

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 01/30/2018

Reviewed on 01/30/2018

1 Identification

- **Product Identifier**

- **Trade name: AquaKlean SUS**

- **Product Number: ng-AKSUS**

- **Relevant identified uses of the substance or mixture and uses advised against:**

Use only as directed by manufacturer.

- **Product Description:**

Low foaming, multi-metal ultrasonic cleaner ideal for strip ultrasonic machine applications. Highly effective and safe on most metals including soft, amphoteric metals such as Aluminum, Tin and Zinc and their alloys such as Brass and Bronze. Product remains clear both in concentrate and in dilution during use, and with no foaming tendencies at both high and low temperatures, allowing for efficient and robust cleaning and residue free spotless rinsing. Flash rust and corrosion inhibition package is effective on most metals including mild steels and soft, amphoteric metals.

- **Application of the substance / the mixture:**

Industry-specific application. FOr use in soak, ultrasonic or spray applications.

- **Details of the Supplier of the Safety Data Sheet:**

- **Manufacturer/Supplier:**

NuGeneration Technologies, LLC (dba NuGenTec)

1155 Park Avenue, Emeryville, CA 94608

salesteam@nugentec.com

1-888-996-8436 or 1-707-820-4080 for product information

www.nugentec.com

- **Emergency telephone number:**

الاستجابة للطوارئ: المحلية وكندا - 1-8253-633-800-1, دولي 1-0667-629-801-PERS

2 Hazard(s) Identification

- **Classification of the substance or mixture:**



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

- **Label elements:**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms:**



GHS07

- **Signal word: Warning**

- **Hazard statements:**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

- **Precautionary statements:**

P264

Wash thoroughly after handling.

P280

Wear protective gloves / eye protection / face protection.

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- P302+P352 *If on skin: Wash with plenty of water.*
 P321 *Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).*
 P305+P351+P338 *If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
 P332+P313 *If skin irritation occurs: Get medical advice/attention.*
 P362+P364 *Take off contaminated clothing and wash it before reuse.*
 P337+P313 *If eye irritation persists: Get medical advice/attention.*

· **Unknown acute toxicity:**

This value refers to knowledge of known, established toxicological or ecotoxicological values. 13.5 % of the mixture consists of component(s) of unknown toxicity.

· **Classification system:** NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



· **Hazard(s) not otherwise classified (HNOC):** None known

3 Composition/Information on Ingredients

· **Non-hazardous components:**

	Proprietary Surfactant	Proprietary%
7732-18-5	Water, distilled water, deionized water	Proprietary%

· **Chemical characterization: Mixtures**

· **Description:** Mixture of substances listed below with non-hazardous additions.

· **Dangerous Components:**

Proprietary Salt	⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	Proprietary%
Proprietary Salt	⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	Proprietary%
Proprietary Solvent	⚠ Eye Irrit. 2A, H319; Flam. Liq. 4, H227	Proprietary%

· **Additional information:**

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

4 First-Aid Measures

· **Description of first aid measures:**

· **After inhalation:**

Generally the product does not irritate with inhalation. Supply fresh air; consult doctor in case of complaints.

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- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation occurs, consult a doctor.
- **After eye contact:**
Rinse opened eye for several minutes under running water.
If easy to do so, remove contact lenses if worn.
If eye irritation occurs, consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting without medical advice.
If vomiting does occur, repeat fluid administration
Call a doctor if irritation or symptoms develop.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed:**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed:**
No further relevant information available.

* 5 Fire-Fighting Measures

- **Extinguishing media:**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture:**
If incinerated, product will release the following toxic fumes: Oxides of Carbon, Phosphorus and Sodium, Potassium, and Nitrogen (NOx).
- **Advice for firefighters:**
- **Protective equipment:**
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

* 6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures:**
Avoid contact with skin, eyes and clothing.
Ensure adequate ventilation.
- **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
Dispose of the collected material according to regulations.
- **Reference to other sections:**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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· **Protective Action Criteria for Chemicals**

· PAC-1:	
Proprietary Solvent	30 ppm
Proprietary Corrosion Inhibitor	61 mg/m ³
· PAC-2:	
Proprietary Solvent	33 ppm
Proprietary Corrosion Inhibitor	680 mg/m ³
· PAC-3:	
Proprietary Solvent	200 ppm
Proprietary Corrosion Inhibitor	4,000 mg/m ³

7 Handling and Storage

- **Handling**
- **Precautions for safe handling:** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities:**
Store away from strong acids, strong bases, strong oxidizing agents and strong reducing agents.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s):** No further relevant information available.

8 Exposure Controls/Personal Protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters:**
All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.
- **Components with occupational exposure limits:**
The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

Proprietary Salt	
WEEL	Short-term value: 5 mg/m ³

- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.
- **Exposure controls:**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing and wash before reuse.

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Wash hands before breaks and at the end of work.

- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Select glove material based on penetration times, rates of diffusion and degradation.

- **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material:**

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

- **Eye protection:**



Safety glasses

- **Body protection:** Not required.

9 Physical and Chemical Properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form: Liquid
Color: Clear, amber

- **Odor:** Mild
- **Odor threshold:** Not determined.

- **pH-value @ 20 °C (68 °F):** 10

- **Change in condition**

Melting point/Melting range: Not determined.
Boiling point/Boiling range: ≥ 100 °C (≥ 212 °F)

- **Flash point:** None

- **Flammability (solid, gaseous):** Product is not flammable.

- **Ignition temperature:** Not applicable

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not self-igniting.

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· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure @ 20 °C (68 °F):	≤23 hPa (≤17.3 mm Hg)
· Density @ 20 °C (68 °F):	1.127 g/cm ³ (9.405 lbs/gal)
· Relative density:	Not determined.
· Vapor density:	Not determined.
· Evaporation rate:	Not determined.
· Solubility in / Miscibility with:	
Water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
VOC content:	67 g/l
· Other information:	No further relevant information available.

10 Stability and Reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:**
Strong acids, strong bases, strong oxidizing agents and strong reducing agents.
- **Hazardous decomposition products:**
Oxides of Carbon, Phosphorus, Sodium, Potassium and Nitrogen (NO_x).

11 Toxicological Information

- **Information on toxicological effects:**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

Proprietary Salt		
Oral	LD50	>2,000 mg/kg (Mouse)
Dermal	LD50	>4,640 mg/kg (Rabbit)
Proprietary Solvent		
Oral	LD50	5,660 mg/kg (Rat)

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Dermal	LD50	4,000 mg/kg (Rabbit)
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• **Primary irritant effect:**

• **On the skin:** Irritating effect

• **On the eye:** Irritating effect.

• **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

• **Carcinogenic categories:**

• **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

• **NTP (National Toxicology Program):**

None of the ingredients are listed.

• **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

12 Ecological Information

• **Toxicity:** The hazards for the aquatic environment are unknown.

• **Aquatic toxicity:** No further relevant information available.

• **Persistence and degradability:** No further relevant information available.

• **Behavior in environmental systems:**

• **Bioaccumulative potential:** No further relevant information available.

• **Mobility in soil:** No further relevant information available.

• **Additional ecological information:**

• **General notes:**

Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.

• **Results of PBT and vPvB assessment:**

• **PBT:** Not applicable.

• **vPvB:** Not applicable.

• **Other adverse effects:** No further relevant information available.

13 Disposal Considerations

• **Waste treatment methods:**

• **Recommendation:**

Observe all federal, state and local environmental regulations when disposing of this material.

• **Uncleaned packagings**

• **Recommendation:** Dispose of as unused product.

• **Recommended cleansing agent:** Water, if necessary with cleansing agents.

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14 Transport Information

- **UN-Number:**
· **DOT, ADR/ADN, ADN, IMDG, IATA** *Non-Regulated Material*
- **UN proper shipping name:**
· **DOT, ADN, IMDG, IATA** *Non-Regulated Material*
- **Transport hazard class(es):**
· **DOT, ADR/ADN, ADN, IMDG, IATA**
· **Class:** *Non-Regulated Material*
- **Packing group:**
· **DOT, ADR/ADN, IMDG, IATA** *Non-Regulated Material*
- **Environmental hazards:** *Not applicable.*
- **Special precautions for user:** *Not applicable.*
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** *Not applicable.*
- **UN "Model Regulation":** *Non-Regulated Material*

15 Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**

Section 355 (extremely hazardous substances):	<i>Proprietary Salt</i>
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- **Section 313 (Specific toxic chemical listings):**

Section 313 (Specific toxic chemical listings):	<i>Proprietary Salt</i>
	<i>Proprietary Solvent</i>
- **TSCA (Toxic Substances Control Act):**

TSCA (Toxic Substances Control Act):	<i>Proprietary Salt</i>
	<i>Proprietary Salt</i>
	<i>Proprietary Solvent</i>
	<i>Proprietary Corrosion Inhibitor</i>
	<i>Proprietary Chelating Agent</i>
<i>7732-18-5</i>	<i>Water, distilled water, deionized water</i>
- **TSCA new (21st Century Act) (Substances not listed)**

TSCA new (21st Century Act) (Substances not listed)	<i>Proprietary Salt</i>
	<i>Proprietary Solvent</i>
- **California Proposition 65:**
- **Chemicals known to cause cancer:**

Chemicals known to cause cancer:	<i>None of the ingredients are listed.</i>
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· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

· **New Jersey Right-to-Know List:**

Proprietary Salt

· **New Jersey Special Hazardous Substance List:**

None of the ingredients are listed.

· **Pennsylvania Right-to-Know List:**

Proprietary Salt

· **Pennsylvania Special Hazardous Substance List:**

Proprietary Salt

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· **Carcinogenic categories:**

· **EPA (Environmental Protection Agency):**

None of the ingredients are listed.

· **TLV (Threshold Limit Value established by ACGIH):**

None of the ingredients are listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health):**

None of the ingredients are listed.

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms:**



GHS07

· **Signal word:** Warning

· **Hazard statements:**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

· **Precautionary statements:**

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

P302+P352 If on skin: Wash with plenty of water.

P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

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P337+P313 If eye irritation persists: Get medical advice/attention.

• National regulations:

None of the ingredients are listed.

• Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

• Date of preparation / last revision: 01/30/2018 / -**• Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety & Health Administration

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flam. Liq. 4: Flammable liquids – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

• * Data compared to the previous version altered.SDS created by MSDS Authoring Services www.msdsauthoring.com +1-877-204-9106