SAFETY DATA SHEETS

SECTION 1: Identification

Product Name

FINECUT 2500NK

Supplier's detail Name

NEOS Co., Ltd

Address

6-2-1 Kano-cho, Chuo-ku, Kobe, JAPAN

Telephone number

+81 783319381 (Head Office) +81 748753161 (Central Research Laboratory)

Date prepared

10 Feb. 2011

Recommended use of the

: Water soluble metal working fluid.

chemical and restrictions on use

SECTION 2: Hazard identification

GHS classification Physical Hazards

Flammable liquids

: Not classified

Others

Not applicable or classication not possible

Human Health Hazards

Acute toxicity (Oral) Acute toxicity (Dermal) Acute toxicity

Not classified Not classified : Not applicable

(Inhalation: Gases)

Acute toxicity

Classification not possible

(Inhalation: Vapors)

Acute toxicity

Classification not possible

(Inhalation: Dusts or Mists)

Skin Corrosion/irritation

Serious eye damage/

eye irritation Respiratory sensitization

: Classification not possible

Skin sensitization

* Not classified Classification not possible

Germ cell mutagenicity Carcinogenicity

Not classified

Category 2

Category 1

Reproductive toxicity

Classification not possible

Specific target organ

* Category 1(Liver), Category 3(Narcotic effects)

Category 2 (Liver, Blood, Kidney, Central nervous system)

toxicity-Single exposure

Specific target organ

toxicity-Repeated exposure

Aspiration hazard

: Classification not possible

Environmental Hazards

Acute toxicity to the aquatic environment

Chronic toxicity

Category 2

to the aquatic environment

Not classified

Label Elements

Pictogram and Symbol

Health Hazard, Corrosion, Exclamation mark

Signal word Hazard statement : Health Hazard, Corrosion, Exclamation mark

May be harmful if swallowed

Causes skin irritation

Causes serious eye damage Causes damage to organs (Liver)

May cause drowsiness or dizziness

May cause damage to organs (Liver, Blood, Kidney, Central nervous

system) through prolonged or repeated exposure

Toxic to aquatic life

Precautionary statements

[Prevention]

Do not handle until all safty precautions have been read and understood.

Obtain special instructions before use.

Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye

protection/face protection. Wear respiratory protection.

Use only outdoors or in a well-ventilated area.

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Wash hand thoroughly after handling.

Avoid release to the environment if this is not the intended

Do not breathe dust/fume/gas/mist/vapours/spray.

Do not swallow.

Do not get in eyes, on skin, or on clothing.

Do not pressurize empty containers. (May cause explosion.) Do not weld, heat, drill or cut the container. (Product

residues may cause explosion or ignition.)

Keep container tightly closed. Do not spill this product at handling.

[Fire fighting measures]

[First aid measures] Inhalation

Extinguish a fire with suitable measures.

Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Get medical advice/attention if you feel unwell.

Skin contact

Wash with plenty of soap and water.

Get medical advice/attention if skin irritation or rash

occurs

Wash contaminated clothing before reuse.

Eye contact Rinse cautiously with water for fifteen minutes.

Remove contact lenses, if present and easy to do. Continue

rinsing.

Immediately call a POISON CENTER or doctor/physician.

Ingestion

Rinse mouth.

Vomit with the large quantity of water if possible.

Do NOT attempt to give anything by mouth to an unconscious

Get medical advice/attention if you feel unwell. Get medical advice/attention if you feel unwell.

If exposed or concerned

[Storage]

* Keep container tightly closed. Store in a well-ventilated

place. Keep cool. Store locked up. Keep out of reach of children.

[Disposal considerations]

Dispose of container and unused contents to in accordance with local/regional/national/international regulations.

SECTION 3:Composition/information on ingredients

Classification of the substance : Mixture.

or mixture

Chemical name or

classification

: Not applicable.

comm <u>ercial name</u>	
Components	Contents
Amines	20~30%
Surfactant	5~10%
Water	40~50%
Dye stuff	<1%
Corrosion inhibitor	<1%
Fats	5~10%
Organic acids	10~20%
Component(s) used for GHS	: 2,2'-Iminodiethanol

SECTION 4: First aid measures

Inhalation : Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

Get medical advice/attention if you feel unwell.

Skin contact : Wash with plenty of soap and water.

Get medical advice/attention if skin irritation or rash

occurs.

Wash contaminated clothing before reuse.

Eye contact : Rinse cautiously with water for fifteen minutes.

Remove contact lenses, if present and easy to do. Continue

rinsing.

Immediately call a POISON CENTER or doctor/physician.

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Ingestion

Rinse mouth.

Vomit with the large quantity of water if possible.

Do NOT attempt to give anything by mouth to an unconscious

Get medical advice/attention if you feel unwell.

If exposed or concerned

Get medical advice/attention if you feel unwell.

SECTION 5: Fire fighting measures

Suitable extinguishing media Unsuitable extinguishing media Extinguishing powder, Foam, carbon dioxide, sand, water fog.

Water jet.

Specific hazards arising from

chemical

Containers may explode in heat of fire.

Irritating or toxic substances may be emitted upon thermal

decomposition.

Precautions Move containers from fire area if it can be done without

risk.

Cool containers enough by using volumes of water after fire

is extinguished.

Special protective actions fire: Wear self-contained breathing apparatus.

fighters

Extinguish fire from the windward.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and procedures emergency

Do not touch or walk through spilled material.

Isolate hazard area and deny entry.

Keep unneccessary people away.

Emergency responders with adequate personal equipment (see

also SECTION 8) for cleaning up.

Do not touch damaged containers or spilled product without

proper personal protection.

Stay up wind.

Keep out of low areas.

Ventilate closed spaces before entering.

Prevent spill from entering sewers or drains and contact

with soil.

Decontamination and neutralization techniques

Environmental precautions

For small spills: Absorb with dry soil, sand or non-reactive

absorbent and place in an appropriate chemical waste

container.

For large spills: Dike for later disposal. Collect liquid in

a safe area.

Methods and materials for containment and cleaning up Stop leak if safe to do so.

Prevention of second accident

Prevent spills from entering basement and closed place.

Immediately eliminate all ignition sources,

SECTION 7: Handling and storage

Precautions for safe handling

Set up appropriate equipment. Wear appropriate protective equipment. (see also SECTION 8)

Ventilate by the local/general exhaust system. (see also

SECTION 8) Obtain special instructions before use.

Do not handle until all safty precautions have been read and understood.

prohibit the use of the fire in the surrounding. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product.

Wash hand thoroughly after handling.

Do not get in eyes,

Do not get on skin or clothing. Do not swallow. Do not breathe dust/fume/gas/mist/vapours/spray.

See also SECTION 10.

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Conditions for safe storage, including any incompatibilities : Make the structure that water does not put to the floor in storage.

Set up appropriate equipment for the lighting and ventilation necessary to store, and to handle.

Keep away from heat and flame.

Make the floor in storage that does not infiltrate with an appropriate inclination, set up appropriate pool for spilled material.

Do not contact with incompatible materials.

Keep container tightly closed. Store in a well-ventilated

place. keep cool. Store locked up. See also SECTION 10.

Store in a closed/corrosive resistant container.

SECTION 8: Exposure controls/ personal protection

Exposure limits

: Not established (by product).

Exposur limits of ingrediet(s)

Chemical name Japan Society for Occupational: Not established.

2, 2'-Iminodiethanol

Health

ACGIH TLV-TWA 2mg/m3 (absorbed through the skin.)

ACGIH TLV-STEL : Not established. Chemical name : Dicyclohexylamine Japan Society for Occupational: Not established.

Health

ACGIH TLV-TWA : Not established.

Appropriate engineering

controls

Eye-wash stations and safty showers should be located in the

A system of local and /or general exhaust is recommended to keep employee exposure below the air borne exposure limits. If mist/dust/fume/gas is generated, a system of local and /or general exhaust is recommended to keep employee exposure

below the air borne exposure limits.

Personal protections

Respiratory protection

Wear appropriate protective equipment for respiratory organ.

If necessary, wear appropriate mask where expose is possible.

Hand protection Wear appropriate protective gloves.

If necessary, wear chemical resistant protective gloves where

expose is possible.

Eye protection * Wear chemical splash goggles and appropriate protective

equipments for face.

Wear chemical splash goggles and a full face shield where

splashing is possible.

Skin protection Use chemical splash goggles or appropriate face shield.

If necessary, wear chemical resistant protective clothing and

boots where splashing is possible.

Comments Do not eat, drink or smoke when using this product.

Wash hand thoroughly after handling.

SECTION 9: Physical and chemical properties

Appearance (physical state, Blue liquid.

color etc)

0dor Slightly peculiar odor. 9.5(2% solution/water,25℃) На

Melting point Not available. Boiling point Not available. Flash point None

Lower explosive limit Not available. Upper explosive limit : Not available. : Not available. Vapor pressure Vapor density (Air=1) Not available. Relative density 1.06(15°C)

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Solubility Easily soluble in water at room temperature.

Partition coefficient: Not available.

n-octanol/ water

Auto-ignition temperature Not available. Decomposition temperature Not available. Odor threshold Not available. Not available. Evaporation rate

(Butyl acetate=1)

Flammability (solid, gas) Not available. Viscosity Not available.

SECTION 10:Stability and reactivity

Chemical stability Stable at room temperature.

Possibility of hazardous Heat is generated reacting with acid.

reaction Zinc, aluminum, and these alloys are corroded. Nitrosamine is generated reacting with nitrite.

Conditions to avoid Contact with hot surfaces/sparks/open flames/incompatible

Incompatible materials Zinc, aluminum and these alloys, nitriles, nitrite, strong

> oxidizing agents, acids, water-reactivity materials. Thermal decomposition products may include oxides of

Hazardous decomposition carbon, nitrogen and sulfur.

SECTION 11: Toxicological information

This product is classified into Category 5 based on the acute toxicity estimate (ATE) calculated from acute toxicity

value of ingredients. However, the total concentration of ingredient(s) with unknown acute toxicity is about 30%.

This product is classified into Not classified based on the acute toxicity estimate (ATE) calculated from acute toxicity value of ingredients. However, the total concentration of ingredient(s) with unknown acute toxicity is about 30%.

This product is classified into Not applicable. The physical

state of this product is liquid.

This product cannot be classified, because data concerning toxicity of ingredients cannot be obtained.

This product cannot be classified, because data concerning

toxicity of ingredients cannot be obtained. This product is classified into Category 2 based on the

toxicity of ingredients. However, the total concentration of ingredient(s) with unknown toxicity is about 30%.

This product is classified into Category 1 based on the toxicity of ingredients.

This product cannot be classified, because data concerning toxicity of ingredients cannot be obtained.

This product is classified into Not classified based on the toxicity of ingredients. However, the total concentration of ingredient(s) with unknown toxicity is about 30%.

This product cannot be classified, because data concerning toxicity of ingredients cannot be obtained.

This product is classified into Not classified based on the toxicity of ingredients. However, the total concentration of ingredient(s) with unknown toxicity is about 30%.

This product cannot be classified, because data concerning toxicity of ingredients cannot be obtained.

This product is classified into Category 1(Liver), Category 3 (Narcotic effects) based on the toxicity of ingredients.

This product is classified into Category 2(Liver, Blood, Kidney, Central nervous system) based on the toxicity of ingredients. However, the total concentration of ingredient(s) with unknown toxicity is about 30%.

This product cannot be classified, because data concerning toxicity of ingredients and/or vicosity of this product cannot be obtained.

products

Acute toxicity (oral)

Acute toxicity (dermal)

Acute toxicity (inhalation: gases) Acute toxicity (inhalation: vapors) Acute toxicity

(inhalation: dusts, mists) Skin corrosion/irritation

Serious eye damage/ irritation

Respiratory sensitization

Skin sensitization

Germ cell mutagenicity

Carcinogenicity

Reproductive toxicity

Specific target organ systemic toxicity-single exposure Specific target organ systemic toxicity-repeated exposure

Aspiration hazard

SECTION 12: Environmental Hazards

toxicity

Hazardous to the aquatic environment-acute hazard

This product is classified into Category 2 based on the toxicity of ingredients. However, the total concentration of ingredient(s) with unknown toxicity is about 30%.

Hazardous to the aquatic environment-chronic hazard

This product is classified into Not classified based on the toxicity of ingredients. However, the total concentration of ingredient(s) with unknown toxicity is about 30%.

Persistence and degradability Bioaccumulative potential Mobility in soil

No imformation is available.No imformation is available.No imformation is available.

SECTION 13:Disposal considerations

Unused contents : Dispose of contents to in accordance with

local/regional/national/international regulations.

Notify the processing trader who consign it enough danger

and the hazardous property.

Container : Container recycles cleanly, or dispose to in accordance with

local/regional/national/international regulations.

Remove unused contents completely.

SECTION 14:Transport information

UN Number : Not regulated.
UN Proper Shipping name : Not regulated.
Transport hazard class(s) : Not regulated.
Packing group : Not regulated.

Other information Keep 40°C or less the container. Pile up without damage.

Prevent the collapse of cargo piles.

Transport of container to in accordance with

local/regional/national/international regulations. (see also

SECTION 7)

SECTION 15: Regulatory information

Please treat this product in compliance with federal

requirements and local

SECTION 16:Other information

Key literature references and sources

: The GHS classification result of about 1500 substances by

Japanese Government during 2005 and 2006.

Website of the Japan Advanced Information Center of Safety

and Health.

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