

SAFETY DATA SHEET

Product name: ANA Etsgel Page: 1/12
Revision: Print date: 2023-03-02
Product No.: SDS-ID: EU-EN/1.0

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

1.1. Product identifier

Product name: ANA Etsgel

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

Identified use(s): Etching of enamel and dentin.

1.3. Details of the supplier of the safety data sheet

Supplier: Directa AB
P.O. Box 723
SE-194 27 Upplands Väsby
Tel:+46 850650575
Fax:+46 85903060
info@directadental.com

Responsible for safety data sheet authoring: info@directadental.com

1.4. Emergency telephone number

Emergency telephone: National Poison Control Centres are available in Member Countries. or +4608331231 (Only during office hours).

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SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP: The product is classified: Skin Corr. 1B;H314 - Eye Dam. 1;H318

2.2. Label elements



Danger

Contains: Phosphoric acid 37%

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

P260 Do not breathe vapour/spray.

P264 Wash hands thoroughly after handling.

P280 Wear protective clothing, gloves, eye and face protection.

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/doctor.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

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

2.3. Other hazards

PBT/vPvB: This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

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CLP:

| <u>%:</u> | <u>CAS-No.:</u> | <u>EC No.:</u> | <u>REACH Reg. No:</u> | <u>Chemical name:</u> | <u>Hazard classification:</u> | <u>Notes:</u> |
|-----------|-----------------|----------------|-----------------------|---------------------------|-------------------------------|---------------|
| 37 | 7664-38-2 | 231-633-2 | - | Orthophosphoric acid ...% | Skin Corr. 1B;H314 | B |
| 4.7 | 7631-86-9 | 231-545-4 | - | Silicon dioxide | - | |

Chemical name:

SCL

Orthophosphoric acid ...%

Skin Corr. 1B;H314: C ≥ 25 %
Skin Irrit. 2;H315: 10 % ≤ C < 25 %
Eye Irrit. 2;H319: 10 % ≤ C < 25 %

Silicon dioxide

Notes:

B: The supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

References:

The full text for all hazard statements is displayed in section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation:

Move the exposed person to fresh air at once. Place unconscious person on the side in the recovery position and ensure breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

Skin contact:

Remove contaminated clothing immediately. Wash the skin immediately with soap and water. Contact physician if irritation continues or sores develop. Chemical burns must be treated by a physician.

Eye contact:

Do not rub eye. Immediately flush with plenty of water for at least 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

Ingestion:

Unlikely route of exposure.
Immediately rinse mouth and drink 1-2 glasses of water or milk. Keep person under observation. Do not induce vomiting. If vomiting occurs, keep head low. Immediate transport to hospital. Bring along these instructions.

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

Symptoms/effects:

See section 11 for more detailed information on health effects and symptoms.

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

Medical attention/treatments: Treat symptomatically.

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SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media: This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Specific hazards: Contact with metals evolve hydrogen gas which may form explosive vapour/air mixtures.
During fire, gases hazardous to health may be formed. (Phosphine (PH₃).)

5.3. Advice for firefighters

Protective equipment for fire-fighters: Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Avoid contact with skin and eyes. Follow precautions for safe handling described in this safety data sheet.

6.2. Environmental precautions

Environmental precautions: Avoid discharge into water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Absorb in vermiculite, dry sand or earth and place into containers.

6.4. Reference to other sections

References: For personal protection, see section 8.
For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Safe handling advice: Avoid contact with eyes and prolonged skin contact. Observe good chemical hygiene practices. Ventilate well.

Technical measures: Keep the workplace clean.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in tightly closed original container in a dry, cool and well-ventilated place. Store away from: oxidising agents and metals. Strong alkalis.

7.3. Specific end use(s)

Specific use(s): Not relevant.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

| <u>CAS-No.:</u> | <u>Chemical name:</u> | <u>As:</u> | <u>Exposure limits:</u> | <u>Type:</u> | <u>Notes:</u> | <u>References:</u> |
|-----------------|-----------------------|------------|-------------------------|--------------|---------------|--------------------|
| 7664-38-2 | Orthophosphoric acid | - | 1 mg/m3 | - | - | EC |
| | | - | 2 mg/m3 | - | 15min | |

Notes: EC: Commission Directives 2009/148/EC, 2004/37/EC, 2000/39/EC and 91/322/EEC, with amendments.

DNEL/PNEC: Not available.

8.2. Exposure controls

Engineering measures: Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.
Provide access to washing facilities incl. soap, skin cleanser and fatty cream.

Personal protection: Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Respiratory equipment: Respiratory protection not required.
In case of inadequate ventilation: Wear suitable respiratory protection.

Hand protection: Wear protective gloves.
It is recommended to use gloves of Viton or nitrile rubber. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.
The most suitable glove must be chosen in collaboration with the supplier of gloves, who can inform about the breakthrough time of the glove material.

Eye protection: Wear goggles/face shield.

Skin protection: Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures: Wash hands after handling. Wash contaminated clothing before reuse.

Environmental Exposure Controls: Not available.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state: Gel.
Colour: Blue.
Odour: Odourless.
Odour threshold: Not available.
pH: 1,6
Melting point / freezing point: Not available.
Boiling point: Not available.
Flash point: Not available.
Evaporation rate: Not available.
Flammability (solid, gas): This product is not flammable.
Explosion limits: Not available.
Vapour pressure: Not available.
Vapour density: Not available.
Relative density: 1200 kg/m³ @ 20°C
Solubility: Miscible with water.
Partition coefficient (n-octanol/water): Not available.
Auto-ignition temperature (°C): Not available.
Decomposition temperature (°C): Not available.
Viscosity: Not available.
Explosive properties: Non-explosive
Oxidising properties: Non-oxidizing

9.2. Other information

Other data: Not available.

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SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity: The product reacts with water and will generate heat.

10.2. Chemical stability

Stability: Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Hazardous Reactions: None known.

10.4. Conditions to avoid

10.5. Incompatible materials

Incompatible materials: Oxidising materials. Metal Strong alkalis.

10.6. Hazardous decomposition products

Hazardous decomposition products: In contact with metals generates hydrogen gas, which together with air can form explosive mixtures. Beware, risk of formation of toxic and corrosive gases. (Phosphine (PH₃).)

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SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute Toxicity (Oral): Based on available data, the classification criteria are not met.

Acute Toxicity (Dermal): Based on available data, the classification criteria are not met.

Acute Toxicity (Inhalation): Based on available data, the classification criteria are not met.

Skin Corrosion/Irritation: Causes severe skin burns and eye damage.

Serious eye damage/irritation: Causes serious eye damage.

Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive Toxicity: Based on available data, the classification criteria are not met.

STOT - Single exposure: Based on available data, the classification criteria are not met.

STOT - Repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Inhalation: Vapours may irritate the respiratory system and cause coughing, asthmatic breathing and breathlessness. High concentrations may cause severe lung damage.

Skin contact: This substance is corrosive. Painful irritation.
May cause serious chemical burns to the skin.

Eye contact: Strongly corrosive. Causes severe burns and serious eye damage. Immediate first aid is imperative.
May cause chemical conjunctivitis and corneal damage with direct eye contact.
Symptoms/effects: Irritation, burning, lachrymation, blurred vision after liquid splash.

Ingestion: May cause irritation to the mouth and throat.

Toxicological data: Phosphoric acid
LD50 (oral, rat): 1530 mg/kg
LD50 (dermal rabbit): 2740 mg/kg

11.2. Information on other hazards

Endocrine disrupting properties: The product contains no substances identified as having endocrine disrupting properties in humans.

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SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity: There are no data on the ecotoxicity of this product.

Phosphoric acid:
LC50 (Fish, *Lepomis macrochirus*, 96 h): 3-3,25 mg/l
NOEC (*Daphnia magna*, 48h): 56 mg/l
EC50 (Algae: *Desmodesmus subspicatus*)/72 hours: >100 mg/l

12.2. Persistence and degradability

Degradability: The product solely consists of inorganic compounds which are not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: Bioaccumulation: Is not expected to be bioaccumulable.

12.4. Mobility in soil

Mobility: The product is soluble in water. May adsorb to soil particles.

12.5. Results of PBT and vPvB assessment

PBT/vPvB: This product does not contain any PBT or vPvB substances.

12.6. Endocrine disrupting properties

Endocrine disrupting properties: The product contains no substances identified as having endocrine disrupting properties in aquatic organisms.

12.7. Other adverse effects

Other adverse effects: None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Waste is classified as hazardous waste.

Waste from residues: EWC-code:
18 01 06

Contaminated packaging: Dispose of contaminated packings as residue.

Empty packaging: Empty clean packaging should be collected for reuse.

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SECTION 14: TRANSPORT INFORMATION

The product is covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/AND/RID).

14.1. UN number

UN-No: 1805

14.2. UN proper shipping name

Proper Shipping Name: PHOSPHORIC ACID, SOLUTION

14.3. Transport hazard class(es)

Class: 8

14.4. Packing group

PG: III

14.5. Environmental hazards

Marine pollutant: No.

Environmentally Hazardous substance: No.

14.6. Special precautions for user

Special precautions: None known.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk: Not relevant.

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SECTION 15: REGULATORY INFORMATION

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

Special provisions: As a general rule, persons under 18 years of age are not allowed to work with this product. Users must be carefully instructed in the proper work procedure, the dangerous properties of the product and the necessary safety instructions.

National regulation: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, with amendments.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work, with amendments.

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, with amendments.

Commission Directive 91/322/EEC of 29 May 1991 on establishing indicative limit values by implementing Council Directive 80/1107/EEC on the protection of workers from the risks related to exposure to chemical, physical and biological agents at work, with amendments.

Directive 2004/37/EC of the European Parliament and of the Council of 29 April 2004 on the protection of workers from the risks related to exposure to carcinogens or mutagens at work, with amendments.

Directive 2009/148/EC of the European Parliament and of the Council of 30 November 2009 on the protection of workers from the risks related to exposure to asbestos at work, with amendments.

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work, with amendments.

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives, with amendments.

2014/955/EC: Commission Decision of 18 December 2014 amending Decision 2000/532/EC as regards the list of wastes.

15.2. Chemical Safety Assessment

CSA status: No chemical safety assessment has been carried out.

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SECTION 16: OTHER INFORMATION

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

For restrictions on use see section 15.

Abbreviations and acronyms

used in the safety data sheet:

CSA = Chemical Safety Assessment.
EC50 = Effective Concentration 50%.
LC50 = Lethal Concentration 50%.
LD50 = Lethal Dose 50%.
NOEC = No Observed Effect Concentration.
PBT = Persistent, Bioaccumulative and Toxic.
vPvB = very Persistent and very Bioaccumulative.

Additional information: Classification according to Regulation (EC) No. 1272/2008: Calculation method.

Wording of H-statements:

H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

Made by DHI - Environment and Toxicology, Agern Allé 5, DK-2970 Hørsholm, Denmark.
www.dhigroup.com.
