
| STOT | — | Specific Target Organ Toxicity |
| UN | — | United Nations |
| vPvB | — | Very Persistent and Very Bioaccumulative |
| w/w | — | Weight by Weight |

Key literature references and sources for data

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, Regulation (EC) 1272/ 2008 Annex I, as well as from actual test data performed on the product itself.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/ 2008 [CLP]

All classifications were done as per available test data based on Health Effects Guideline OPPTS and EPA Guidelines or as per official European classification as listed per CLP and GHS regulations.

Relevant H- and EUH-statements (number and full text)

The following refers to the 100% raw material pure substance classification

| | | |
|------|---|---|
| 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 |

| | | | |
|---|---------------------|----------------------------------|----------------------------|
| Product: F10 Sterilant with Rust Inhibitor RTU | Version: 002 | Revision Date: 2022-09-26 | Page: Page 11 of 12 |
|---|---------------------|----------------------------------|----------------------------|

SAFETY DATA SHEET

Product: F10 Sterilant with Rust Inhibitor RTU

Revision date: 2022-09-26

| | | |
|------|---|--|
| H330 | — | Fatal if inhaled |
| H351 | — | Suspected of causing cancer |
| H372 | — | Causes damage to organs through prolonged or repeated exposure |
| H400 | — | Very toxic to aquatic life |
| H410 | — | Very toxic to aquatic life with long lasting effects |

Training advice

All personnel handling this product must be made aware of the content of the SDS and hazards of the product if any.

Further information

Not applicable.