



1. Chemical product and company identification

| | |
|-------------------------------------|--|
| Product name | MOLY-DEE TAPPING FLUID |
| MSDS# | 05086 |
| Code | 05086-BW, BT |
| Product use | Lubricant |
| Manufacturer | Castrol Industrial North America, Inc. 150 W. Warrenville Road Naperville, IL 60563 |
| Supplier | Castrol Industrial North America, Inc. 150 W. Warrenville Road Naperville, IL 60563 Product Information: 1-800-621-2661 |
| EMERGENCY SPILL INFORMATION: | 1 (800) 424-9300 CHEMTREC (USA) |

2. Composition/information on ingredients

| Ingredient name | CAS # | % by weight |
|--|------------|-------------|
| Alkanes, (C10-13), chloro | 61788-76-9 | 35 - 40 |
| Distillates (petroleum), hydrotreated heavy naphthenic (Highly refined mineral oil) | 64742-52-5 | 10 - 15 |
| Distillates (petroleum), solvent-refined heavy paraffinic (Highly refined mineral oil) | 64741-88-4 | 1 - 5 |

3. Hazards identification

| | |
|---------------------------------|--|
| Physical state | Liquid. |
| Color | Green. |
| Emergency overview | <p>WARNING!</p> <p>CAUSES EYE IRRITATION. MAY CAUSE SKIN IRRITATION. MAY CAUSE RESPIRATORY TRACT IRRITATION.</p> <p>Do not ingest. Do not get in eyes, on skin or clothing. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.</p> |
| Routes of entry | Dermal contact. Eye contact. Inhalation. Ingestion. |
| Potential Health Effects | |
| Eyes | Causes eye irritation. |
| Skin | May cause skin irritation. |
| Inhalation | May cause respiratory tract irritation. |
| Ingestion | Ingestion may cause gastrointestinal irritation and diarrhea. |

Medical conditions
aggravated by
overexposure

None identified.

See toxicological Information (section 11)

4. First aid measures

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| Eye Contact | In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops. |
| Skin Contact | Immediately wash exposed skin with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops. |
| Inhalation | If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if irritation develops. |
| Ingestion | Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear. |

5. Fire-fighting measures

| | |
|--------------------------------------|---|
| Flammability of the product | |
| Flash point | 154 °C (Open cup) Cleveland. |
| Products of combustion | These products are carbon oxides (CO, CO ₂), halogenated compounds, hydrogen chloride, sulfur oxides (SO ₂ , SO ₃ ...). |
| Unusual fire/explosion hazards | This material is not explosive as defined by established regulatory criteria. Non-explosive in presence of open flames, sparks and static discharge, of shocks, of heat. |
| Fire fighting media and instructions | In case of fire, use water fog, foam, dry chemicals, or carbon dioxide. |
| Protective clothing (fire) | Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. |

6. Accidental release measures

| | |
|--|---|
| Personal Precautions | Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (See Section: "Exposure controls/personal protection"). Follow all fire fighting procedures (See Section: "Fire-fighting measures"). |
| Environmental precautions and clean-up methods | If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Minimize contact of spilled material with soils to prevent runoff to surface waterways. See Section 13 for Waste Disposal Information. |
| Personal protection in case of a large spill | Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product. |

7. Handling and storage

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|----------|--|
| Handling | Do not ingest. Do not get in eyes, on skin or on clothing. Avoid contact with skin and clothing. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable. Use only with adequate ventilation. Wash thoroughly after handling. |
| Storage | Keep container tightly closed. Keep container in a cool, well-ventilated area. Empty containers may contain harmful, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. |

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8. Exposure controls/personal protection

Occupational exposure limits

Ingredient name

Alkanes, (C10-13), chloro
Distillates (petroleum), hydrotreated heavy
naphthenic (Highly refined mineral oil)

Occupational exposure limits

None assigned.

ACGIH (United States).

STEL: 10 mg/m³ 15 minute(s). Form: Oil mist, mineral

TWA: 5 mg/m³ 8 hour(s). Form: Oil mist, mineral

OSHA (United States).

TWA: 5 mg/m³ 8 hour(s). Form: Oil mist, mineral

Distillates (petroleum), solvent-refined heavy
paraffinic (Highly refined mineral oil)

ACGIH (United States).

STEL: 10 mg/m³ 15 minute(s). Form: Oil mist, mineral

TWA: 5 mg/m³ 8 hour(s). Form: Oil mist, mineral

OSHA (United States).

TWA: 5 mg/m³ 8 hour(s). Form: Oil mist, mineral

Control Measures

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.

Hygiene measures

Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Personal protection

Eyes

Avoid contact with eyes. Safety glasses with side shields.

Skin and Body

Avoid contact with skin and clothing. Wear suitable protective clothing.

Respiratory

Use only with adequate ventilation. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable.

Hands

Wear suitable gloves.

Not available.



Consult local authorities for acceptable exposure limits.

9. Physical and chemical properties

Physical state

Liquid.

Odor

Hydrocarbon.

Color

Green.

Specific Gravity

1.04 to 1.06

Density

1050 kg/m³ (1.05 g/cm³) at 15°C

Solubility

Insoluble in water.

Viscosity

Kinematic: 100 to 120 mm²/s (100 to 120 cSt) at 40°C

10. Stability and reactivity

| | |
|---|--|
| Stability and Reactivity | The product is stable. |
| Conditions to avoid | None known. |
| Incompatibility with various substances | Reactive with oxidizing agents. |
| Hazardous Decomposition Products | These products are halogenated compounds, hydrogen chloride. |
| Hazardous polymerization | Will not occur. |

11. Toxicological information

Chronic toxicity

| | |
|----------------------|--|
| Carcinogenic effects | No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC). No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Act (OSHA). |
| Mutagenic effects | No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a mutagen. |
| Reproductive effects | No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a reproductive toxin. |
| Teratogenic effects | No component of this product at levels greater than 0.1% is classified by established regulatory criteria as teratogenic or embryotoxic. |

12. Ecological information


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|-------------|--|
| Ecotoxicity | No testing has been performed by the manufacturer. |
|-------------|--|

13. Disposal considerations



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|---|--|
| Waste information | Waste must be disposed of in accordance with federal, state and local environmental control regulations. |
| RCRA Waste Code(s) | USED OIL |
| Remarks | No additional remark. |
| Consult your local or regional authorities. | |

14. Transport information

International transport regulations

| Regulatory Information | UN number | Proper shipping name | Class | Packing group | Label | Additional information |
|------------------------|-----------|--|-------|---------------|---|--|
| DOT Classification | UN3082 | Environmentally hazardous substance, liquid, n.o.s. (Alkanes, (C10-13), chloro). Marine pollutant | 9 | III |  | Marine pollutant Marine pollutant (P) Special provisions Not regulated (if shipped by land in non bulk packaging) |
| | | | | | | |

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|----------------------------|----------------|---|----------------|----------------|---|---|
| TDG Classification | UN3082 | Environmentally hazardous substance, liquid, n.o.s.. Marine pollutant | 9 | III |  | Marine pollutant Marine pollutant (P) |
| IMDG Classification | UN3082 | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.. Marine pollutant | 9 | III |  | Marine pollutant Marine pollutant (P) |
| IATA Classification | Not regulated. | Not regulated. | Not regulated. | Not regulated. | ---- | Not regulated. |

15. Regulatory information

U.S. Federal regulations

US INVENTORY (TSCA): In compliance.

This product is not regulated under Section 302 of SARA and 40 CFR Part 355.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: MOLY-DEE TAPPING FLUID: Immediate (Acute) Health Hazard

SARA 313

| | Product name | CAS number | Concentration |
|--|---------------------------|-------------------|----------------------|
| Form R - Reporting requirements | Alkanes, (C10-13), chloro | 61788-76-9 | 35 |
| Supplier notification | Alkanes, (C10-13), chloro | 61788-76-9 | 35 |

CERCLA Sections 102a/103 Hazardous Substances (40 CFR Part 302.4):: This material is not regulated under CERCLA Sections 103 and 107.

State regulations

Massachusetts RTK:molybdenum sulfide; Refined paraffin wax
New Jersey:molybdenum sulfide
Pennsylvania RTK:Oils, Lard (generic environmental hazard); Refined paraffin wax (generic environmental hazard)

Inventories

AUSTRALIAN INVENTORY (AICS): Not listed.

CANADA INVENTORY (DSL): In compliance.

CHINA INVENTORY (IECS): Not listed.

EC INVENTORY (EINECS/ELINCS): In compliance.

JAPAN INVENTORY (ENCS): Not listed.

KOREA INVENTORY (ECL): In compliance.

PHILIPPINE INVENTORY (PICCS): Not listed.

16. Other information

Label Requirements

WARNING!

CAUSES EYE IRRITATION.
MAY CAUSE SKIN IRRITATION.
MAY CAUSE RESPIRATORY TRACT IRRITATION.

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HMIS® Rating :

Health 2
Flammability 1
Physical 0
Hazard
Personal B
protection

**National Fire
Protection
Association
(U.S.A.)**

**Other special
considerations**

PETROLEUM OIL: STEL = 10 mg/M3. Using terminology of the International Agency for Research on Cancer (IARC), the petroleum distillates listed in Section II are classified by the supplier as severely processed. Not all those listed in Section II may be present. The supplier has stated that these distillates do not require a carcinogen label as defined by OSHA 29 CFR 1910.1200. Chlorinated Paraffin The specific chlorinated paraffin included in this product has not been tested or proven to cause adverse health effects. Other chlorinated paraffins have been tested and show evidence of carcinogenicity in laboratory animals via ingestion. No component known to be present in this product at >0.1% is presently listed as a carcinogen by IARC, NTP or OSHA.

History

Date of issue 03/01/2005.
Date of previous issue No Previous Validation.
Prepared by Product Stewardship

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.

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