

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 24.04.2018

Version number 1

Revision: 28.08.2015

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

- **1.1 Product identifier**
- **Trade name:** **FFW/TW**
- **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**  
Delimiting agent  
Rust remover/ rust-removing agent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
BWT Aktiengesellschaft  
Walter Simmer Straße 4  
A - 5310 Mondsee  
AUSTRIA  
Tel.: +43/6232/5011-0  
Fax: +43/6232/4050  
email: office@bwt.at
- **Further information obtainable from:**  
Abteilung F&E - Chemikalienbeauftragter  
Tel.: +43/6232/5011-1427  
email: msds-info@bwt-group.com
- **1.4 Emergency telephone number:**  
Vergiftungsinformation Wien  
Tel.: +43/1-406 43 43

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.  
Eye Dam. 1 H318 Causes serious eye damage.



GHS07

STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

- **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**



GHS05 GHS07

- **Signal word** Danger
- **Hazard-determining components of labelling:**  
hydrogen chloride
- **Hazard statements**  
H314 Causes severe skin burns and eye damage.  
H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

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- **Precautionary statements**

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

- **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.

- **Dangerous components:**

CAS: 7647-01-0	hydrogen chloride	 Skin Corr. 1B, H314	25-50%
EINECS: 231-595-7		 STOT SE 3, H335	

- **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 and to be sure call for a doctor.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **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:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

### SECTION 6: Accidental release measures

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

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

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

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

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Ensure adequate ventilation.

· **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.

Prevent formation of aerosols.

· **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:** Store only in the original receptacle.

· **Information about storage in one common storage facility:** Do not store with chlor products.

· **Further information about storage conditions:**

Keep container tightly sealed.

Protect from frost.

Protect from heat and direct sunlight.

· **Storage class:** 8B

· **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:**

**7647-01-0 hydrogen chloride**

WEL	Short-term value: 8 mg/m <sup>3</sup> , 5 ppm
	Long-term value: 2 mg/m <sup>3</sup> , 1 ppm
	(gas and aerosol mists)

· **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.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

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

Filter B

· **Protection of hands:**



Protective gloves

· **Material of gloves** Nitrile rubber, NBR

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- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

- **Body protection:** Acid resistant protective clothing

### SECTION 9: Physical and chemical properties

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

- **General Information**

- **Appearance:**

Form:	Fluid
Colour:	Brown
Odour:	Pungent

- **pH-value at 20 °C:** 1 (10 g/l)

- **Change in condition**

Melting point/freezing point: Undetermined.  
Initial boiling point and boiling range: Undetermined.

- **Flash point:** Not applicable.

- **Auto-ignition temperature:** Product is not selfigniting.

- **Explosive properties:** Product does not present an explosion hazard.

- **Vapour pressure at 20 °C:** 20 hPa

- **Density at 20 °C:** 1.15 g/cm<sup>3</sup>

- **Solubility in / Miscibility with water:** Fully miscible.

- **Solvent content:**

Organic solvents: 0.0 %

- **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 according to specifications.

- **10.3 Possibility of hazardous reactions**

Reacts with amines.

Reacts with metals forming hydrogen.

Reacts with alkali (lyes).

- **10.4 Conditions to avoid** No further relevant information available.

- **10.5 Incompatible materials:** Bases

- **10.6 Hazardous decomposition products:** Hydrogen chloride (HCl)

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### 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:**
- |                                    |                         |
|------------------------------------|-------------------------|
| <b>7647-01-0 hydrogen chloride</b> |                         |
| Oral                               | LD50 900 mg/kg (rabbit) |
- **Primary irritant effect:**
  - **Skin corrosion/irritation**  
Causes severe skin burns and eye damage.
  - **Serious eye damage/irritation**  
Causes serious eye damage.
  - **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**  
May cause respiratory irritation. May cause drowsiness or dizziness.
  - **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:** No further relevant information available.
- **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.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
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 decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product 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.
  - **European waste catalogue**
- |           |                   |
|-----------|-------------------|
| 06 01 02* | hydrochloric acid |
|-----------|-------------------|
- **Uncleaned packaging:**
  - **Recommendation:** Disposal must be made according to official regulations.

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

### SECTION 14: Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	UN1789
· 14.2 UN proper shipping name · ADR · IMDG, IATA	1789 HYDROCHLORIC ACID HYDROCHLORIC ACID
· 14.3 Transport hazard class(es) · ADR, IMDG, IATA	
· Class · Label	8 Corrosive substances. 8
· 14.4 Packing group · ADR, IMDG, IATA	II
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user · Danger code (Kemler): · EMS Number: · Segregation groups · Stowage Category	Warning: Corrosive substances. 80 F-A,S-B Acids E
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· <b>Transport/Additional information:</b>	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category · Tunnel restriction code	2 E
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN1789, HYDROCHLORIC ACID, 8, II

### 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 hydrogen chloride
  - REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

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· **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**

*H314 Causes severe skin burns and eye damage.*

*H335 May cause respiratory irritation.*

· **Abbreviations and acronyms:**

*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*

*ICAO: International Civil Aviation Organisation*

*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)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*Skin Corr. 1B: Skin corrosion/irritation – Category 1B*

*Eye Dam. 1: Serious eye damage/eye irritation – Category 1*

*STOT SE 3: Specific target organ toxicity (single exposure) – Category 3*

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

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