

Safety Data Sheet

1. Product and company identification

Product name	Neji-saurus Liquid (ZC-28, ZC-28M, ZC-29)
Company	ENGINEER INC. 2-8-9 Higashi-Imazato Higashinari-ku Osaka, 537-0011 Japan
Department in charge	Technical department Tel. +81-6-6974-0100 Fax +81-6-6974-5661
Date of creation	2017/10/30
Date of revision	2018/04/24
Reference number	ZC-28_20171030

2. Hazards Identification

GHS Classification

Hazards to health:

Skin Irritation	Category 2
Eye Irritation	Category 2A

Hazards not listed above cannot be classified.

GHS label elements

Pictograms



Signal word

Warning

Hazard statements

Causes skin irritation
Causes serious eye irritation

Precautionary statements

Prevention

Read the safety data sheet carefully before use.
Mixing hazards: This substance is a reducing agent, and might generate oxygen when mixed with oxidants (hydrogen peroxide,

sodium bromate etc.).

Wear protective clothing while working.

Wash hands and face thoroughly and rinse mouth with clean water after handling.

Response

IF IN EYES: Rinse cautiously with water for at least 15 minutes.

IF ON SKIN: Wash immediately with plenty of water.

IF INHALED: Move to fresh air and keep comfortable for breathing.

IF SWALLOWED: Drink a large amount of water and seek medical attention.

Storage

Protect from sunlight and store locked up in a cool and dark place.

Do not store together with oxidants.

Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations. Dilute with water and oxidize with diluted hydrogen peroxide or the equivalent.

3. Composition/information on ingredients

Substance/mixture	Mixture
Chemical name/formula	Ammonium thioglycolate $\text{HSCH}_2\text{COONH}_4$
Ingredient name/amount	Ammonium thioglycolate 29.5 ~ 31.0% Aliphatic organic solvents 12.0 ~ 15.0% Nonionic surfactants 0.5 ~ 1.0% Sequestering agent 0.2 ~ 0.4% Deodorants <1% Purified water 57.8 ~ 52.6%
CSCL	2-1355 (thioglycolic acid), 1-391 (ammonia)
CAS number	5421-46-5
UN no./UN class	Not applicable
Industrial Safety and Health Act	Not applicable

4. First aid measures

Eye contact	Rinse cautiously with water for at least 15 minutes. Seek medical attention if irritation persists or if concerned.
Skin contact	Wash immediately with plenty of water.
Inhalation	Move to fresh air and keep comfortable for breathing. Seek medical attention if irritation persists or if concerned.
Ingestion	Drink a large amount of water and seek medical attention.

5. Fire-fighting measures

Extinguishing media	Water spray.
Fire-fighting instructions	Move substance and oxidants like hydrogen peroxide from fire area if you can do so without risk. Cool surrounding containers, facilities, etc. to prevent the fire from spreading.
Hazardous combustion products	Carbon oxides, Nitrogen oxides (NO _x), Sulphur oxides

6. Accidental release measures

Small spill	Wipe off with a paper towel or cloth. Rinse with plenty of water.
Large spill	Collect recoverable product into labelled containers for recycling. Rinse with plenty of water.

7. Handling and storage

Precautions for safe handling	Wear appropriate protective equipment to avoid contact with eyes and skin. As this substance colors when it comes into contact with metals, keep it in glass, pottery or polyethylene containers.
Conditions for safe storage	Protect from sunlight and store locked up in a cool and dark place. Do not store together with oxidants. Keep in glass, pottery or polyethylene containers.

8. Exposure Controls/Personal Protection

Control parameters	No applicable occupational exposure limits.
Exposure controls	
Eye protection	Protective glasses
Skin protection	Appropriate protective equipment such as protective clothing and face protection
Respiratory protection	Not needed under normal conditions.
Hand protection	Wear appropriate protective gloves.

9. Physical and chemical properties

Appearance	Colorless transparent liquid
pH	7.0 – 7.8 (25°C)
Initial boiling point and boiling range	Not available
Melting point	Not available
Auto-ignition temperature	Not available
Flash point	Not available
Flammability or explosive limits	Not available
Relative density	Not available
Vapor pressure	Not available
Water solubility	Soluble

10. Stability and Reactivity

Stability	Stable under normal conditions. Purity may decrease when stored longer than 6 months.
Hazardous decomposition products	None

11. Toxicological Information

Acute toxicity	Not available
Skin corrosion/irritation	The solution of Thioglycolic acid 6% is used as a cold permanent wave solution, so its skin irritancy is considered to be relatively weak, but some people may have irritations.
Serious eye damage/irritation	Irritation occurs when it comes in contact with the eyes. Invades the mucous membrane if neglected.

Respiratory or skin sensitization	Not available
Germ cell mutagenicity	Not available
Carcinogenicity	Not available
Reproductive toxicity	Not available
STOT-single exposure	Not available
STOT-repeated exposure	Not available
Aspiration hazard	Not available

12. Ecological information

Environmental hazards

Acute hazards to the aquatic environment	Not available
Chronic hazards to the aquatic environment	Not available
Ecotoxicity	Not available

13. Disposal considerations

Residual waste	Dilute with water and oxidize with diluted hydrogen peroxide or the equivalent. Dispose of contents and container in accordance with all local, regional, national and international regulations (BOD, COD etc.).
Contaminated containers and packaging	Remove the contents completely before disposing of empty containers. Clean and then recycle containers, or dispose of them in compliance with the relevant regulations and local government standards.

14. Transport information

Make sure there are no leaks in the container. Prevent from impact, falling, breakage and load collapse. Avoid direct sunlight. Avoid transportation together with oxidants.

15. Regulatory information

Industrial Safety and Health Act	Not applicable
Fire Service Act	Not applicable
PRTRs	Not applicable
Poisonous and Deleterious Substances Control Act	Not applicable

16. Other Information

Sources of data

MSDS, Bretherick's handbook of reactive chemical hazards, other

Notice to reader

The contents stated are based on data and information available at the present time and may be revised according to new knowledge. The precautions are intended for ordinary handling. In the case of special handling, take safety precautions appropriate to the usage. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. We are not responsible for any damage caused by handling of this substance, whether this substance is handled as instructed by this information.