NADES

aquagroup
Aktiengesellschaft

Super Oxidized Disinfectant Solution

Produced by ECA Technology and ECA System of Aquagroup AG, Germany

NADES

ECA (Electro Chemically Activated) Solution/Disinfectant to safe and improve the microbial quality of water, food, environment and surface area. This environmentally friendly disinfectant is produced by the electrolysis of natural ingredients (water and salt (NaCl)) only.

One For All. Perfect form of Disinfection. (Kills 99.99% of Germs)

Features

- High antimicrobial efficacy
- Effective against all known microorganism & biofilm (including bacteria, virus, algae, fungi and spore)
- No harmful Chlorates
- Environmentally friendly
- Non-irritating
- High Worker Safety
- Produced by natural and food grade ingredients
- Easy to use
- Quick acting against Germs

Fields of Applications

- Water, Beverage, Dairy and Brewing Industry
- Meat, Sea Food Industry
- Poultry Farms, Slaughter House & Abattoir
- Live Stock & Dairy Farm
- Hotel, Resort, Hotel Apartment, Villa, Commercial & Residential Building
- Schools
- Hospital and Clinic
- Restaurant, Kitchen & Cafeteria
- Fruits & Vegetables Processing Co.
- Cooling Tower Industry
- Cosmetic & Pharma Co.
- Biogas Plants
- Cruise Liner & Off Shore

Packing size: 5 Ltr Can & 25 Ltr Can

Applications of NADES

Water Treatment	Surface Disinfection	Product Microbial Decontamination
• Drinking water treatment • Process water treatment • Swimming pool water treatment • Cooling tower water treatment • Waste/Sewerage water treatment • Lake water treatment • Irrigation water treatment	• Floor/Wall/Tables • CIP/Machines • Filler head microbial decontamination • Bottle rinsing • Reused bottles rinsing • Water pipeline and water system flushing • Tank disinfection • Utensils/Equipment	• Fruit/Vegetable sanitation • Fish microbial decontamination • Carcass washing • Meat/Sea Food microbial decontamination

Fayfa Chemicals LLC (Aquagroup Swiss GmbH Dubai Branch), P.O Box: 6246, Dubai, UAE
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TECHNICAL SPECIFICATIONS

Section-1

Product identifier **NADES**

Relevant Uses **Super Oxidized Disinfection Solution**

Details of the supplier of the safety data sheet

Supplied by **Fayfa Chemicals (Aquagroup Dubai)**
P.O Box: 6246, Dubai, UAE
Tel +971 4 3472082
Fax +971 50 451 0513
www.FayfaChemicals.com

Address enquiries to Technical information
support@fayfachemicals.com

Section-2

Application range:

- To use as a fast-acting highly effective bactericidal, veridical, fungicidal and sporozoite disinfectant. Use diluted only as per recommended concentration by the supplier (dependent on application)
- Surface disinfection of floor, wall, machine, equipments, glass, food contact surface, CIP.
- Environmentally friendly, non-irritating, quickly acting against germs, non-toxic as per recommended application dose.

Section-3

Product-type:
The product is a mixture.
Active chlorine of sodium hypochlorite. Compound.

Range [%]	substance
>99.60%	**Electrolyzed Water**
<0.02%	**Sodium hypochlorite** CAS: 7681-52-9, EINECS/ELINCS: 231-668-3
<0.3%	**Sodium chloride** CAS: 7647-14-5, EINECS/ELINCS: 231-598-3

Baua-Number: **N-31157 (Produktart 4)**
N-31158 (Produktart 5)

Chemical aspects:
The above figures displayed indicate the maximum possible values.

Section-4

Personal precautions, protective equipment and - emergency procedures
Ensure adequate ventilation.
Use personal protective equipment.

Environmental precautions
Do not discharge 100% concentrate into the drains/surface waters/groundwater.
Prevent spread over a wide area (e.g. by containment or oil barriers).

Section-5

Description of first aid measures

General information Change soaked clothing

Inhalation Ensure supply of fresh air

Skin contact When in contact with the skin, clean with soap and water. Consult a doctor if skin irritation persists.

Eye contact In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

Ingestion Do not induce vomiting. Rinse out mouth and give plenty of water to drink. Supply with medical care.

Section-6

Precautions for safe handling
Use only in well-ventilated areas. The normal safety precautions for handling chemicals must be observed.

Conditions for safe storage, including any incompatibilities
Keep only in original container. Prevent penetration into the ground. Do not store together with acids. Keep container tightly closed. Keep container in a well-ventilated place. Keep in a cool place.

Section-7

Information on basic physical and chemical properties

Appearance: Homogeneous clear, liquid
Colour: clear
Odour: Mild ozonous / chlorinous odour
Taste: Mild saline
Boiling Point: 1000C
Sp Gravity: 1.02 - 1.06 g/ml
pH-value: 7.0 ±0.5
Oxidation Reduction Potential: ORP = +900 mV ±100mV
Solubility: as for water
Explosibility characteristics: there's no explosion risk
Oxidising characteristics: none

Section-8

Reactivity No dangerous reactions known if used as directed.

Chemical stability Stable under normal ambient conditions (ambient temperature).

Possibility of hazardous reactions
Reactions with oxidizing agents.

Conditions to avoid strong heating.

Incompatible materials Sodium hypochlorite: Evolution of chlorine under influence of acids.

Hazardous decomposition products
Chlorine compounds.

Section-9

Information on toxicological effects
Acute toxicity

Acute toxicity-oral:	LD50 (L929-Zellen)	10 min. 3 h	43.4% 27.1%
	LD50 (FL-Zellen)	10 min. 3 h	26.0% 17.3%

No toxic reaction detected both by a 10 minute and 3 hour residence time with a NADES dilution of 10%.

Section-10

Toxicity

Range [%]	substance
>99.60%	**Electrolyzed Water**
<0.02%	**Sodium hypochlorite** CAS: 7681-52-9, EINECS/ELINCS: 231-668-3
<0.3%	**Sodium chloride** CAS: 7647-14-5, EINECS/ELINCS: 231-598-3

Section-11

Safety, health and environment regulations/legislation specific for the substance or mixture

EEC-REGULATIONS 1967/548 (199/45); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (Reach); 1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC

TRANSPORT-REGULATIONS
DOT-Classification, ADR (2011);IMDG-Code (2011, 35. Amdt.); IATA-DGR (2012).

NATIONAL REGULATIONS (GB):
EH40/2005 Workplace exposure limits with amendments October 2007. CHIP 3/ CHIP 4

Chemical safety assessment
Chemical safety assessments for substances in this mixture were not carried out.

Note: For further information please see MSDS