

GETINGE CLEAN

Material Safety Data Sheet

Neutralizer Plus

According to regulation (EC) 1907/2006

SECTION 1: Identification of the substance/mixture and company

1.1 Product identifier

Product name: Getinge Clean Neutralizer Plus

Product code: Art. no. 5043002/03/04/05/00 XV1560

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

Multipurpose acidic detergent. Removes rust, stains and hard water scale from stainless steel instruments, equipment and washer disinfectant chambers. Restores stainless steel surface finish. Can also be used as a process additive for pH neutralization of alkaline residues.

1.3 Details of the supplier of the Safety Data Sheet

Getinge Disinfection AB, Ljungadalsgatan 11

Box 1505, SE-351 15 Växjö, Sweden

Phone: +46 (0)10 335 98 00

Web: <http://www.getinge.com>

E-mail: info@getinge.com

1.4 Emergency number:

For emergency event of spillage, inhalation or ingestion of product, please contact the emergency hotline:

EU +44 (0) 1235 239 670

AU +61 2801 445 58

JP +81 345 789 341

CN +86 10 5100 3039

Middle East +44 (0) 1235 239 671

SECTION 2: Hazards identification (Undiluted product)

2.1 Classification of the mixture:

Classification according to directive 1999/45/EC: Corrosive

2.2 Label elements:



Corrosive

R34: Causes burns.

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28: After contact with skin, wash immediately with plenty of water.

2.3 Other hazards: Strongly acidic product, use with caution.

SECTION 3: Composition/information on ingredients

| Material | CAS number | Level | Hazards (see section 16) | |
|----------------------|------------|--------|--------------------------|-------------|
| Orthophosphoric acid | 7664-38-2 | 30-50% | Corrosive | C R34 |
| Nitric acid | 7697-37-2 | 1-5% | Corrosive | C R35, O R8 |

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SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact:** Immediately flush eyes with water, holding eyelids apart, for at least 10 minutes. Seek medical assistance immediately.
- Skin contact:** Remove contaminated clothing, wash skin with water and seek medical attention immediately.
- Inhalation:** If irritation occurs, remove to fresh air, keep warm and at rest, seek medical attention immediately.
- Ingestion:** Do not induce vomiting. If conscious, give water to drink. Seek medical assistance immediately.
- First aider PPE:** As required to prevent contact. See section 8.2.

4.2 Most important symptoms and effects, both acute and delayed

- Eye hazard:** Causes burns.
- Skin hazard:** Causes burns.
- Respiratory hazard:** Breathing spray mist will cause irritation.

4.3 Indication of any immediate medical attention and special treatment needed

No special treatment or attention required additional to section 4.2

SECTION 5: Fire fighting measures

Flammability hazard: Not combustible.

5.1 Extinguishing media: No special requirements. As appropriate for the fire.

5.2 Special hazards

arising from the mixture: May cause toxic fumes in a fire.

5.3 Advice for fire fighters: No special measures arising from the mixture.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Take precautions to avoid contact. Use Personal Protective Equipment as detailed in section 8. Spillage may make floors slippery. Keep the area clear. Observe regulations.

6.2 Environmental precautions

Prevent spills from entering water courses.

6.3 Methods and material for containment and cleaning up

Small quantities, mop up or use an inert absorbent.

Large quantities, contain and absorb or pump into suitable containers for disposal.

6.4 Reference to other sections

Observe the advice given in sections 8 and 13.

SECTION 7: Handling and storage

Shelf life: 24 months in original sealed containers.

7.1 Precautions for safe handling

Do not mix with other products. Observe good industrial hygiene.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry place protected from frost and away from alkalis and strong oxidizing agents.

Store upright in original containers.

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7.3 Product Uses: Confirm compatibility of all contact materials before use.

Instruments – Manual Procedure

Add 10 ml/litre Neutralizer Plus in hot tap water $\geq 50^{\circ}\text{C}$ in a non-porous acid compatible container. Carefully place pre-cleaned, open stainless steel instruments in solution to prevent splashing. Soak instruments for 5-15 minutes. For heavily stained instruments - soak for 15-60 minutes. Remove instruments from solution and rinse thoroughly. If necessary, repeat the procedure to achieve satisfactory result. Reprocess as recommended.

Instruments/Washer Disinfector- Automated Procedure

Add 10 ml/litre Neutralizer Plus based on machine tank capacity in a stainless steel container and place in washer disinfector chamber. Run a standard deliming cycle at temperatures $\geq 60^{\circ}\text{C}$.

Rinse thoroughly. If necessary, repeat the procedure to achieve satisfactory result. Reprocess as recommended.

Neutralization – Automated Procedure

Add as required to achieve the acceptable pH reduction.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limits

| | | |
|----------------------|-----------------------|-----------------|
| Orthophosphoric acid | 1 mg/m ³ | WEL 8 hour TWA |
| Nitric acid | 2.6 mg/m ³ | WEL 15 min STEL |

8.2 Exposure controls

These measures are suggested on the basis of general use methods and may not be appropriate to all potential uses of the product. The user is responsible for carrying out a full risk assessment of their specific processes and systems of work.

Eye protection: Wear a full face visor to BS EN 166 39B.

Hand protection: Wear pvc or latex gloves. Exact choice of glove depends on specific risk assessments.

Body protection: As necessary to prevent contact.

Respiratory protection: Use in a well ventilated area. Avoid breathing vapour or spray. Wear a respirator if necessary.



Other protection:

Personal protective equipment:

Exact PPE requirements should be determined from a specific risk assessment of the processes being carried out.

Environmental protection: Prevent mixture from entering water courses.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|-------------------------------------|----------------------|
| Appearance: | Colourless liquid |
| Odour: | Mild, characteristic |
| pH at 5ml/lit in water (typical): | 2 |
| pH as supplied (typical): | <1 |
| Initial boiling point: | >100°C |
| Auto-ignition temperature: | Not applicable |
| Explosive properties: | Not applicable |
| Oxidising properties: | Not applicable |
| Vapour pressure: | No data |
| Solubility: | Miscible with water |
| Relative density at 20°C (typical): | 1.282 typical |
| Flash point: | Not applicable |
| Viscosity: | <10cPs |

9.2. Other information: None measured

SECTION 10: Stability and reactivity

| | |
|--|--|
| 10.1. Reactivity | Incompatible with strong oxidising agents and alkalis. |
| 10.2. Chemical stability | Stable under recommended storage conditions. |
| 10.3. Possibility of hazardous reactions | No hazardous reactions are expected to occur. |
| 10.4. Conditions to avoid | Extremes of temperature. |
| 10.5. Incompatible materials | Incompatible with strong oxidising agents and alkalis. |
| 10.6. Hazardous decomposition products | May produce toxic fumes in fire. |

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|----------------------------|---|
| Sensitisation: | Does not contain any ingredients classified as sensitising. |
| Carcinogenicity: | Does not contain any ingredients classified as carcinogenic. |
| Mutagenicity: | Does not contain any ingredients classified as mutagenic. |
| Toxicity for reproduction: | Does not contain any ingredients classified as toxic for reproduction. |
| Long term: | Based on current knowledge, no long term effects are anticipated if used correctly. |

Routes of exposure/symptoms

| | |
|---------------|---|
| Eye contact: | Causes burns. |
| Skin contact: | Causes burns. |
| Inhalation: | Breathing spray mist will cause irritation. |
| Ingestion: | Low toxicity, will cause irritation and damage to gastro-intestinal tract due to acidity. |

SECTION 12: Ecological information

| | |
|--|---|
| 12.1. Toxicity | Not classified as dangerous for the environment. May affect aquatic organisms due to low pH if released into water courses untreated. |
| 12.2. Persistence and degradability | All organic ingredients are biodegradable when well diluted. |
| 12.3. Bioaccumulative potential | Not expected to bioaccumulate. |
| 12.4. Mobility in soil | This product has high water solubility. |
| 12.5. Results of PBT and vPvB assessment | Contains no ingredients classified as PBT or vPvB. |
| 12.6. Other adverse effects | No other adverse effects are anticipated. |

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of surplus product and packaging via a licenced chemical waste contractor.

Empty cleaned containers can be recycled where facilities exist or sent for landfill or incineration where permitted. Process effluent can normally be discharged to foul sewer (subject to consent limits). May require pH neutralisation.

SECTION 14: Transport information

| | |
|---|---|
| 14.1. UN number | 3264 |
| 14.2. UN proper shipping name | Corrosive liquid, acidic, inorganic, n.o.s |
| 14.3. Transport hazard class(es) | 8 |
| 14.4. Packing group | 3 |
| 14.5. Environmental hazards | This product is not classified as environmentally hazardous |
| 14.6. Special precautions for user | No specific precautions |
| 14.7. Transport in bulk according to Annex II of MARPOL 7 3/78 and the IBC Code | Not available for bulk transport |

SECTION 15: Regulatory information

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

Contents according to (EC) regulation No. 648/2004 on detergents.

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

R Phrases relating to ingredients (see section 3).

R34 Causes burns.

R35 Causes severe burns.

O R8 Oxidising.

This product should be stored, handled and used in accordance with good industrial practice and in conformity with legal regulations. The information in this data sheet is based on the present state of our knowledge and is intended to describe products from the point of view of safety requirements and thus should not be construed as guaranteeing specific properties. It is for users to satisfy themselves of the suitability of this product for their own applications.

Always consult and follow recommendations for reprocessing of medical device according to the manufactures guidelines in accordance with EN ISO 17664.