

ANTI CORROSIVE SEALING AGENT FOR LINING STEEL PIPES

HERME SEAL 66 is a liquid gasket with specially purified polymer resin as basic material that allows the production of strong sealing effectiveness.

HERME SEAL 66 meets the requirements of SS245 : 1981 and JIS K 6742 (1971). Therefore, it is found to be safely used as sealing materials for pipes conveying portable water.



PROPERTIES

| | |
|------------------|---------------------|
| COLOUR | : GREY |
| TYPE OF FILM | : DRYING HARDENING |
| VISCOSITY | : 4300 CPS AT 25°C |
| SPECIFIC GRAVITY | : 1.2 |
| HEATED RESIDUE | : 63 ± 3% |
| DILUENT | : SPECIFIED SOLVENT |
| SHELF LIFE | : ONE YEAR |

APPLICATION METHOD AND RECOMMENDATION FOR HERME SEAL 66

- Removal of any water, oil, dust from the applied surface.
- Stir well before used.
- Applied the suitable amount of solvent with a brush.
- Allowed the solvent to evaporate before tighten the joint.
- After tightening, 12 hours is required to give better adhesion properties.
- Sufficient amount is required as excessive application will caused blockage.
- After used, ensure the cap is tighten and store under a cool and dry place.



DUCTILE PTE LTD

504 Defu Lane Singapore 539502 367
Tel : (65) 284 5511 Fax : (65) 285 1930
E-mail: ductile @ mbox2.singnet.com.sg
<http://www.ductile.com.sg>

Material Safety Data Sheet

May be used to comply with
OSHA's Hazard Communication Standard,
29 CFR 1910.1200. Standard must be
consulted for specific requirements.

U. S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (As Used on Label and List)

HERME SEAL 66

Note: Blank spaces are not permitted. If any item is not applicable, or no
information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name

NIHON HERMETICS CO., LTD.

Emergency Telephone Number

Address (Number, Street, City, State, and ZIP Code)

Telephone Number for Information

03-3492-3677

No. 31-8, NISHI-GOTANDA 2-CHOME, SHINAGAWA-KU, TOKYO, 141, JAPAN

Date Prepared

Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

| Hazardous Components (Specific Chemical Identity; Common Name(s)) | OSHA PEL | ACGIH TLV | Other Limits Recommended | % (optional) |
|---|----------|-----------|--------------------------|--------------|
| | | T W A | | |
| ETHYL ACETATE (CAS. No. 141-78-6) | | 400 ppm | | 30 - 40 |

Section III - Physical/Chemical Characteristics

| | | | |
|-------------------------|------------|---|---------|
| Boiling Point | 171 °F | Specific Gravity (H ₂ O = 1) | 1.2 |
| Vapor Pressure (mm Hg) | 73 (68 °F) | Melting Point | -119 °F |
| Vapor Density (AIR = 1) | 3.04 | Evaporation Rate (Butyl Acetate = 1) | 5.25 |

Solubility in Water

Insoluble

Appearance and Odor

Gray paste, aromatic odor

Section IV - Fire and Explosion Hazard Data

| | | | | |
|---------------------------|----------------------------|------------------|-----------|----------|
| Flash point (Method Used) | 19 °F (by Seta closed-cup) | Flammable limits | LEL 2.2 % | UEL 11 % |
|---------------------------|----------------------------|------------------|-----------|----------|

Extinguishing Media

Dry chemical, CO₂

Special Fire Fighting Procedures

Fire fighter should wear self-contained breathing apparatus.

Unusual Fire and Explosion Hazards

Unknown. If closed containers of large amounts are allowed to heat,
pressure may build and cause container to burst.

Section V - Reactivity Data

| | | | |
|-----------|----------|---|--------------------------|
| Stability | Unstable | | Conditions to Avoid |
| | Stable | X | High temperature , flame |

Incompatibility (Materials to Avoid)

Hazardous Decomposition or Byproducts

CO , hydrocarbon oxidation products including organic acids , aldehydes and alcohols

| | | | |
|--------------------------|----------------|---|--------------------------|
| Hazardous Polymerization | May Occur | | Conditions to Avoid |
| | Will Not Occur | X | High temperature , flame |

Section VI - Health Hazard Data

| | | | |
|--------------------|-------------|-------|------------|
| Route(s) of Entry: | Inhalation? | Skin? | Ingestion? |
| | X | X | X |

Health Hazards (Acute and Chronic)

Oral-Rat ; LD₅₀ 5620 mg/kg (Ethyl acetate)Inhalation-rat ; LC₅₀ 1600 ppm/8h. (Ethyl acetate)

Harmful if swallowed inhaled or absorbed through skin .

| | | | |
|------------------|---------|------------------|-----------------|
| Carcinogenicity: | NTP? | IARC Monographs? | OSHA Regulated? |
| | Unknown | Unknown | Unknown |

Unlisted as carcinogenic material .

Signs and Symptoms of Exposure

Eye-irritating , headache , dazzling , wheezing , shortness of breath

Medical Conditions

Generally Aggravated by Exposure

Narcotism , breathing paralysis as acute toxic

If inhaled , remove to fresh air , if breathing is difficult give oxygen and call a physician immediately .

Emergency and First Aid Procedures

Skin contact : Wash affected area with soap and water .

Eye contact : Flush with water for at least 15 min , and call a physician immediately .

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled

Eliminate all sources of ignition . Wear organic solvent resistant

gloves , safety glasses and a NIOSH/MSHA approved air purifying respirator with organic vapor cartridge .

Wipe off with dry cloth , and wipe off with thinner .

Waste Disposal Method

Disposal by an industrial waste firm which is qualified to handle hazardous materials is recommended .

Incineration requires scrubbing of combustion product to remove silica and so on.

Precautions to Be Taken in Handling and Storing

Keep away from heat , fire and flame . Keep out of the reach of children .

Use only at well ventilated place . Avoid eye and skin contact . Keep container closed when not in use .

Other Precautions

In addition to any listed precautions , you should consult your occupational safety and health specialist

to insure that the suggested handling procedures will be adequate and in compliance with applicable laws and regulations .

Section VIII - Control Measures

Respiratory Protection (Specify Type)

NIOSH/MSHA approved air purifying respirator with organic vapor cartridge .

| | | |
|-------------|---|---------|
| Ventilation | Local Exhaust | Special |
| | Mechanical (General) | Other |
| | Necessary to maintain exposure below TLV's. | |

Protective Gloves

Rubber organic solvent resistant

Eye Protection

Safety goggles

Other Protective Clothing or Equipment

Work/hygienic Practices

Medical surveillance and employee training proposed to be required .