|  |
| --- |
| Material Safety Data Sheet |
|  |
|  |
| Product Name: **Silv-Cleanse** |

# Manufacturer's Cage Code: FI\_L

Product Classification: Dietary Supplement, for use in drinking water

Synonyms: Colloidal Silver, Functional Food, Mineral Nutrient, Alternative to Antibiotics

THE INFORMATION IN THIS MSDS IS PREPARED BASED ON PRIMARY AND SECONDARY SOURCES AND IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS OR ACCURACY. IT IS THE USER'S RESPONSIBILITY BOTH TO DETERMINE SAFE CONDITIONS FOR USE OF THIS PRODUCT AND TO ASSSUME LIABILITY FOR LOSS, INJURY, OR EXPENSE RESULTING FROM IMPROPER USE OF THIS PRODUCT

NFPA Hazard Ratings:0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe

|  |  |  |
| --- | --- | --- |
| **Health=2** | **Fire=3** | **Reactivity=0** |

# IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

Product Name: Silv-Cleanse

Product Classification: For use as water disinfectant

Synonyms: Colloidal Silver, Functional Food, Mineral Nutrient, Alternative to Antibiotics, Silver nucleate; silver protein

Product Description: Free from silver nitrate (AgNO3, CAS no. 7761-88-8) and silver chloride (AgCl, CAS no. 7783-90- 6); contains free ions of Silver

Product Use: To disinfect water wherever protected water is not available.

# EXCLUSIVE SUPPLIER:

|  |
| --- |
| Terawet Green Technologies, Inc. (TGT) |
| P.O. Box 17040 San Diego, California 92177-7040  E-Mail: [info@terawet.com](mailto:info@terawet.com%20) Contact: +1-619-516-0130 |

1. **COMPOSITION/INFORMATION ON INGREDIENTS**

|  |  |  |  |
| --- | --- | --- | --- |
| **INGREDIENT NAME**  Nano Silver | **CAS NO.**  7440-22-4 | **CONTENTS HEALTH (class)**  0.005% | **RISK (R No.)** |
| Water | 7789-20-0 | 99.995% |  |

1. **HAZARDS IDENTIFICATION**

NONE, Non toxic, Non corrosive

# FIRST AID MEASURES

**INHALATION**

None.

# INGESTION

None

# SKIN

None. Simply wash, if necessary

# EYES

None. Simply wash, if necessary

# FIRE FIGHTING MEASURES EXTINGUISHING MEDIA

None

# SPECIAL FIRE FIGHTING PROCEDURES

None

# UNUSUAL FIRE & EXPLOSION HAZARDS

None

# SPECIFIC HAZARDS

None

# ACCIDENTAL RELEASE MEASURES SPILL CLEAN UP METHODS

None

# HANDLING AND STORAGE HANDLING PREPARATIONS

No Special preparations needed

# STORAGE PRECAUTIONS

Keep in cool, dry, ventilated storage and closed containers.

# EXPOSURE CONTROLS AND PERSONAL PROTECTION Roots of Entry:

None

# Carcinogenicity:

None

# NTP

Not listed

# IARC Monographs

Not listed

# OSHA Regulated : Not required

# Signs and Symptoms of Exposure

None

# Medical Conditions:

**Generally Aggravated by Exposure**

None

# Emergency and First Aid Procedures

None required

# VENTILATION RESPIRATORS

None

# SKIN PROTECTION

None. Simply wash, if necessary

# EYE PROTECTION

None. Simply wash, if necessary

# OTHER PROTECTION

None

# HYGIENIC WORK ROUTINES

None special

# PHYSICAL AND CHEMICAL PROPERTIES APPEARANCE

Fluid

# COLOR

Colorless

# ODOR

Characteristic

# MELTING POINT (°C)

NA

# BOILING POINT (°C)

100°C

# SOLUBILITY DESCRIPTION

Water soluble

# SPECIFIC GRAVITY at 20°C (Water = 1)

1.0025

# TASTE

Slightly pungent

# pH-VALUE, CONC.

6.5-6.7

# VAPOUR PRESSURE at 25°C

23.8

# Vapor Density (AIR = 1)

0.023 g/cm3

# STABILITY AND REACTIVITY STABILITY

Stable

# CONDITIONS TO AVOID

Colloid can be broken by freezing or treatment with strong acids.

# HAZARDOUS DECOMPOSITION PRODUCTS

None

# Hazardous Polymerization

Will not occur

# TOXICOLOGICAL INFORMATION

There have been no reports of argyria or other toxic effects resulting from the exposure of healthy persons to silver. On the basis of present epidemiological and pharmacokinetic knowledge, a total lifetime oral intake of about 10 g of silver can be considered as the human NOAEL.

As the contribution of drinking-water to this NOAEL will normally be negligible, the establishment of a health based guideline value is not deemed necessary.

On the other hand, special situations may exist where silver salts are used to maintain the bacteriological quality of drinking-water.

Higher levels of silver, up to 0.1 mg/ L (a concentration that gives a total dose over 70 years (<http://www.who.int/water_sanitation_health/dwq/chemicals/silver.pdfof> half the human NOAEL of 10 g), could then be tolerated without risk to health)

# Acute Toxicity:

None

# INHALATION

None

# INGESTION

None

# SKIN

None. If necessary wash with water.

# EYES

None. If necessary wash with water.

# HEALTH WARNINGS

None

# ROUTE OF ENTRY

None

# MEDICAL SYMPTOMS

None

# ECOLOGICAL INFORMATION

GRAS.

# DISPOSAL CONSIDERATIONS

**DISPOSAL METHODS**

None

# TRANSPORT INFORMATION

No Special Requirements

# REGULATORY INFORMATION

Not a regulated product

# OTHER INFORMATION

**TGT provides the information contained herein in good faith, in compliance with the Occupational Safety and Health Act of 1970, but makes no representation as to its comprehensiveness or accuracy.**

**This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.**

**TGT warrants that this product is of merchantable quality.**

**The implied warranty of fitness for a particular purpose is limited to the extent the products are used for the purpose or uses described on the product's label or in any written instructions or materials distributed to the buyer by TGT and is hereby disclaimed should buyer use the products in a manner inconsistent with this uses or purposes described therein.**

**In no event shall TGT be liable for any consequential, exemplary, or incidental damages incurred by buyer even if it has been advised of the possibility of such damages.**

**REFERENCES:**

1. Holleman AF, Wiberg E. Lehrbuch der anorganischen Chemie.[Textbook of inorganic chemistry. ] Berlin, Walter de Gruyter, 1985.
2. National Academy of Sciences. Drinking water and health . Washington, DC, 1977:289-292.
3. Whitlow SI, Rice DL. Silver complexation in river waters of central New York. Water research , 1985, 19:619-626.
4. Fowler BA, Nordberg GF. Silver. In: Friberg L, Nordberg GF, Vouk VB, eds. Handbook on the toxicology of metals. Amsterdam, Elsevier, 1986:521-531.
5. US Environmental Protection Agency. Ambient water quality criteria for silver. Washington, DC, 1980 (EPA 440/5- 80-071).
6. National Academy of Sciences. Drinking water and health , Vol. 4. Washington, DC, 1982.
7. Dequidt J, Vasseur P, Gromez-Potentier J. Étude toxicologique expérimentale de quelques dérivés argentiques. 1. Localisation et élimination. Bulletin de la Société de Pharmacie de Lille , 1974, 1:23-35 (cited in reference 5).

11. Goldberg AA, Shapiro M, Wilder E. Antibacterial colloidal electrolytes: the potentiation of the activities of mercuric-

, phenylmercuric- and silver ions by a colloidal sulphonic anion. Journal of pharmacy and pharmacology

, 1950, 2:20-26.