

**MSDS****CLEANING SOLUTION TOOTH
ENAMEL ANTIVET**

No. REVISIÓN: 0

FECHA DE REVISIÓN:
2014

NOVIEMBRE PÁGINA: 1 de 10

Section I. Product identification and information of the manufacturer.

Product Name: Cleaning Solution tooth enamel ANTIVET.

Manufacturer Identification:

Manufacturera Dental Continental, S.A. de C.V.**Industria del Plástico 2113****Fracc. Zapopan Industrial Norte****Zapopan Jalisco México Tel:****01 (52) 38330333**www.dental.com**Section II Composition and Information about Ingredients.****Sección II Composición e información sobre los ingredientes.**

Product name: Cleaning solution tooth enamel ANTIVET			
Mean component	Chemical formula	No. CAS	Content
Hydrochloric acid	HCl	7647-01-0	21%
Dangerous component: HCl (No uses advised detected, provided that the information specified in this Safety Data Sheet are met)			

Section III Identification of the risks and effects of exposure.**Effects of exposure:**

Inhalation: Do not breathe the dust / the smoke / gas / mist / vapors / aerosol.

Ingestion: Do not ingest, toxic.

Eye contact: Extremely irritant.

Skin contact: Wear gloves / clothes / glasses / protection mask.

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In case of eye contact (or hair): Take off immediately contaminated clothing.
Rinse skin with water or shower.

In case of inhalation, take the victim to fresh air and keep at rest in a comfortable position for breathing.

In case of eye contact: Rinse cautiously with water for several minutes. Take off contact lenses if present and if you find it easy. Keep rinsing.

Note: The information corresponding to precautionary labeling are based on our own judgment following the instructions in Regulation 1272 / 2008 (CLP). In case of repacking, consult regulations.

Carcinogenicity N/D

Mutagenicity N/D

Teratogenicity N/D

Neurotoxicity N/D

Reproductive system N/D

White organs N/D

Other effects N/D

Section IV. First aid.

General indications: First aid personnel should wear self-contained breathing apparatus and protective clothing, gloves and appropriate footwear.

In case of projection in the eyes and face, treat eyes with priority.

Ingestion: Do not induce vomiting, rinse your mouth with water and give to drink keeping warm.

If unconscious or convulsing, lay him down and keep warm and at rest and not to drink or eat. See a doctor immediately.

Inhalation: Remove affected person from the contaminated area taking him to a ventilated place, sheltered, lying and resting.

If not breathing, perform artificial respiration.

If breathing is difficult, apply oxygen.

See a doctor immediately.



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Eyes contact: Immediately rinse with plenty of water (for at least 30 minutes) .

Use topical ophthalmic solutions in case of difficulty of opening the lids.

Consult an ophthalmologist.

Skin contact: Immediately wash the affected area with plenty of water for at least 15 minutes while contaminated clothing and shoes are removed.

See a doctor immediately.

Most important symptoms and effects, acute and delayed:

Ingestion: Irritating and burns of the digestive tract, internal bleeding.

Inhalation: Irritation and burns of respiratory tract.

Throat pain, cough. It can lead to pulmonary edema.

Eyes contact: Irritation and burns of cornea. Painful sensitization to light. Risk of permanent injury.

Skin contact: Skin irritation. It can cause several burns and ulcerations. Risk of dermatitis in case of continued contact. Indication of immediate medical attention and special treatment needed immediately.

Ingestion: Avoid gastric lavage (risk of perforation). Oxygen by intratracheal intubation

Inhalation: Respiratory resuscitation.

Prevention or treatment of pulmonary edema. Complete rest.

Skin contact: Classic treatment of burns.

Section V. Actions against fire.

Suitable extinguishing actions: CO₂, water curtains to absorb gases and smoke and to fresh equipment, foam.

Unsuitable extinguishing actions: Water may be inappropriate. Not apply water directly or within containers.

Specific dangers arising from the substance or mixing.

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The product is not flammable or explosive, but its corrosive action reacts with many metals generating hydrogen gas, this can form flammable and explosive mixtures in air.

By heat, may produce hydrogen chloride gas (corrosive and toxic). The closed containers can explode by the formation of gas. In contact with water may release heat and present risk of splashing.

It is convenient to form curtains of water to absorb gases and smoke, and to refresh equipment, containers, etc. that were under fire, even after time after putting out the fire.

Advice for firefighters:

Propped attire (complete suite, gloves, and boots), airtight goggles, mask and helmet.

As respiratory protection, used a mask with cartridge for acid vapors or SCBA with compressed air. Always stand upwind.

Actions in case of spill or leaks.

Personal precautions, protective equipment and emergency procedures.

Restrict access to the danger area.

Tell people potentially affected about the risk of chemical burns.

Restringir el acceso al área de peligro.

Wear appropriated clothes, eye protection, gloves, boots and SCBA. Avoid eye contact, skin and respiratory tracts. Keep staff that doesn't have protection clothes, in upwind.

Disperse the gases with water spray.

Environmental precautions:

Avoid that product gets to the sewers or surface water.

If is necessary, can make dams based inert absorbent material: earth, sand, sepiolite.

If product came to a natural watercourse, inform to Civil Protection authorities.

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Methods and material for containment and cleaning:

Small spills: Dilute with water. It can be neutralized with lime if the operation is performed by skilled personnel with adequate protective clothing. Disperse the gases with water spray.

In any case, notify to specialized personnel to their total elimination.

Big spills: If possible, contain the spills with sand or sepiolite. Dilute with water. Move absorbent products to landfill or safe storage to be treated by a licensed waste contractor.

For collection not use metal container.

Reference to other sections:

Information regarding exposure controls / personal protection and disposal consideration, can be found in paragraphs 8 and 13 respectively.

Section VII. Handling and storage.

Precautions for safe handling. Do not smoke, eat or drink when handling the product.

Personnel handling the product must always use the recommended protective clothing.

Avoid eye and skin contact, and inhalations of vapors.

The containers will remain perfectly labeled.

The samples will handling in suitable and labeled containers.

Do not back product to the storage tank or other containers.

Cautions for if it remains rest of incompatible products as chlorite, chlorate, hypochlorite, alkalis or sulfides.

Handle at room temperature.

Conditions of safe storage:

Keep in a cool and ventilated place, away from sun light and heat sources.

Placing signaling risk under the legislation applicable to this case: labels, diamonds, and warning signs.

Avoid storing other incompatible chemical products together in order to prevent them react violently: flammables, organic oxidants, bases, etc.

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Recommended material for tanks and containers: Fiberglass reinforced with polyester, ebonite steel or plastic coated, PVC, polyethylene, polypropylene, PVDF. Equipping storage tanks with antacid coating collection buckets and liquid channeling.

Incompatible material for warehouse store: Metals, but tantalum and titanium.

Piping and equipment installations dry chloride must be dry, avoiding contact with air from the atmosphere.

Specific end uses in different products applications, should be avoid direct contact with incompatible uncontrolled products like hypochlorite, chlorite, alkali, etc. For any particular use please contact the supplier.

Section VIII. Exposure controls and personal protective equipment.

Controls parameters.

Exposure limits values.

Workers: Acute local effects inhalation 15 mg / m³ (15min)

Local effects chronic inhalations 8 mg / m³ (8 h)

PNEC PNEC (fresh water): 36 µg/L (based in lowest value of chronic toxicity and safety factor 10).

PNEC (seawater): 36 µg/L (based in lowest value of chronic toxicity and safety factor 10).

PNEC (intermittent emissions): 45 µg/L (based in lowest value of chronic toxicity and safety factor 10).

PNEC (plant wastewater treatment): 36 µg/L. Keep an adequate ventilation Provide eyewash and safety showers.

Individual personal protection measures such personal protective equipment.

Eye protection and face protection: rimmed glasses or full face for protection.

Skin protection is recommended: hands: gloves for chemical risks (natural latex, polychloroprene, acrylonitrile...)

Others: Suite antacid type or plastic apron and boots PVC, neoprene or rubber.

Respiratory protection: in case of gas emissions, use a mask with filter for organic vapors (EN 136) (EN 141).

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Environmental exposures controls: Do not discharge into sewers or surface water. Respect all local, regional and national regulations for liquid emissions. Measurement system: Analysis of hydrogen chlorite atmosphere, effluence control acidity.

Section IX. Physical and chemical properties.

Aspect: Colorless or slightly yellowish liquid smoky air.

Odor: Irritating, sharp, suffocating.

Odour: No data available.

PH: Strongly acidic < 1 (dissolution 5%)

Crystallization temperature -41 °C

Boiling point: 80 °C

Flash point: Not applicable (the substance is inorganic)

Evaporation rate: 2, 0

Flammability (solid / gas): Not applicable.

Explosive limits: No data available.

Vapor pressure (20 °C): 40 hPa

Vapor density (air = 1): 1,27

Relative density (25 °C): 1,165 g/ cm³

Water solubility (20 °C): Very soluble.

Solubility in solvents: soluble in alcohol, ether, acetone, acetic acid and chloroform

Partition coefficient n-octanol / water (log Pow) (20 °C): Not applicable (the substance is inorganic)

Auto ignition temperature: Not applicable (product non-flammable)

Descomposición temperatura: No data available.

Viscosity: 1,79 cPs

Section X. Stability and reactivity.

Reactivity. React with strong bases, aluminum, ammonia and sodium hydroxide.

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Chemical stability. The substance is stable under normal ambient and anticipated conditions of temperature and pressure during storage and handling. Possibility of dangerous reactions. May react violently with ammoniac (NH_4OH), sodic hydroxide (Na OH), aluminum.

With strong bases may cause violent reactions.

Conditions to avoid: Temperatures above $40\text{ }^\circ\text{C}$ and direct sunlight.

Incompatible materials: Cyanide, metals, alkalis, amines, oxidizing agents, fluorine, strong alkalis, sulfides, coal, vinyl acetate, hypochlorite, chlorite, chlorate and formic acid.

Dangerous decomposition products: In the presence of moisture, in contact with metal, hydrogen follows (flammable gas between 4 and 75% by volume in air).

When heated, it gives off toxic fumes of hydrogen chloride. Contact with sodium hypochlorite bleach follows.

Section XI. Toxicological information.

Acute oral toxicity: LD50 / rat: 700 mg/kg

Inhalation: LC50 / rat: (5min): 45,6 mg/L (aerosol). LC50 / rat (30min): 8,3 mg/L (aerosol). Skin contact: LD50 / rabbit: > 5.010 mg/kg.

Corrosion or skin irritation.

Corrosión o irritación cutáneas

Irritation serious eye damage. Serious eye damage

Eye damage: Category 1 - Causes serious eye damage. Serious injury / eye irritation (rabbit): Irreversible eye effects. (OECD 405). Skin sensitization. Non sensitizing (female mice and guinea pigs).

In view of the available data, no classification criteria are met.

Inhalation exposure: NOAEL: < 10 ppm (male rat; exposure 128 weeks).

No carcinogenic effect were observed.

It can cause respiratory irritation.

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Inhalation exposure: 10 ppm (rat; 4 days or 13 weeks for 6 hours per day) (OECD 413 method equivalent to).

Aspirations hazard. No aspiration hazard evidence.

Section XII. Information of the effects on the ecology.

Acute toxicity to fish: Bluegill - LC50 (96 h): 20,5 mg / l. (PH: 3,25 - 3,5): (fresh water; semi static system).

It's not considered necessary to conduct the study because of buffer properties of aquatic environments.

Acute toxicity to aquatic plants: Chlorella Vulgaris - EC50 (72h): 0,73 mg/L. (fresh water: static system: pH 4,7: based on the growth rate).

Toxicity data micro and macro organisms in the soil and other environmental relevant organism, such as bees, birds, plants: No effects on the terrestrial environment and sediment are contemplated.

Being an organic substance does not apply the concept of biodegradability.

Non persistence. It neutralizes with natural alkalinity.

Abiotic degradation: Air, indirect photo oxidation. Spend chlorine by reaction with hydroxyl radicals. Air / water / soil: instantaneous ionization. Air / water / soil: Neutralization by natural alkalinity.

Hydrochloric acid dissociates almost completely and readily reacts with salt presents especially in wastewater.

Soil: The hydrochloric acid reacts with the chemical constituents of the soil forming chlorides which depending on the solubility, are readily leached by water.

Other adverse effects. Acidification of lands and effluents generated vapors are highly acidic and corrosive, heavier than air and spread along ground.

Section XIII. Considerations on the disposal of the product.

Product: Dilute with water and neutralize with: sodium carbonate, calcium oxide, calcium carbonate, sodium bicarbonate, dilute sodium hydroxide or calcium hydroxide. Respect the local current regulation concerning the disposal of this material and empty containers of the same.



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Contaminated packaging. Rinse empty containers with water and treat the effluent in the same manner noted above.

The empty and clean containers can be reused in accordance with existing regulations.

Sections XIV. Shipping information

Precautions for transport: N/A

By the transported portion, use those recommended by the manufacturer, not exceed 40 °C.

In case of emergency in transportation see this information.

Section XV. Regulatory information.

Consult the regulations and legislation on safety, health and environmental specific medium HCL 21%. And national rules and other regulations, limitations and prohibitive regulations.

Section XVI. Other information.

This document express information that is accurate to the best knowledge of the product ANTIVET that makes MDC Dental, S.A. de C.V. The data contained in this sheet are related only to the specific product designated herein.

The data shown correspond to our current knowledge and does not represent a guarantee of the properties. The receiver of our product must observe, under its responsibility, the rules and regulations.

MDC Dental, S.A. de C.V, assume no legal responsibility for the independent use of these data or misuse of the product.