Version : N°1 (20/07/2022) Rubix Engineering

SPARTEX HEAVY DUTY CLEANER & DESCALER - DETAC - 895694

Date: 28/06/2023 Page 1/10

Revision: N°7 (20/07/2022)

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: SPARTEX HEAVY DUTY CLEANER & DESCALER

Product code: 895694.

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

Descaler and cleaner for sanitary, tiles, ...

Is not intended for public use.

For professional use only.

1.3. Details of the supplier of the safety data sheet

Registered company name: Rubix Engineering.

Address: 61, Avenue Tony Garnier.69007.LYON.FRANCE.

Telephone: +33 (1) 44 86 08 10. info-rubix-engineering@rubix.com

1.4. Emergency telephone number: +33 (0)1 45 42 59 59.

Association/Organisation: INRS / ORFILA http://www.centres-antipoison.net.

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).

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

Hazard pictograms:



GHS05

Signal Word:

DANGER

Hazard statements:

H314 Causes severe skin burns and eye damage.

Precautionary statements - Prevention :

P264 Wash thoroughly with water after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Date: 28/06/2023 Page 2/10 Version: N°1 (20/07/2022) Revision: N°7 (20/07/2022)

Rubix Engineering

SPARTEX HEAVY DUTY CLEANER & DESCALER - DETAC - 895694

Precautionary statements - Response:

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 [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.

P310 Immediately call a POISON CENTER or a doctor.

Precautionary statements - Disposal:

P501 Dispose of contents / container in accordance with local regulations.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 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> = 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: 016-026-00-0	GHS07		2.5 <= x % < 10
CAS: 5329-14-6	Wng		
EC: 226-218-8	Eye Irrit. 2, H319		
	Skin Irrit. 2, H315		
SULPHAMIDIC ACID	Aquatic Chronic 3, H412		
CAS: 5949-29-1	GHS07		$1 \le x \% < 2.5$
EC: 201-069-1	Wng		
REACH: 01-2119457026-42-0014	Eye Irrit. 2, H319		
ACIDE CITRIQUE MONOHYDRATE			

Information on ingredients:

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

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 aera 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.

Version: N°1 (20/07/2022)

Rubix Engineering

SPARTEX HEAVY DUTY CLEANER & DESCALER - DETAC - 895694

Date: 28/06/2023 Page 3/10

Revision: N°7 (20/07/2022)

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.

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

- carbon monoxide (CO)
- carbon dioxide (CO2)
- sulphur dioxide (SO2)

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 alkaline decontaminant, such as an aqueous solution of sodium carbonate or similar.

If the ground is contaminated, once the product has been recovered by sponging with an inert and non-combustible absorbent material, wash the contaminated area in plenty of water.

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

Version: N°1 (20/07/2022)

Rubix Engineering

SPARTEX HEAVY DUTY CLEANER & DESCALER - DETAC - 895694

Date: 28/06/2023 Page 4/10 Revision: N°7 (20/07/2022)

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.

PROC8: Transfer of substance or preparation from large containers

PROC10: Roller application or brushing

Non industrial spraying

Room size : >= 20m3Breathing volume : 10m3/jProcess temperature : $< 60^{\circ}\text{C}$ Exposure duration per day : 15-60 minutes

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.

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 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.

7.3. Specific end use(s)

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No data available.

SULPHAMIDIC ACID (CAS: 5329-14-6)

Final use:Exposure method:
Workers.
Dermal contact.

Potential health effects: Long term systemic effects.

DNEL: 10 mg/kg body weight/day

Exposure method: Inhalation.

Potential health effects: Long term systemic effects.

DNEL: 70.5 mg of substance/m3

Version: N°1 (20/07/2022)

Rubix Engineering

SPARTEX HEAVY DUTY CLEANER & DESCALER - DETAC - 895694

Date: 28/06/2023 Page 5/10 Revision: N°7 (20/07/2022)

Predicted no effect concentration (PNEC):

SULPHAMIDIC ACID (CAS: 5329-14-6)

Environmental compartment: Soil.

PNEC: 0.00638 mg/kg

Environmental compartment: Fresh water. PNEC: 0.048 mg/l

Environmental compartment: Sea water. PNEC: 0.0048 mg/l

Environmental compartment: Intermittent waste water.

PNEC: 0.48 mg/l

Environmental compartment: Fresh water sediment.

PNEC: 0.173 mg/kg

Environmental compartment: Waste water treatment plant.

PNEC: 2 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE):





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.

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))
- PVC (polyvinyl chloride)
- Butyl Rubber (Isobutylene-isoprene copolymer)

Materials: Polyisoprene and natural rubber.

Matter; nitrile rubber (NBR).

Breakthrough time:>8 hours; thickness: 0.5mm

Breakthrough time:>8 hours; thickness: 0.35mm

Materials: fluorinated rubber

Breakthrough time:>8 hours; thickness: 0.4mm

Rubix Engineering

SPARTEX HEAVY DUTY CLEANER & DESCALER - DETAC - 895694

Date: 28/06/2023 Page 6/10

Revision: N°7 (20/07/2022)

Materials: butyl rubber Breakthrough time:>8 hours; thickness: 0.5mm Material: polyvinyl rubber Breakthrough time:>8 hours; thickness: 0.5mm

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing:

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605/A1 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034/A1 to prevent skin contact.

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.

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.

Exposure controls linked to environmental protection

No exposure estimate is available for the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

9.1.	Information	on basi	c physical	and	chemical	properties	

Physical state

Physical state: Fluid liquid.

Colour

color yellow

Odour

odor floral note scent
Odour threshold: Not stated.

Melting point

Melting point/melting range: Not specified.

Freezing point

Freezing point / Freezing range : Not stated.

Boiling point or initial boiling point and boiling range

Boiling point/boiling range: Not specified.

Flammability

Flammability (solid, gas): Not stated.

Lower and upper explosion limit

Explosive properties, lower explosivity limit (%):

Explosive properties, upper explosivity limit (%):

Not stated.

Flash point

Flash point interval : Not relevant.

Auto-ignition temperature

Self-ignition temperature: Not specified.

Decomposition temperature

Decomposition point/decomposition range: Not specified.

pН

pH: 0.50 ± 0.5 .

Strongly acidic.

Version: N°1 (20/07/2022) Revision: N°7 (20/07/2022)

Date: 28/06/2023 Page 7/10

Rubix Engineering

SPARTEX HEAVY DUTY CLEANER & DESCALER - DETAC - 895694

pH (aqueous solution): Not stated.

Kinematic viscosity

Viscosity: Not stated.

Solubility

Water solubility: Soluble.
Fat solubility: Not stated.

Partition coefficient n-octanol/water (log value)

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

Vapour pressure

Vapour pressure (50°C): Above 300 kPa (3 bar).

Density and/or relative density

Density: 1,025 à 1,035

Relative vapour density

Vapour density: Not stated.

9.2. Other information

No data available.

9.2.1. Information with regard to physical hazard classes

No data available.

9.2.2. Other safety characteristics

No data available.

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

Avoid:

- frost

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

The thermal decomposition may release/form:

- carbon monoxide (CO)
- carbon dioxide (CO2)
- sulphur dioxide (SO2)

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

Acute toxicity:

ACIDE CITRIQUE MONOHYDRATE (CAS: 5949-29-1)

Date: 28/06/2023 Page 8/10 Version: N°1 (20/07/2022) Revision: N°7 (20/07/2022)

Rubix Engineering

SPARTEX HEAVY DUTY CLEANER & DESCALER - DETAC - 895694

Oral route: LD50 > 5000 mg/kg

Species: Mouse

Dermal route: 2,000 < LD50 <= 5000 mg/kg

11.1.2. Mixture

Skin corrosion/skin irritation:

Corrosive classification is based on an extreme pH value.

11.2. Information on other hazards

Monograph(s) from the IARC (International Agency for Research on Cancer):

CAS 97-53-0: IARC Group 3: The agent is not classifiable as to its carcinogenicity to humans. CAS 140-11-4: IARC Group 3: The agent is not classifiable as to its carcinogenicity to humans.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

ACIDE CITRIQUE MONOHYDRATE (CAS: 5949-29-1)

LC50 = 440 mg/lFish toxicity:

Duration of exposure: 48 h

EC50 = 1535 mg/lCrustacean toxicity:

> Species: Daphnia magna Duration of exposure: 24 h

12.1.2. Mixtures

Not release to the environment / water courses.

12.2. Persistence and degradability

The surface-active agent contained in this preparation is readily biodegradable according to the biodegradability criteria laid down in Regulation EC No. 648/2004.

12.2.1. Substances

ACIDE CITRIQUE MONOHYDRATE (CAS: 5949-29-1)

Biodegradability: no degradability data is available, the substance is considered as not degrading

quickly.

12.3. Bioaccumulative potential

No potential for bioaccumulation for this product hydrophilic.

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.

Version: N°1 (20/07/2022)

Rubix Engineering

SPARTEX HEAVY DUTY CLEANER & DESCALER - DETAC - 895694

Date: 28/06/2023 Page 9/10

Revision: N°7 (20/07/2022)

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 2021 - IMDG 2020 [40-20] - ICAO/IATA 2022 [63]).

14.1. UN number or ID number

1760

14.2. UN proper shipping name

UN1760=CORROSIVE LIQUID, N.O.S.

(sulphamidic acid)

14.3. Transport hazard class(es)

- Classification:



8

14.4. Packing group

Ш

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	III	8	80	5 L	274	E1	3	E
IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage	Segregation	
								Handling		
	8	-	III	5 L	F-A. S-B	223 274	E1	Category A	-	
								SW2		

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	8	-	III	852	5 L	856	60 L	A3 A803	E1
	8	-	III	Y841	1 L	-	-	A3 A803	E1

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)

Version: N°1 (20/07/2022)

Rubix Engineering

SPARTEX HEAVY DUTY CLEANER & DESCALER - DETAC - 895694

Date: 28/06/2023 Page 10/10

Revision: N°7 (20/07/2022)

Container information:

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.

Particular provisions:

No data available.

Labelling for detergents (EC Regulation No. 648/2004,907/2006):

- less than 5% of: anionic surfactants
- perfumes

15.2. Chemical safety assessment

The relevant information extracted from the exposure scenarios of the substances has been integrated into sections 7 and 8 of this safety data sheet.

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:

H315 Causes skin irritation.
H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms:

LD50: The dose of a test substance resulting in 50% lethality in a given time period.

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

EC50: The effective concentration of substance that causes 50% of the maximum response.

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

DNEL: Derived No-Effect Level

PNEC: Predicted No-Effect Concentration

UFI: Unique formulation identifier. STEL: Short-term exposure limit TWA: Time Weighted Averages

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: Wassergefahrdungsklasse (Water Hazard Class).

GHS05: Corrosion

PBT: Persistent, bioaccumulable and toxic. vPvB: Very persistent, very bioaccumulable. SVHC: Substances of very high concern.