Material Safety Data Sheet

First writing Date: 22/04/2010 Revision Date: 03/10/2012 Print Date: 27/03/2013

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Product name COOLACT 10

Company TAKASAGO INTERNATIONAL CORPORATION
Department QUALITY ASSURANCE DEPARTMENT

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Intended use Not intended for personal use in this concentration.

For manufacturing use only.

MSDS form No. 201CH950QAD369-001

2. HAZARDS IDENTIFICATION

GHS hazard classifications

PHYSICAL HAZARDS Not available
HEALTH HAZARDS Not available
ENVIRONMENTAL HAZARDS Not available

*[Classification not possible] or [Not Classification] is the Hazards Category which is NOT written on the

above.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component Aroma/Fine chemical

Chemical name/general name 3-1-Menthoxypropane-1, 2-diol

Composition ingredient

Ingredients Name CAS-Number Range of concentrations

3-I-Menthoxypropane-1, 2-diol 87061-04-9 ≥98.0%

4. FIRST-AID MEASURE

If INHALED Remove to a place with fresh air and keep at rest in a comfortable

position, and obtain medical advice if necessary.

Maintain normal body temperature by covering the with a blanket or

the like.

Remove all contaminated clothing or protectors from the immediately. Rescuer should be careful to prevent from touching hazardous material

by wearing gloves or the like.

In case of SKIN contact Remove all contaminated clothes and shoes or the like from the

immediately. If necessary, sever them. Wash product contact area with running cold/lukewarm water. Wash them away using a soap. If there is

observable change in appearance or continued pain, get medical

advice/attention immediately.

Treat the product by keeping away from fire as this product is

flammable.

In case of EYE contact Flush eyes well with a large amount of running clean water for at

least 15 minutes, followed by immediate medical attention. When flushing eyes, be sure to hold eyelids open well with sterilized fingers to completely rinse the eyes including eyeballs and eyelids. When wear contact lenses, keep rinsing eyes after taking them off as

201CH950QAD369-001 COOLACT 10 TAKASAGO INTERNATIONAL CORPORATION 27/03/2013

2/4

far as product does not adhere to them(or contact lenses adhere to

If SWALLOWED Rinse mouth with water and have drink one or two cups of water or milk to dilute the product. Immediately get medical advice/attention. necessary, administrate artificial respiration / oxygen inhalation.

Never give anything by mouth to an unconscious

Special protective equipment for first-aid responder

Wear protective gloves/protective clothing/eye protection/face protection.

5. FIRE-FIGHTING MEASURE

Inappropriate media Specific hazards

Any precaution to be taken

Special protective equipment for fire-fighters

Extinguishing media

Fire extinguishing powder agent, foam extinguishing agent, carbon dioxide, sands

Do not use water for fire extinguishing.

Not known

Start fire fighting at the windward as far as possible.

Prohibit nonessential personnel from going into the surrounding area where fire starts.

In case fire starts in the surrounding area, remove portable container to safe area.

Start fire fighting from windward, avoid inhaling harmful gases. Wear suitable protective equipment (gloves, eye glasses, masks) in occasion.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Environmental precautions

Methods and materials for containment and cleaning up Prohibit nonessential personnel from going into the spilled area by enclosing the area with ropes.

Do not touch spilled product without suitable protection (rubber glove, protective glasses, protective clothing, etc.)

Be careful that the spilled product is flowed into the water such as river, resulting in adverse effects on the environments.

(Decontamination)

Scoop up leaked spillage, and then collect them with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container such as paper bag or drum for disposal according to local / national laws and regulations.

In case of large amount of spillage, enclosed by embankment to prevent it from flowing out, and treat it after introducing it into safe area. In case of small amount of spillage (liquid), have it be absorbed with the spilled product with dry sands, soil, vermiculites, waste cloth or other incombustible absorbents (designated according to the property of the product), and recovered into sealable, empty container.

(Neutralization)

Collect liquid in an appropriate container or absorb with an inert material (e.g. vermiculite, earth, etc.) and place in a chemical waste container.

Prevention of second disaster

Remove ignition source around the product (inflammable liquid) and prepare fire extinguishing agent.

Use safety equipment which do not spark.

Handling

Technological countermeasure Handle the product in a well-ventilated place.

COOLACT 10

Avoid leaking, spilling, dispersing, and also prevent the evolution of

excess amount of steam.

Prevent the product from contacting skin, mucous membrane, clothing,

or entering eyes.

Do not eat, drink or smoke except for at the designated places. Handle product with appropriate protective equipment such as

protective eye glasses or protective gloves.

Fire Strict Prohibition. Electric equipment should not be source of ignition caused by static electricity or spark, etc. as well as being

explosion-proof structure.

Ventilation requirements Handle the product in a local exhaust equipment, or in a place where

whole ventilation system is installed.

Safe handling Equipment should have explosion-proof structure, and take measures to

prevent the build up of electrostatic charge in the facility.

Storage

Storage conditions Store indoors at 25.0°C (77.0 F) or less, if possible, preferably

around 15.0°C (59.0 F) in dry, well ventilated and dark conditions, in

full sealed containers. Keep away from sources of ignition.

Material of vessels/packages Use the same material as the container of this products

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Permissible Exposure Limits (PELs)

Ingredients Name

3-I-Menthoxypropane-1, 2-diol

Engineering control

Japan. OELs – ISHL Japan. OELs – JSOH ACGIH-TLV

Install equipment for washing eyes and body near handling area. In case steam, fume or mist evolves in the handling area, install

local exhaust equipment there.

Personal protection equipment

Respiratory protection

Hand protection Eye protection Skin protection Dust mask, simple dust mask

Protective gloves
Safety goggle
Protective clothing
Protective boots

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical properties

Description Colorless and odorless viscous liquid.

Odor Almost no odor.

Flash point 174.0°C open cup

Explosive range Not available
Specific gravity at 20/20 degC 0.992 - 1.004
Solubility Water insoluble

10. STABILITY AND REACTIVITY

Stability Stable under ordinary conditions of use and storage

Possibility of Not available

hazardous reaction

Conditions to avoid

Incompatible materials

Not available

Hazardous decomposition Carbon dioxide and carbon monoxide

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11. TOXICOLOGICAL DATA

Acute toxicity Oral Rat >2000mg/kg 1)

Dermal Not available
Inhalation(Vapor) Not available

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish

Toxicity to daphnia

Toxicity to algae

Not available

Not available

13. DISPOSAL CONSIDERATION

Residue Comply with local regulations for waste disposal.

being sent for reconditioning or disposal. The washings should be

treated as trade effluent or special waste as appropriate.

14. TRANSPORT INFORMATION

International transport regulations

IMDG information

UN number Not restricted

IATA information

UN number Not restricted

15. REGULATORY INFORMATION

Japan (ENCS)

This product is listed on the ENCS Inventory.

USA (TSCA)

This product is listed on the TSCA Inventory.

EU (EINECS/ELINCS)

This product is listed on the EINECS Inventory.

Canada (DSL/NDSL)

This product is listed on the DSL Inventory.

Australia (AICS)

This product is listed on the AICS Inventory.

Korea (ECL)

This product is NOT listed on the ECL Inventory.

China (IECSC)

This product is listed on the IECSC Inventory.

Philippines (PICCS) This product has been notified.

16. OTHER INFORMATION

Reference literature
1) TAKASAGO data

The information contained in this Material Safety Data Sheet is obtained from reputable sources. However, this data is provided without any warranty, express or implied, regarding its accuracy. It is the user's responsibility both to determine safe condition for use of this product and to assume liability for loss, injury, damage, or expense resulting from improper use of this product.