

FICHA DE DATOS DE SEGURIDAD



Formulario: AR-5.LABQ.Pr.117_F-01

Fecha: 01/06/2022 Revisión: 0

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Product name: **NOVOC® DS3500**

Product Identifier: DS3500

Relevant identified uses: Descaler.

PECOM SERVICIOS ENERGIA S.A.

Uruguay 4075, (B1644HKG) Victoria, San Fernando, Argentina.

T: +54 11 4341 7000

Emergency phone (24 hours): **0 800 222 2933 (from Argentina)**
+54 11 4552-8747 (from outside Argentina)

SECTION 2 – HAZARDS IDENTIFICATION

Classification according to Globally Harmonized System.

Hazard pictogram(s):



Skin irritation (Category 2) – Serious eye damage (Category 1)

Reproductive toxicity (Category 1B)

Specific target organ toxicity – single exposure (Category 3)

Short-term (acute) aquatic hazard (Category 3)

Signal word: DANGER

Hazard statements:

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

H335 - May cause respiratory irritation.

H360 - May damage the unborn child.

H402 - Harmful to aquatic life.

Precautionary statements:

P261 - Avoid breathing dust, fume, gas, mist, vapours and spray.

P273 - Avoid release to the environment.

P280 - Wear protective gloves.

P302 + P352 - IF ON SKIN: Wash with plenty of water.

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.

P308 + P313 - IF EXPOSED OR CONCERNED: Get medical advice or attention.

P332 + P313 - IF SKIN IRRITATION OCCURS: Get medical advice or attention.

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

Additional information

There are no other additional hazards of consideration in the classification.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CONFIDENTIAL COMMERCIAL INFORMATION
IF EMERGENCY, CALL 0 800 222 1030 (from Argentina)

SECTION 5 – FIRST AID MEASURES

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| GENERAL ADVICE: | Avoid exposure to the product taking appropriate protective measures. Get medical advice. |
| EYE CONTACT: | Immediately flush with water for at least 15 minutes, holding eyelids apart to ensure that all eye and lid tissues rinsed. Washing eyes within several seconds is essential to achieve maximum effectiveness. If you have contact lenses, remove them after the first 5 minutes, then continue rinsing eye. Get medical advice. |
| SKIN CONTACT: | Wash immediately after contact with water for at least 15 minutes. Remove contaminated clothing and wash before reuse. |
| INHALATION: | For those providing assistance, avoid exposure. Use proper protection if necessary. Move victim and get fresh air. Keep calm. If not breathing, give artificial respiration. Get medical advice. |
| INGESTION: | DO NOT INDUCE VOMITING. Rinse mouth with water. Never give anything by mouth to an unconscious person. Get medical advice. If vomiting occurs spontaneously, place victim on side to reduce the risk of aspiration. |
| SYMPTOMS: | Inhalation: May cause discomfort. Skin Contact: May cause irritation or dermatitis on prolonged or repeated exposure. Eye Contact: May cause serious eye damage. Ingestion: May cause nausea, vomiting, and stomach pain. |
| MEDICAL ADVICE: | Provide symptomatic treatment. For more information, contact a Poison Control Center. |

SECTION 5 – FIREFIGHTING MEASURES

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| EXTINGUISHING MEDIA: | Use dry chemical, foam, sand or carbon dioxide (CO ₂). Use the product according to surrounding materials. DO NOT USE water jets as it may spread fire. |
| FLASH POINT: | Not flammable. |
| FLAMMABLE LIMITS: | N/D |
| SPECIAL HAZARDS: | The liquid will not ignite easily. In case of fire, it may release irritating and/or toxic fumes and gases, such as carbon monoxide, nitrogen oxides, and other substances derived from incomplete combustion. |

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS: Wear positive pressure self-contained breathing apparatus and fire-fighting protective clothing (includes fire-fighting helmet, jacket, pants, boots, and gloves). Avoid contact with the product during operations. For non-fire spills or post-fire cleanup phase, wear chemical protective clothing specifically recommended by the manufacturer.

ADVICE FOR FIREFIGHTERS: Spray containers and/or tanks with water to keep them cool. Continue cooling with water after fire is out. Prevent water used for fire control from entering watercourses, drains or springs.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Eliminate all ignition sources (no smoking, do not use flares, sparks or flames in immediate area). Evacuate personnel to a ventilated area. Ventilate immediately, especially where product may accumulate. Do not allow reuse of spilled product.

ENVIRONMENTAL PRECAUTIONS: Contain spilled liquid with a dam or barrier. Prevent entry into navigable waterways, sewers, basements or uncontrolled confined areas.

CONTAINMENT AND CLEANING UP: Contain and recover the liquid when possible. Collect the liquid product with sand, vermiculite, earth, or inert absorbent material and then completely clean the affected area. Dispose of the waste properly.

SECTION 7 – HANDLING AND STORAGE

Do not eat, drink or smoke during handling. Avoid contact with eyes, skin and clothing. Wash after handling.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Store in a clean, dry, well-ventilated area. Protect from sunlight. Keep containers/packages closed. Keep away from Strong oxidizing agents, bases, halogens.

Material appropriate packaging: Supplied by the manufacturer.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS: TLV-TWA (ACGIH): N/D
TLV-STEL (ACGIH): N/D
PEL (OSHA): 1 ppm; 1-Methyl-2-pyrrolidone
IDLH (NIOSH): N/D

EXPOSURE CONTROLS: Keep workplace ventilated. The normal routine ventilation is usually adequate. Use local hoods for operations that produce or release large amounts of product. In low or confined areas provide mechanical ventilation. Provide showers and eyewash stations near workplace.

PERSONAL PROTECTION EQUIPMENT, INHALATION: When necessary, wear an organic gas or steam (A) respirator. Pay special attention to oxygen levels in the air. If large releases occur, wear self-contained breathing apparatus (SCBA).

SKIN PROTECTION: When necessary, wear impermeable protective PVC gloves (complying with standards EN 374), clothes and safety footwear resistant to chemicals.

EYE AND FACE PROTECTION: When necessary, wear chemical splash-proof safety glasses (complying with EN 166).

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

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| APPEARANCE: | Liquid. |
| COLOR: | N/D |
| ODOUR: | Slight to ammonia. |
| ODOUR THRESHOLD: | N/D |
| pH: | 0,20 ± 0,10 [direct] |
| POUR POINT: | N/D |
| BOILING POINT: | N/D |
| FLASH POINT: | Not flammable. |
| EVAPORATION RATE: | N/D |
| AUTO-IGNITION TEMPERATURE: | N/D |
| EXPLOSIVE LIMITS: | N/D |
| VAPOUR PRESSURE (20°C): | N/D |
| VAPOUR DENSITY (AIR=1): | N/D |
| RELATIVE DENSITY (20°C): | 1,205 ± 0,01 g/cm ³ |
| SOLUBILITY (20°C): | Soluble in water. |
| HENRY CONSTANT (20°C): | N/D |
| PARTITION COEFF. (logKo/w): | N/D |
| VISCOSITY (20°C): | < 100 cSt |
| EXPLOSIVE PROPERTIES: | Not explosive. According to column 2 of Annex VII of REACH, this study is not required because in the molecule no chemical groups are associated with explosive properties. |
| OXIDIZING PROPERTIES: | According to column 2 of Annex VII of REACH, this study is not necessary because the substances present in the product, due to their chemical structures, are incapable of reacting exothermically with combustible materials. |
| OTHER PROPERTIES: | None. |

SECTION 10 – STABILITY AND REACTIVITY

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| REACTIVITY: | It is not expected that product reactions or decomposition may occur under normal storage conditions. It does not contain organic peroxides. May be corrosive to certain metals. It does not react with water. |
| CHEMICAL STABILITY: | The product is chemically stable and it does not require stabilizers. |
| HAZARDOUS REACTIONS: | No hazardous polymerization is expected. |
| CONDITIONS TO AVOID: | Avoid high temperatures, contact with alkalis and metals. |
| HAZARDOUS DECOMPOSITION PRODUCTS: | When heated, it may release toxic and irritating vapors. In case of fire, see section 5. |
| INCOMPATIBLE MATERIALS: | Strong oxidizing agents, bases, halogens. |

SECTION 11 – TOXICOLOGICAL INFORMATION

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| ROUTES OF EXPOSURE: | Inhalation, skin and eye contact. |
| ACUTE EFFECTS: | Inhalation: May cause discomfort. Skin Contact: May cause irritation or dermatitis on prolonged or repeated exposure. Eye Contact: May cause serious eye damage. Ingestion: May cause nausea, vomiting, and stomach pain. |

CARCINOGENICITY, MUTAGENICITY AND REPRODUCTION TOXICITY:

Carcinogenicity: No information is available on any component of this product, present at levels greater than or equal to 0.1%, that is classified as probable, possible or confirmed human carcinogen by IARC (International Agency for Research on Cancer).

Mutagenicity: There are no components of this product, present at a concentration greater than or equal to 0.1%, that classify as mutagens according to the GHS.

Tox. Repr .: At least one component of this product is classified as toxic for reproduction category 1B by the GHS with effects on sexual function and fertility.

Teratogenicity: At least one component of this product is classified as toxic for reproduction category 1B by the GHS with effects on the development of offspring.

STOT-SE: May cause respiratory tract irritation.

STOT-RE: There are no components of this product, present at a concentration greater than or equal to 1%, that they classify as toxic to target organs according to the GHS.

Aspiration: There are no components of this product, present at a concentration greater than or equal to 10%, that classify as toxic by aspiration according to the GHS.

ANIMAL TOXICITY VALUES:

There is no information about the toxicity of the product, but acute toxicity estimations are presented.

ATE-LD50 oral (calc.): > 5000 mg/kg

ATE-LD50 der (calc.): > 5000 mg/kg

ATE-LC50 inh. (4 hs., calc.): > 5 mg/l

Skin irr. (rabbit, estim.): irritant

Eye irr. (rabbit, estim.): severe eye damage

Skin sens (Guinea pig, estim.): not sensitizing

Resp. sens (Guinea pig, estim.): not sensitizing

SECTION 12 – ECOLOGICAL INFORMATION

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| ECOTOXICITY: | There is no information about the ecotoxicity of the product, but acute toxicity estimations are presented. ATE-EC50 (fish, calc., 96 h): 10 - 100 mg/l ATE-EC50 (inv., calc., 48 h): > 100 mg/l ATE-EC50 (algas, calc., 72 h): 10 - 100 mg/l ATE-NOEC (fish, calc., 14 d): > 1 mg/l ATE-NOEC (inv., calc., 14 d): > 1 mg/l |
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| PERSISTENCE AND DEGRADABILITY: | BIODEGRADABILITY (estimated): According to calculations based on the composition, the product is expected to be biodegradable. PNEC (water): N/D PNEC (sea water): N/D PNEC-STP: N/D |
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| BIOACCUMULATIVE POTENTIAL: | Log Ko/w (OCDE 107 o 117): N/D BIOCONCENTRATION FACTOR - BCF (OCDE 305): N/D |
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| MOBILITY IN SOIL: | HENRY CONSTANT (20°C): N/D |
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LogKoc: N/D

OTHER ADVERSE EFFECTS: Does not contain organic halogens nor metals.

SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose of excess product and empty containers according to current legislation for the protection of the environment and hazardous waste. Disposal procedure: sewage treatment plant

SECTION 14 – TRANSPORT INFORMATION**TRANSPORT BY LAND**

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| Proper Shipping Name: | NOT CLASSIFIED AS A DANGEROUS GOODS |
| UN/ID Number: | NOT CLASSIFIED AS A DANGEROUS GOODS |
| Hazard class: | NOT CLASSIFIED AS A DANGEROUS GOODS |
| Packing group: | NOT CLASSIFIED AS A DANGEROUS GOODS |
| Hazard identification number: | NOT CLASSIFIED AS A DANGEROUS GOODS |
| Excepted and limited quantity: | NOT CLASSIFIED AS A DANGEROUS GOODS |
| Special provisions: | NOT CLASSIFIED AS A DANGEROUS GOODS |

AIR TRANSPORT (ICAO/IATA)

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| Proper Shipping Name: | NOT CLASSIFIED AS A DANGEROUS GOODS |
| UN/ID Number: | NOT CLASSIFIED AS A DANGEROUS GOODS |
| Hazard class: | NOT CLASSIFIED AS A DANGEROUS GOODS |
| Packing group: | NOT CLASSIFIED AS A DANGEROUS GOODS |
| PAX and Cargo Packing instructions: | NOT CLASSIFIED AS A DANGEROUS GOODS |
| Cargo Packing instructions: | NOT CLASSIFIED AS A DANGEROUS GOODS |
| ERC: | NOT CLASSIFIED AS A DANGEROUS GOODS |
| Special provisions: | NOT CLASSIFIED AS A DANGEROUS GOODS |

SEA TRANSPORT (IMO)

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|---------------------------|-------------------------------------|
| Proper Shipping Name: | NOT CLASSIFIED AS A DANGEROUS GOODS |
| UN/ID N°: | NOT CLASSIFIED AS A DANGEROUS GOODS |
| Hazard class: | NOT CLASSIFIED AS A DANGEROUS GOODS |
| Packing group: | NOT CLASSIFIED AS A DANGEROUS GOODS |
| EMS: | NOT CLASSIFIED AS A DANGEROUS GOODS |
| Stowage and manipulation: | NOT CLASSIFIED AS A DANGEROUS GOODS |
| Segregation: | NOT CLASSIFIED AS A DANGEROUS GOODS |
| Marine pollutant: | NO |

Proper Shipping Name: NOT CLASSIFIED AS A DANGEROUS GOODS

SECTION 15 – REGULATORY INFORMATION

Regulations and safety legislation specific for the substance or mixture:

Not dangerous for the ozone layer.

Volatile organic compounds (VOC's): N/D

Globally Harmonized System of Classification and Labelling of Chemicals, fifth revised edition, 2013 (GHS)

2013 - 'ST / SG / AC 10/30 / Rev.5'). The fifth edition is taken into consideration because it is the one valid for Argentina according to Resolution 801/2015 of the SRT. In any case, the information is contrasted with Revision 7 ('ST / SG / AC 10/30 / Rev.7') and clarification is made if required.

Agreement on Transport of Dangerous Products within the MERCOSUR, MERCOSUR\CMC\DEC N° 2/94.

European Agreement on the International Carriage of Dangerous Goods by Road (ADR 2023) and amendments.

Regulations concerning the International Carriage of Dangerous Goods by Rail (RID 2023) and amendments.

International Maritime Dangerous Goods Code (IMDG 2022 - Amendment 41-22), International Maritime Organization (IMO).

Regulations of the International Air Transport Association (IATA 62 ed., 2023) on the transport of dangerous goods by air.

SECTION 16 – OTHER INFORMATION

ACGIH: American Conference of Governmental Industrial Hygienists.

ATE: Acute toxicity estimate.

CAS: Chemical Abstracts Service.

CMP: maximum concentration allowed.

CMP-C: maximum concentration allowed, ceiling concentration.

CMP-CPT: maximum concentration allowed, short time period.

EC: effect concentration.

EC50: Average Effective Concentration.

EMS: Emergency management sheet.

ERC: Emergency response card.

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.

IARC: International Agency for Research on Cancer.

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organization.

IDLH: Immediately dangerous to life or health

IMDG: International Maritime Dangerous Goods.

IMO: International Maritime Organization.

LC: Lethal concentration.

LD: Lethal dose.

Log Ko/w: octanol-water partition coefficient.

Log Koc: organic carbon to water partition coefficient.

MTESS: Ministry of Labor, Employment and Social Security, Argentina.

N/A: not applicable.

N/D: no data available.

NFPA: National Fire Protection Association.

NIOSH: National Institute for Occupational Safety and Health

NOEC: No observed effect concentration.

OECD: Organisation for Economic Co-operation and Development.

OSHA: Occupational Safety and Health Administration.

PAX: Passengers.

PBT: persistent, bioaccumulative or toxic criteria.

PEL: Permissible Exposure Limit.

PMCC: Pensky Martens closed cup

PNEC: Predicted No Effect Concentration

PNEC-STP: Predicted No Effect Concentration – sewage treatment plant.

PPE: Personal protection equipment.

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals - Europa.

REL: Recommended Exposure Limit.

SRT: Superintendence of Labor Risks, Argentina.

STEL: Short Term Exposure.

TLV: Threshold Limit Value.

UN: United Nations.

vPvB: very persistent or very bioaccumulative.

Key literature references and sources for data

International Agency for Research on Cancer (IARC), carcinogen classification.

European Regulation 1272/2008, Classification, labelling and packing (CLP)

European Agreement on the International Carriage of Dangerous Goods by Road (ADR 2019) and amendments.

Regulations concerning the International Carriage of Dangerous Goods by Rail (RID 2019) and amendments.

International Maritime Dangerous Goods Code (IMDG 2018 - Amendment 39-18), International Maritime Organization (IMO).

IBC Code 2016, IMO, IMO Resolution MSC.369 (93).

Regulations of the International Air Transport Association (IATA 60 ed., 2019) on the transport of dangerous goods by air.

The classification was performed based on chemical analogues and product information compiled by CIQUIME.

SECTION 2: classification by analogy with other products, and based on product data in CIQUIME database.

SECTION 9: product data.

SECTION 11 and 12: calculation of acute toxicity estimation according to GHS, product data and bibliographic data.

Change's control: v.1 - Adaptation to the GHS.

| | |
|----------------------|----------|
| HEALTH | 1 |
| FLAMMABILITY | 0 |
| REACTIVITY | 1 |
| TARGET ORGANS | 1 |



Obligatory safety goggles.



Obligatory gloves.



Obligatory overall.

The information in this document refers to the product, and not to another product or process that involves it. This document provides health and safety information. The information is correct and complete according to our knowledge. It is provided in good faith, but without guarantee. Use the product according to the recommendations for use. If you use this product, you should be informed of the recommended safety precautions and should have access to this information. For any other use, evaluate exposure and implement appropriate handling measures and training programs to ensure safe operations in the workplace.

It remains your responsibility that this information is appropriate and complete for the use of the product.

Version: 3
Replaces: 2
Created: CIQUIME

Emmision date: October, 2023
Revised: PECOM SERVICIOS ENERGIA S.A.