

G81 NETTOYANT CORPS DE CHAUFFE



>

SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

>SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : G81 NETTOYANT CORPS DE CHAUFFE

> 1.2. Relevant identified uses of the substance or mixture and uses advised against

Cleaner for boilers

1.3. Details of the supplier of the safety data sheet

Registered company name : GEB.

Address : CS 62062.95972.ROISSY CDG CEDEX . France.

Telephone : +33 1 48 17 99 99. Fax : +33 1 48 17 98 00.

geb@geb.fr

www.geb.fr

1.4. Emergency telephone number : +33 1 45 42 59 59.

Association/Organisation : INRS.

>SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Skin corrosion, Category 1A (Skin Corr. 1A, H314).

Serious eye damage, Category 1 (Eye Dam. 1, H318).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

Detergent mixture (see section 15).

Mixture for spray application.

> In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



GHS05

Signal Word :

DANGER

Product identifiers :

011-002-00-6 SODIUM HYDROXIDE

Hazard statements :

H314

Causes severe skin burns and eye damage.

Precautionary statements - General :

P101

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

P102

Keep out of reach of children.

Precautionary statements - Prevention :

P280

Wear protective gloves/eye protection/face protection.

Precautionary statements - Response :

P301 + P330 + P331

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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P303 + P361 + P353

IF ON SKIN (or hair): 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.

Precautionary statements - Disposal :

P501

Discard content/container according to applicable regulations.

> 2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) $\geq 0.1\%$ published by the European Chemicals Agency (ECHA) under article 59 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances $\geq 0.1\%$ with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

>SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

> Composition :

Identification	Classification (EC) 1272/2008	Note	%
INDEX: 011-002-00-6 CAS: 1310-73-2 EC: 215-185-5 REACH: 01-2119457892-27 SODIUM HYDROXIDE	GHS05 Dgr Skin Corr. 1A, H314	[i]	0 \leq x % < 2.5
CAS: 64-02-8 EC: 200-573-9 REACH: 01-2119486762-27-0000 TETRASODIUM ETHYLENE DIAMINE TETRAACETATE	GHS07, GHS05, GHS08 Dgr Acute Tox. 4, H302 Eye Dam. 1, H318 Acute Tox. 4, H332 STOT RE 2, H373		0 \leq x % < 2.5
INDEX: 007-001-01-2 CAS: 1336-21-6 EC: 215-647-6 REACH: 007-001-01-2 AMMONIA	GHS05, GHS09 Dgr Skin Corr. 1B, H314 Aquatic Acute 1, H400 M Acute = 1	B	0 \leq x % < 2.5
INDEX: 607-620-00-6 CAS: 5064-31-3 EC: 225-768-6 TRISODIUM NITRILOTRIACETATE	GHS08, GHS07 Wng Carc. 2, H351 Acute Tox. 4, H302 Eye Irrit. 2, H319	[i] [ii]	0 \leq x % < 2.5

> Specific concentration limits:

Identification	Specific concentration limits	ATE
INDEX: 011-002-00-6 CAS: 1310-73-2 EC: 215-185-5 REACH: 01-2119457892-27 SODIUM HYDROXIDE	Skin Corr. 1A: H314 C \geq 5% Skin Corr. 1B: H314 2% \leq C < 5% Skin Irrit. 2: H315 0.5% \leq C < 2% Eye Dam. 1: H318 C \geq 2% Eye Irrit. 2: H319 0.5% \leq C < 2%	
INDEX: 007-001-01-2 CAS: 1336-21-6 EC: 215-647-6 REACH: 007-001-01-2 AMMONIA	STOT SE 3: H335 C \geq 5%	

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INDEX: 607-620-00-6 CAS: 5064-31-3 EC: 225-768-6 TRISODIUM NITRILOTRIACETATE	Carc. 2: H351 C>= 5%	
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> Information on ingredients :

(Full text of H-phrases: see section 16)

[i] Substance for which maximum workplace exposure limits are available.

[ii] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. description of first aid measures

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

In the event of splashes or contact with skin :

Remove any soiled or splashed clothing immediately.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing :

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention immediately, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO₂)

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

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In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO₂)

5.3. Advice for firefighters

No data available.

>SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid any contact with the skin and eyes.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

> 6.3. Methods and material for containment and cleaning up

Neutralise with an acidic decontaminant.

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly.

Fire prevention :

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Where the personnel must carry out work in a booth, whether for spraying or otherwise, the ventilation may be inadequate to control particles and solvent vapors in every case.

It is therefore recommended that personnel wear masks with a compressed air supply during spraying operations until the concentration of particles and solvent vapors has fallen below the exposure limits.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep out of reach of children.

Keep the container tightly closed in a dry, well-ventilated place.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Packaging

Always keep in packaging made of an identical material to the original.

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7.3. Specific end use(s)

No data available.

>SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
1310-73-2			2 mg/m3		

- Germany - AGW (BAuA - TRGS 900, 02/2022) :

CAS	VME :	VME :	Excess	Notes
5064-31-3		2 E ppm 4 (II) mg/m3		

- France (INRS - Outils 65 / 2021-1849, 2021-1763, decree of 09/12/2021) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
1310-73-2		2				

- UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
1310-73-2		2 mg/m3			

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

When spraying, wear a face shield in accordance with standard EN166.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

> - Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

> - Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing :

Wear suitable protective clothing, in particular overalls and boots. These items must be kept in good condition and cleaned after use.

Suitable type of protective boots :

In the event of minor spatter, wear protective boots or half-boots against chemical risks in accordance with standard EN13832-2.

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In the event of prolonged contact, wear boots or half-boots with liquid-chemical-resistant and waterproof soles and uppers in accordance with standard EN13832-3.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

>SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state

Physical state : Viscous liquid.

> Colour

Unspecified

> Odour

Odour threshold : Not stated.

> Freezing point

Freezing point / Freezing range : Not stated.

> Boiling point or initial boiling point and boiling range

Boiling point/boiling range : Not relevant.

> Flammability

Flammability (solid, gas) : Not stated.

> Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) Not stated.

:

Explosive properties, upper explosivity limit (%) Not stated.

:

> Flash point

Flash point interval : Not relevant.

> Auto-ignition temperature

Self-ignition temperature : Not relevant.

> Decomposition temperature

Decomposition point/decomposition range : Not relevant.

> pH

pH (aqueous solution) : Not stated.

pH : 11.00 .

Slightly basic.

> Kinematic viscosity

Viscosity : Not stated.

> Solubility

Water solubility : Insoluble.

Fat solubility : Not stated.

> Partition coefficient n-octanol/water (log value)

Partition coefficient: n-octanol/water : Not stated.

Vapour pressure

Vapour pressure (50°C) : Not relevant.

Density and/or relative density

Density : > 1

> Relative vapour density

Vapour density : Not stated.

> 9.2. Other information

VOC (g/l) : 10

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9.2.1. Information with regard to physical hazard classes

No data available.

9.2.2. Other safety characteristics

No data available.

|> Formation of explosible dust/air mixtures

Characteristic of dust particles :

Maximum pressure generated by the explosion :

Deflagration index (Kst) :

Minimum ignition energy :

MEC/LEL:

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)

- carbon dioxide (CO₂)

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

May cause irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis, following exposure for up to three minutes.

Corrosive reactions are typified by ulcers, bleeding, bloody scabs, and, by the end of observation at 14 days, by discolouration due to blanching of the skin, complete areas of alopecia, and scars.

11.1.1. Substances

No toxicological data available for the substances.

11.1.2. Mixture

Skin corrosion/skin irritation :

Corrosivity :

Causes severe skin burns.

OECD Guideline 431 (In Vitro Skin Corrosion: Human Skin Model Test)

The 'corrosive' classification is based on the low/high pH which has been confirmed by tests.

11.2. Information on other hazards

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

No data available.

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12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

>SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2023 - IMDG 2020 [40-20] - ICAO/IATA 2023 [64]).

14.1. UN number or ID number

1760

> 14.2. UN proper shipping name

UN1760=CORROSIVE LIQUID, N.O.S.

(sodium hydroxide, ammonia)

14.3. Transport hazard class(es)

- Classification :



8

14.4. Packing group

II

14.5. Environmental hazards

-

14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	8	C9	II	8	80	1 L	274	E2	2	E

>

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation

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	8	-	II	1 L	F-A. S-B	274	E2	Category B SW2	-
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IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	8	-	II	851	1 L	855	30 L	A3 A803	E2
	8	-	II	Y840	0.5 L	-	-	A3 A803	E2

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

>SECTION 15 : REGULATORY INFORMATION

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

> Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2022/692 (ATP 18)

Container information:

Packaging to be fitted with child-resistant fastenings (see EC Regulation No. 1272/2008, Annex II, Part 3).

Containers to be fitted with a tactile warning of danger (see EC Regulation No. 1272/2008, Annex II, Part 3).

> Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH):
<https://echa.europa.eu/substances-restricted-under-reach>.

> Explosives precursors :

The mixture does not contain any substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

Particular provisions :

No data available.

15.2. Chemical safety assessment

No data available.

>SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

> Wording of the phrases mentioned in section 3 :

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H351	Suspected of causing cancer .
H373	May cause damage to organs through prolonged or repeated exposure .
H400	Very toxic to aquatic life.

> Abbreviations and acronyms :

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

CMR: Carcinogenic, mutagenic or reprotoxic.

STEL : Short-term exposure limit

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TWA : Time Weighted Averages

TMP : French Occupational Illness table

TLV : Threshold Limit Value (exposure)

AEV : Average Exposure Value.

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefährdungsklasse (Water Hazard Class).

GHS05 : Corrosion

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.

➤ Modification compared to the previous version