

A/A0007

Safety Data Sheet Gardoclean A 5548

Revision date : 2019/12/02
Version: 1.0

Page: 1/9
(30689794/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

Gardoclean A 5548

Recommended use of the chemical and restriction on use

Recommended use*: corrosion inhibitor

Unsuitable for use: None known

* 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

Telephone: 800-424-9300, 1-703-527-3887

Other means of identification

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
Skin Sens.	1	Skin sensitization
Aquatic Acute	2	Hazardous to the aquatic environment - acute
Met. Corr.	1	Corrosive to metals

Label elements

Pictogram:

Safety Data Sheet

Gardoclean A 5548

Revision date : 2019/12/02
Version: 1.0

Page: 2/9
(30689794/SDS_GEN_US/EN)



Signal Word:
Danger

Hazard Statement:

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H401 Toxic to aquatic life.
H290 May be corrosive to metals.

Precautionary Statements (Prevention):

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves, protective clothing and eye protection or face protection.
P273 Avoid release to the environment.
P272 Contaminated work clothing should not be allowed out of the workplace.
P264 Wash contaminated body parts thoroughly after handling.
P260 Do not breathe dust or mist.
P234 Keep only in original packaging.

Precautionary Statements (Response):

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 or doctor/physician.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P390 Absorb spillage to prevent material damage.
P363 Wash contaminated clothing before reuse.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303 + P361 + P353 IF ON SKIN (or hair): Remove or Take off immediately all contaminated clothing. Rinse skin with water or shower.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

Precautionary Statements (Storage):

P405 Store locked up.
P406 Store in corrosive resistant container with a resistant inner liner.

Precautionary Statements (Disposal):

P501 Dispose of contents and container to hazardous or special waste collection point.

Hazards not otherwise classified

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria. 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

Safety Data Sheet

Gardoclean A 5548

Revision date : 2019/12/02
Version: 1.0

Page: 3/9
(30689794/SDS_GEN_US/EN)

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
102-71-6	$\geq 1.0 - < 3.0\%$	2,2',2"-nitrilotriethanol
141-43-5	$\geq 15.0 - < 20.0\%$	2-aminoethanol
4719-04-4	$\geq 0.3 - < 1.0\%$	2,2',2"-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol

4. First-Aid Measures

Description of first aid measures

General advice:

Immediately remove contaminated clothing. First aid personnel should pay attention to their own safety. Remove affected person from danger area. In case of intoxication, call a poison control center or physician for treatment advice, taking the packaging or the label of the product.

If Inhaled:

Remove the affected individual into fresh air and keep the person calm. If symptoms persist, seek medical advice.

If on skin:

Flush with copious amounts of water for at least 15 minutes. Immediate medical attention required.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open. Immediate medical attention required.

If swallowed:

Rinse mouth immediately with water. Do not induce vomiting. Summon medical aid without delay.

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.

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.
Treatment:	Symptomatic treatment (decontamination, vital functions).

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

Safety Data Sheet

Gardoclean A 5548

Revision date : 2019/12/02
Version: 1.0

Page: 4/9
(30689794/SDS_GEN_US/EN)

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon oxides, nitrogen oxides

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.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Avoid breathing vapours. Keep away from sources of ignition. Ensure adequate ventilation. Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

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.

7. Handling and Storage

Precautions for safe handling

Do not return residues to the storage containers. Provide good ventilation of working area (local exhaust ventilation if necessary). Avoid inhalation of vapour and spray mist. The workplace should be equipped with an emergency shower and eye-rinsing facility. Avoid contact with skin and eyes. Keep away from food, drink and animal feeding stuffs. Warn users about safety measures and precautions to prevent accidents.

Protection against fire and explosion:

Avoid all sources of ignition: heat, sparks, open flame.

Conditions for safe storage, including any incompatibilities

Suitable materials for containers: High density polyethylene (HDPE), Low density polyethylene (LDPE), Polyethyleneterephthalate (PET), Polypropylene (PP), Carbon steel (Iron), tinned carbon steel (Tinplate)

Further information on storage conditions: The entrance to storage rooms is to be granted only to appropriately trained personnel. Keep only in the original container. Keep in a cool, well-ventilated place. Avoid direct sunlight.

Safety Data Sheet

Gardoclean A 5548

Revision date : 2019/12/02
Version: 1.0

Page: 5/9
(30689794/SDS_GEN_US/EN)

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

2,2',2"-nitrilotriethanol	ACGIH TLV	TWA value 5 mg/m3 ;
2-butoxyethanol	OSHA PEL	PEL 50 ppm 240 mg/m3 ; Skin Designation ; The substance can be absorbed through the skin. SKIN_FINAL ; The substance can be absorbed through the skin. TWA value 25 ppm 120 mg/m3 ;
	ACGIH TLV	TWA value 20 ppm ;
2-aminoethanol	OSHA PEL	PEL 3 ppm 6 mg/m3 ;
	ACGIH TLV	STEL value 6 ppm ; TWA value 3 ppm ;

Advice on system design:

Use only in well-ventilated areas.

Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate.

Hand protection:

Chemical resistant protective gloves (EN 374), chloroprene rubber (Neoprene), Further information on penetration time is available from the manufacturer of the glove., 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. 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:	amine-like
Colour:	amber
pH value:	10.5 - 11.5 (20 °C) (undiluted)
Freezing point:	-14 °C
onset of boiling:	not determined
Flash point:	not applicable

Safety Data Sheet

Gardoclean A 5548

Revision date : 2019/12/02
Version: 1.0

Page: 6/9
(30689794/SDS_GEN_US/EN)

Flammability:	not applicable
Lower explosion limit:	not determined
Upper explosion limit:	not applicable
Autoignition:	not determined
Vapour pressure:	(20 °C) not determined
Density:	1.027 g/cm3 (20 °C)
Partitioning coefficient n-octanol/water (log Pow):	No data available.
Solubility in water:	fully soluble
Miscibility with water:	miscible

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.

Possibility of hazardous reactions

Reacts with metals, with evolution of hydrogen.

Conditions to avoid

Protect from sunlight.

Incompatible materials

acids

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.

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.

Primary routes of entry

Ingestion
Skin

Acute Toxicity/Effects

Safety Data Sheet

Gardoclean A 5548

Revision date : 2019/12/02
Version: 1.0

Page: 7/9
(30689794/SDS_GEN_US/EN)

Chronic Toxicity/Effects

Symptoms of Exposure

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.

12. Ecological Information

Bioaccumulative potential

Bioaccumulation potential
No data available.

Mobility in soil

Assessment transport between environmental compartments
No data available.

13. Disposal considerations

Waste disposal of substance:
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.

14. Transport Information

Land transport

USDOT

Hazard class:	8
Packing group:	III
ID number:	UN 2491
Hazard label:	8
Proper shipping name:	ETHANOLAMINE SOLUTION

Sea transport

IMDG

Hazard class:	8
Packing group:	III
ID number:	UN 2491
Hazard label:	8
Marine pollutant:	NO
Proper shipping name:	ETHANOLAMINE SOLUTION

Air transport

IATA/ICAO

Hazard class:	8
Packing group:	III

Safety Data Sheet

Gardoclean A 5548

Revision date : 2019/12/02

Page: 8/9

Version: 1.0

(30689794/SDS_GEN_US/EN)

ID number: UN 2491
Hazard label: 8
Proper shipping name: ETHANOLAMINE SOLUTION

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

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

<u>CERCLA RQ</u>	<u>CAS Number</u>	<u>Chemical name</u>
100 LBS	111-42-2	2,2'-iminodiethanol

State regulations

<u>State RTK</u>	<u>CAS Number</u>	<u>Chemical name</u>
NJ	102-71-6	2,2',2"-nitrilotriethanol
	141-43-5	2-aminoethanol
	111-76-2	2-butoxyethanol
PA	102-71-6	2,2',2"-nitrilotriethanol
	141-43-5	2-aminoethanol

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

WARNING: This product can expose you to chemicals including DIETHANOLAMINE, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

NFPA Hazard codes:

Health: 2 Fire: 0 Reactivity: 0 Special: COR

HMIS III rating

Health: 2 Flammability: 0 Physical hazard: 0

16. Other Information

SDS Prepared by:

Chemetall (now part of BASF Group) NA Product Regulations

SDS Prepared on: 2019/12/02

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

Safety Data Sheet

Gardoclean A 5548

Revision date : 2019/12/02
Version: 1.0

Page: 9/9
(30689794/SDS_GEN_US/EN)

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