

Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA
GHS

Printing date: 12.02.2016

Revision: 12.02.2016


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

- **1.1 Product identifier**
- **Trade name:** Scale Free Steam Boiler Sulfite Treatment
- **Product code:** SF8100
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the mixture:** Water treatment
- **Uses advised against:** Contact manufacturer.

- **1.3 Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Scale Free Company, Inc.
16420 West Hardy Rd.
Houston, TX 77060
Phone: (281) 873-5555
- **1.4 Emergency telephone number:**
ChemTel Inc.
+1 (800)255-3924, +1 (813)248-0585

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
Classifications listed are applicable to the OSHA GHS Hazard Communication Standard (29CFR1910.1200).
Met. Corr.1 H290 May be corrosive to metals.
Skin Corr. 1B H314 Causes severe skin burns and eye damage.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is additionally classified and labelled according to the Globally Harmonized System within the United States (GHS).
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**
- 
- GHS05
- **Signal word** Danger
- **Hazard-determining components of labelling:**
sodium hydroxide
- **Hazard statements**
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
- **Precautionary statements**
P260 Do not breathe mist/vapours/spray.

(Cont'd. on page 2)

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Printing date: 12.02.2016

Revision: 12.02.2016

Trade name: Scale Free Steam Boiler Sulfite Treatment

(Cont'd. from page 1)

- P264 Wash thoroughly after handling.
 P280 Wear protective gloves/protective clothing/eye protection.
 P234 Keep only in original container.
 P303+P361+P353 IF ON SKIN (or hair): 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.
 P310 Immediately call a POISON CENTER/doctor.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P363 Wash contaminated clothing before reuse.
 P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
 P390 Absorb spillage to prevent material damage.
 P405 Store locked up.
 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:**

EUH031 Contact with acids liberates toxic gas.

- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

HEALTH	3	Health = 3
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

- **2.3 Other hazards** There are no other hazards not otherwise classified that have been identified.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**

- **Components:**

CAS: 7681-57-4 EINECS: 231-673-0 Index number: 016-063-00-2	sodium metabisulphite Eye Dam. 1, H318 Acute Tox. 4, H302	<25%
CAS: 1310-73-2 EINECS: 215-185-5 Index number: 011-002-00-6	sodium hydroxide Met. Corr. 1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318	<15%

- **Additional information:**

For the listed ingredient(s), the identity and exact percentages are being withheld as a trade secret.

(Cont'd. on page 3)

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Trade name: Scale Free Steam Boiler Sulfite Treatment

For the wording of the listed Hazard Statements refer to section 16.

(Cont'd. from page 2)

SECTION 4: First aid measures

· 4.1 Description of first aid measures

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

· **After skin contact:**

Immediately remove any clothing soiled by the product.

Immediately rinse with water.

If skin irritation continues, consult a doctor.

Seek immediate medical help for blistering or open wounds.

· **After eye contact:**

Protect unharmed eye.

Remove contact lenses if worn.

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.

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

Strong caustic effect on skin and mucous membranes.

Gastric or intestinal disorders when ingested.

· **Hazards:** Danger of gastric perforation.

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

If medical advice is needed, have product container or label at hand.

Medical supervision for at least 48 hours.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

· **Suitable extinguishing agents:**

The product is not flammable.

Use fire extinguishing methods suitable to surrounding conditions.

· **For safety reasons unsuitable extinguishing agents:** None.

· 5.2 Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

· 5.3 Advice for firefighters

· **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

(Cont'd. on page 4)

Safety Data Sheet

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Printing date: 12.02.2016

Revision: 12.02.2016

Trade name: Scale Free Steam Boiler Sulfite Treatment

(Cont'd. from page 3)

Ensure adequate ventilation

- **6.2 Environmental precautions**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **6.3 Methods and material for containment and cleaning up**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Send for recovery or disposal in suitable receptacles.

- **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**

Prevent formation of aerosols.
Use only in well ventilated areas.

- **Information about fire - and explosion protection:** No special measures required.

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

- **Storage:**

- **Requirements to be met by storerooms and receptacles:**

Avoid storage near extreme heat, ignition sources or open flame.
Provide ventilation for receptacles.
Unsuitable material for receptacle: glass or ceramic.
Unsuitable material for receptacle: aluminium.
Unsuitable material for receptacle: steel.

- **Information about storage in one common storage facility:**

Do not store together with acids.
Store away from foodstuffs.

- **Further information about storage conditions:** Keep container tightly sealed.

- **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:**

1310-73-2 sodium hydroxide

PEL (USA)	Long-term value: 2 mg/m ³
REL (USA)	Ceiling limit: 2 mg/m ³
TLV (USA)	Ceiling limit: 2 mg/m ³

7681-57-4 sodium metabisulphite

REL (USA)	Long-term value: 5 mg/m ³
TLV (USA)	Long-term value: 5 mg/m ³

(Cont'd. on page 5)

Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA
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Printing date: 12.02.2016

Revision: 12.02.2016

Trade name: Scale Free Steam Boiler Sulfite Treatment

(Cont'd. from page 4)

- **DNELs:** No further relevant information available.
- **PNECs:** No further relevant information available.
- **8.2 Exposure controls**
- **Engineering measures** Provide adequate ventilation.
- **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.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
Not required under normal conditions of use.
For large spills, respiratory protection may be advisable.
- **Protection of hands:**



Protective gloves

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

- **Material of gloves** Nitrile or neoprene gloves are recommended.
- **Eye protection:**



Safety glasses

- **Body protection:** Alkaline resistant protective clothing
- **Limitation and supervision of exposure into the environment:** Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- **Appearance**
- **Form:** Liquid
- **Colour:** White
- **Odour:** Sulfurous
- **Odour threshold:** Not determined.
- **pH-value at 20 °C (68 °F):** 4,5 (1% solution)
- **Melting point/Melting range:** Not determined.
- **Boiling point/Boiling range:** > 100 °C (> 212 °F)
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Not applicable.
- **Auto/Self-ignition temperature:** Not determined.

(Cont'd. on page 6)

Safety Data Sheet

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Revision: 12.02.2016

Trade name: Scale Free Steam Boiler Sulfite Treatment

(Cont'd. from page 5)

· Decomposition temperature:	Not determined.
· Self-igniting:	Product is not self-igniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits Lower: Upper:	Not determined. Not determined.
· Oxidising properties	Not determined.
· Vapour pressure:	Not determined.
· Density at 20 °C (68 °F):	1,48 g/cm ³ (12,351 lbs/gal)
· 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: Kinematic:	Not determined. Not determined.
· 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** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**
Heating may cause release of toxic fumes.
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**
Toxic fumes may be released if heated above the decomposition point.
Contact with acids releases toxic gases.
Corrosive action on metals.
Attacks materials containing glass and silicate.
- **10.4 Conditions to avoid** Excessive heat.
- **10.5 Incompatible materials** Contact with acids liberates toxic gas.
- **10.6 Hazardous decomposition products** Sulphur dioxide

(Cont'd. on page 7)

Safety Data Sheet

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GHS

Printing date: 12.02.2016

Revision: 12.02.2016

Trade name: Scale Free Steam Boiler Sulfite Treatment

(Cont'd. from page 6)

SECTION 11: Toxicological information

11.1 Information on toxicological effects

· **Acute toxicity:** Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

1310-73-2 sodium hydroxide

Oral | LD50 | 2000 mg/kg (rat)

· Primary irritant effect

· Skin corrosion/irritation:

Causes severe skin burns and eye damage.

· Serious eye damage/irritation:

Causes severe skin burns and eye damage.

· **Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable routes of exposure:

Ingestion.

Inhalation.

Eye contact.

Skin contact.

· **Acute effects (acute toxicity, irritation and corrosivity):** Causes severe skin burns and eye damage.

· **Repeated dose toxicity:** No further relevant information available.

· **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:** Do not release into bodies of water.

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

(Cont'd. on page 8)

Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA
GHS

Printing date: 12.02.2016

Revision: 12.02.2016

Trade name: Scale Free Steam Boiler Sulfite Treatment


(Cont'd. from page 7)

- **Additional ecological information:**
- **General notes:**
 - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
 - Must not reach sewage water or drainage ditch undiluted or unneutralised.
 - Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. If the dilution of the use-level pH-value is considerably reduced, the aqueous waste, emptied into drains, is only low water-dangerous.
- **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. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.
- **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**
- **DOT, ADR, IMDG, IATA** UN1760
- **14.2 UN proper shipping name**
 -  Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 1 L (0.3 gal).
 - **DOT** Corrosive liquids, n.o.s. (Sodium hydroxide, Sodium metabisulfite)
 - **ADR** 1760 CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE, SODIUM METABISULPHITE)
 - **IMDG** CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE, SODIUM METABISULPHITE)
 - **IATA** Corrosive liquid, n.o.s. (Sodium hydroxide, Sodium metabisulfite)

(Cont'd. on page 9)

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Revision: 12.02.2016

Trade name: Scale Free Steam Boiler Sulfite Treatment

(Cont'd. from page 8)

- **14.3 Transport hazard class(es)**

- **DOT**



- **Class** 8 Corrosive substances.
- **Label** 8

- **ADR**



- **Class** 8 (C9) Corrosive substances.
- **Label** 8

- **IMDG, IATA**



- **Class** 8 Corrosive substances.
- **Label** 8

- **14.4 Packing group**

- **DOT, ADR, IMDG, IATA** II

- **14.5 Environmental hazards:**

- **Marine pollutant:** No

- **14.6 Special precautions for user**

- **Danger code (Kemler):** Warning: Corrosive substances.
- **EMS Number:** 80
- **Segregation groups:** F-A,S-B
- **Alkalis**

- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

- **Transport/Additional information:**

- **ADR**

- **Transport category** 2
- **Tunnel restriction code** E

(Cont'd. on page 10)

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Revision: 12.02.2016

Trade name: Scale Free Steam Boiler Sulfite Treatment

(Cont'd. from page 9)

SECTION 15: Regulatory information

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

- United States (USA)
- SARA

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65 (California):

· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· Carcinogenic Categories

· EPA (Environmental Protection Agency)

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

· Canada

· Canadian Domestic Substances List (DSL)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0,1%)

None of the ingredients are listed.

· Canadian Ingredient Disclosure list (limit 1%)

1310-73-2 sodium hydroxide

7681-57-4 sodium metabisulphite

· Directive 2012/18/EU

- Named dangerous substances - ANNEX I None of the ingredients are listed.

(Cont'd. on page 11)

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Trade name: Scale Free Steam Boiler Sulfite Treatment

(Cont'd. from page 10)

· **Other regulations, limitations and prohibitive regulations**

· **Substances of very high concern (SVHC) according to REACH, Article 57**

None of the ingredients are listed.

· **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**

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

· **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

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)

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

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

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

Acute Tox. 4: Acute toxicity, Hazard Category 4

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

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

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

· **Sources**

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sorinternet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

SDS Prepared by:

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Tampa, Florida USA 33602-2902

(Cont'd. on page 12)

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Revision: 12.02.2016

Trade name: Scale Free Steam Boiler Sulfite Treatment

(Cont'd. from page 11)

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