

# Safety Data Sheet

## Gardacid P 32

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### 1. Identification

**Product identifier used on the label**

**Gardacid P 32**

**Recommended use of the chemical and restriction on use**

Recommended use\*: Rust remover; Scale remover

Unsuitable for use: Uses other than recommended

\* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

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

Company:

Chemetall U.S., Inc.  
675 Central Avenue  
New Providence, NJ 07974 – USA  
+1 800 526-4473  
sds.na-chemetall@basf.com

**Emergency telephone number**

24 Hour Emergency Response Information

CHEMTREC: 800-424-9300, +1-703-527-3887

**Other means of identification**

Chemical family: aqueous solution, inorganic acid, organic compounds

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### 2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

**Classification of the product**

Skin Corr./Irrit.	1	Skin corrosion/irritation
Eye Dam./Irrit.	1	Serious eye damage/eye irritation
STOT SE	3 (irritating to respiratory system)	Specific target organ toxicity — single exposure
Met. Corr.	1	Corrosive to metals

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### Label elements

Pictogram:



Signal Word:  
Danger

Hazard Statement:

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.

Precautionary Statements (Prevention):

P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves, protective clothing and eye protection or face protection.
P264	Wash contaminated body parts thoroughly after handling.
P234	Keep only in original packaging.
P260	Do not breathe dust or mist.
P261	Avoid breathing mist or vapour or spray.

Precautionary Statements (Response):

P303 + P361 + P353	IF ON SKIN (or hair): Remove or Take off immediately all contaminated clothing. Rinse skin with water or 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.
P390	Absorb spillage to prevent material damage.
P363	Wash contaminated clothing before reuse.
P310	Immediately call a POISON CENTER or physician.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Precautionary Statements (Storage):

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P406	Store in corrosive resistant container with a resistant inner liner.
P405	Store locked up.

Precautionary Statements (Disposal):

P501	Dispose of contents and container to hazardous or special waste collection point.
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### Hazards not otherwise classified

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

## 3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

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hydrochloric acid

CAS Number: 7647-01-0

Content (W/W):  $\geq 25.0$  -  $< 50.0\%$

Synonym: No data available.

### 4. First-Aid Measures

#### Description of first aid measures

##### General advice:

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Remove affected person from danger area. Keep warm, calm and covered up. Immediately remove contaminated clothing. Never give anything by mouth to an unconscious person. In case of intoxication, call a poison control center or physician for treatment advice, taking the packaging or the label of the product. Symptoms of poisoning may occur even after several hours, continue medical observation for at least 48 hours after the accident.

##### If inhaled:

Immediate medical attention required. Remove the affected individual into fresh air and keep the person calm. If breathing is irregular or stopped, administer artificial respiration.

##### If on skin:

Flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing immediately and clean before re-use or dispose it if necessary. Immediate medical attention required.

##### If in eyes:

Remove contact lenses, if present. Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist. Immediate medical attention required.

##### If swallowed:

Summon medical aid without delay. Do not induce vomiting due to aspiration hazard. Rinse mouth immediately with water. Keep at rest.

#### Most important symptoms and effects, both acute and delayed

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

*Information on: hydrochloric acid*

*Symptoms: Overexposure may cause:, choking, dyspnea, coughing*

Hazards: May cause severe burns of the mouth and throat if orally ingested, as well as a danger of perforation of the oesophagus and the stomach.

#### Indication of any immediate medical attention and special treatment needed

##### Note to physician

Antidote: No known specific antidote.

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Treatment: Symptomatic treatment (decontamination, vital functions).

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## 5. Fire-Fighting Measures

### Extinguishing media

Suitable extinguishing media:

carbon dioxide, alcohol-resistant foam, dry powder, water spray

Unsuitable extinguishing media for safety reasons:

water jet

### Special hazards arising from the substance or mixture

Hazards during fire-fighting:

chlorine compounds

Hazardous decomposition products formed under fire conditions.

### Advice for fire-fighters

Protective equipment for fire-fighting:

Appropriate breathing apparatus may be required.

### Further information:

Cool closed containers in the vicinity of the source of fire. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems.

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## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours. For non-emergency personnel: Use personal protective clothing. Ensure adequate ventilation. Keep away from sources of ignition. For emergency responders: Advice on product handling can be found in sections 7 and 8 of this safety data sheet. Information regarding personal protective measures, see section 8.

### Environmental precautions

Do not allow to enter drains or waterways. Do not discharge into the subsoil/soil. If the product enters drains or sewers, the local water company should be contacted immediately; in the case of contamination of streams, rivers or lakes, the Environment Agency.

### Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in a suitable container for disposal according with the waste regulations (see section 13). Clean preferably with a detergent; avoid the use of solvents. Ensure adequate ventilation.

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## 7. Handling and Storage

### Precautions for safe handling

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Provide good ventilation of working area (local exhaust ventilation if necessary). Do not return residues to the storage containers. Smoking, eating and drinking are forbidden in application area. For personal protection see section 8. Comply with the health and safety at work laws. Avoid inhalation of vapour and spray mist. The workplace should be equipped with an emergency shower and eye-rinsing facility. Avoid contact with the skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:

Avoid all sources of ignition: heat, sparks, open flame. The relevant fire protection measures should be noted.

### Conditions for safe storage, including any incompatibilities

Segregate from bases. Keep away from oxidising agents, from strongly alkaline and strongly acid materials.

Suitable materials for containers: High density polyethylene (HDPE), Low density polyethylene (LDPE), Polyethyleneterephthalate (PET), Polypropylene (PP)

Further information on storage conditions: Keep container dry. Keep in a cool, well-ventilated place. Avoid direct sunlight. Store only in corrosion proof containers. Close containers carefully once opened and store them upright in order to prevent any leakage. No smoking. No admission for unauthorised personnel. Always keep in containers of same material as the original one. Observe label precautions. avoid contact with metals Store protected against freezing.

## 8. Exposure Controls/Personal Protection

### Components with occupational exposure limits

hydrochloric acid	ACGIH, US:	CLV 2 ppm ;
	OSHA Z1:	CLV 5 ppm 7 mg/m3 ;

### Personal protective equipment

#### **Respiratory protection:**

Respiratory protection required if exposure limit (if available) may be exceeded

#### **Hand protection:**

Chemical resistant protective gloves (EN ISO 374-1), fluoroelastomer (FKM) - 0.7 mm coating thickness, Performance level 6, corresponding to a breakthrough time of >480 min according to EN ISO 374-1, The protection glove should be tested for its specific suitability (e.g. mechanical strength, product compatibility, anti-static properties)., The gloves should be replaced immediately in case of damage or signs of wear. It is recommended to use preventative skin protection (skin cream).

#### **Eye protection:**

Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

#### **Body protection:**

Chemical resistant protective clothing according to DIN EN 13034 (Type 6)

#### **General safety and hygiene measures:**

Do not breathe vapour/spray. Eye wash fountains and safety showers must be easily accessible. Avoid contact with the skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. This can be achieved by the use of local exhaust

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ventilation and good general extraction. If these are not sufficient to maintain concentrations at the workplace below the occupational exposure limits, appropriate certified respirators must be worn. Remove contaminated clothing immediately and dispose of safely. Hands and/or face should be washed before breaks and at the end of the shift. Keep separated from food stuffs and feed stocks.

### 9. Physical and Chemical Properties

Form:	liquid
Odour:	biting, acid
Odour threshold:	No applicable information available.
Colour:	dark brown
pH value:	1.0 - 2.0 ( 20 °C) (undiluted)
Melting point:	-46.00 °C
Freezing point:	-46.00 °C
onset of boiling:	not determined
Boiling range:	not determined
Sublimation point:	No applicable information available.
Flash point:	not applicable
Flammability:	not applicable
Lower explosion limit:	not determined
Upper explosion limit:	not applicable
Autoignition:	not determined
Vapour pressure:	( 20 °C) not determined
Density:	1.162 g/cm3 ( 20 °C)
Relative density:	No applicable information available.
Vapour density:	No applicable information available.
Partitioning coefficient n-octanol/water (log Pow):	No applicable information available.
Thermal decomposition:	No applicable information available.
Viscosity, dynamic:	No applicable information available.
Solubility in water:	fully soluble
Miscibility with water:	miscible
Solubility (quantitative):	No applicable information available.
Solubility (qualitative):	No applicable information available.
Molar mass:	No applicable information available.
Evaporation rate:	No applicable information available.

### 10. Stability and Reactivity

#### Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:  
Corrosive effect on metals.

Oxidizing properties:  
not fire-propagating

#### Chemical stability

The product is stable if stored and handled as prescribed/indicated.

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### Possibility of hazardous reactions

Reacts with metals, with evolution of hydrogen.

### Conditions to avoid

Avoid direct sunlight. Avoid freezing. avoid contact with metals

### Incompatible materials

metal, bases, Keep away from highly acidic or alkaline substances as well as oxidants in order to prevent exothermal reactions.

### Hazardous decomposition products

Decomposition products:

When exposed to high temperatures hazardous decomposition products such as carbon monoxide, carbon dioxide, smoke, oxides of nitrogen may be produced., No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No applicable information available.

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## 11. Toxicological information

### Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

### Acute Toxicity/Effects

#### Acute toxicity

Assessment of acute toxicity: Based on available data, the classification criteria are not met.

#### Oral

Type of value: ATE

Value: > 2,000 mg/kg

The product has not been tested. The statement has been derived from the properties of the individual components.

#### Inhalation

Type of value: ATE

Value: > 20 mg/l

The product has not been tested. The statement has been derived from the properties of the individual components.

#### Dermal

Type of value: ATE

Value: > 2,000 mg/kg

The product has not been tested. The statement has been derived from the properties of the individual components.

#### Assessment other acute effects

Assessment of STOT single:

Causes temporary irritation of the respiratory tract.

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### Irritation / corrosion

Assessment of irritating effects: Corrosive! Damages skin and eyes. May cause severe damage to the eyes.

May cause severe burns of the mouth and throat if orally ingested, as well as a danger of perforation of the oesophagus and the stomach.

### *Information on: hydrochloric acid*

*Assessment of irritating effects: Causes burns.*

*May cause discoloration of the eyes, mucous membranes and skin.*

### Sensitization

Assessment of sensitization: Based on available data, the classification criteria are not met.

### Aspiration Hazard

No aspiration hazard expected.

## Chronic Toxicity/Effects

### Repeated dose toxicity

Assessment of repeated dose toxicity: Based on available data, the classification criteria are not met.

### *Information on: hydrochloric acid*

*Assessment of repeated dose toxicity: After repeated administration the prominent effect is the induction of corrosion.*

### Genetic toxicity

Assessment of mutagenicity: Based on available data, the classification criteria are not met.

### Carcinogenicity

Assessment of carcinogenicity: Based on available data, the classification criteria are not met.

### Reproductive toxicity

Assessment of reproduction toxicity: Based on available data, the classification criteria are not met.

### Teratogenicity

Assessment of teratogenicity: Based on available data, the classification criteria are not met.

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## 12. Ecological Information

### Toxicity

#### Aquatic toxicity

Assessment of aquatic toxicity:

There are no test results available for this product. Do not allow to enter drains or waterways.

Based on available data, the classification criteria are not met.

### Persistence and degradability

#### Assessment biodegradation and elimination (H<sub>2</sub>O)

No data available concerning biodegradation and elimination.



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### Bioaccumulative potential

Bioaccumulation potential  
No data available.

### Mobility in soil

Assessment transport between environmental compartments  
No data available.

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## 13. Disposal considerations

### Waste disposal of substance:

Do not discharge into drains/surface waters/groundwater. Observe national and local legal requirements.

### Container disposal:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

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## 14. Transport Information

### Land transport

USDOT

Hazard class:	8
Packing group:	II
ID number:	UN 1789
Hazard label:	8
Proper shipping name:	HYDROCHLORIC ACID

### Sea transport

IMDG

Hazard class:	8
Packing group:	II
ID number:	UN 1789
Hazard label:	8
Marine pollutant:	NO
Proper shipping name:	HYDROCHLORIC ACID

### Air transport

IATA/ICAO

Hazard class:	8
Packing group:	II
ID number:	UN 1789
Hazard label:	8
Proper shipping name:	HYDROCHLORIC ACID

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## 15. Regulatory Information

### Federal Regulations

Registration status:

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Chemical TSCA, US released / listed

**EPCRA 311/312 (Hazard categories):** Refer to SDS section 2 for GHS hazard classes applicable for this product.

**EPCRA 313:**

**CAS Number**

7647-01-0

Chemical name

hydrochloric acid

**CERCLA RQ**

5000 LBS

**CAS Number**

7647-01-0

**Chemical name**

hydrochloric acid

**State regulations**

**State RTK**

NJ

PA

**CAS Number**

7647-01-0

7647-01-0

**Chemical name**

hydrochloric acid

hydrochloric acid

**NFPA Hazard codes:**

Health: 3

Fire: 0

Reactivity: 1

Special:

**HMIS III rating**

Health: 3

Flammability: 0

Physical hazard: 1

## 16. Other Information

**SDS Prepared by:**

Chemetall (now part of BASF Group) NA Product Regulations

SDS Prepared on: 2022/12/05

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