



# MOF TRU FORM SDS

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product Name on Label: MORFLO TRU FORM  
 Other Identification: NONE  
 Use of the substance/mixture: LUBRICANT  
 Company name : MOORE OIL COMPANY  
 4033 WEST CUSTER AVE  
 MILWAUKEE, WI 53209 (414) 462-3200  
 Emergency number: (800) 424-9300 - CHEMTREC

## SECTION 2: Hazards identification

Classification of the substance or mixture: Petroleum Hydrocarbon with Additives  
 Label elements:



Pictogram:  
 Signal Word: Warning  
 Prevention: Wash hands and forearms thoroughly after handling. Wear protective gloves/protective clothing/protective eye protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing fume/mist/vapors/spray. Use only outdoors in a well-ventilated area.  
 Response: If on Skin: Wash with plenty of soap and water. Take off contaminated clothing and wash it prior to reuse. If skin irritation occurs: Get medical advice/attention. If exposed or concerned: Get medical attention. If inhaled: Remove person to fresh air and keep in a position comfortable for breathing. Call poison center or doctor if you feel unwell.  
 Storage: Store locked up. Store in a well-ventilated place. Keep container tightly closed.  
 Disposal: Dispose of contents/container in accordance with local regional/national/international regulations.  
 Other hazards: Exposure Limit For Total Product - 5 mg/m<sup>3</sup> for oil mist in air. BASIS: OSHA REGULATIONS 29 CFR 1910.1000.  
 Unknown acute toxicity (GHS-US): N/A

## SECTION 3: Composition/information on ingredients

Mixture

NAME	PRODUCT IDENTIFIER	% BY WT
Mixture of severely hydrotreated and hydrocracked base oil	mixture	100

## SECTION 4: First aid measures

EYE CONTACT: If splashed into the eyes, flush with clear water for at least 15 minutes lifting upper and lower lids until any discomfort subsides. Remove contact lenses if applicable. If irritation develops, contact a physician.  
 SKIN CONTACT: In case of skin contact, remove any contaminated clothing and wash skin thoroughly with plenty of soap and flowing water for at least 15 minutes.  
 INHALATION: Vapor pressure is very low. Vapor inhalation under ambient conditions is normally not a problem. If overcome by vapor from hot product, immediately remove from exposure and call a



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physician. If breathing is irregular or has stopped, start resuscitation; administer oxygen, if available. If over exposed to oil mist, remove from further exposure until excessive oil mist condition subsides. INGESTION: If ingested, DO NOT INDUCE VOMITING. Call a physician immediately.

## SECTION 5: Fire-fighting measures

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD IDENTIFICATION SYSTEM

Health - 1          Flammability - 2          Reactivity - 0

HANDLING PRECAUTIONS: Use product with caution around heat, sparks, pilot lights, static electricity, and open flames.

FLAMMABLE OR EXPLOSIVE LIMITS (APPROX. PERCENT BY VOLUME IN AIR):

Estimated values:          Lower Flammable Limit (LEL) - 0.9%

Upper Flammable Limit (UEL) - 7.0%

EXTINGUISHING MEDIA AND FIRE FIGHTING PROCEDURES: Foam, water spray (fog), dry chemical, carbon dioxide and vaporizing liquid type extinguishing agents may all be suitable for extinguishing fires involving this type of product, depending on size or potential size of fire or circumstances related to the situation. Plan fire protection and response strategy through consultation with local fire protection authorities or appropriate specialists.

The following procedures for this type of product are based on the recommendations in the National Fire Protection Association's "Fire Protection Guide on Hazardous Materials", Eighth Edition (1984): Use water spray, dry chemical, foam or carbon dioxide. Use water to keep fire-exposed containers cool. If a leak or spill has not ignited, use water spray to disperse the vapors and to provide protection for persons attempting to stop a leak. Water spray may be used to flush spills away from exposures. Minimize breathing gases, vapor, fumes or decomposition products. Use supplied-air breathing equipment for enclosed or confined spaces or as otherwise needed.

DECOMPOSITION PRODUCTS UNDER FIRE CONDITIONS: Fume, smoke, carbon monoxide, aldehydes and other decomposition products, in the case of incomplete combustion.

EMPTY CONTAINERS WARNING: Empty containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS OR OTHER SOURCES OF IGNITION: THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to clean, since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with local, state and federal regulations.

## SECTION 6: Accidental release measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Recover free product. Add sand, earth or other suitable absorbent to spill area. Minimize skin contact. Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses, or extensive land areas.

Assure conformity with applicable local, state and federal regulations.

## SECTION 7: Handling and storage

Handle as a combustible liquid. Keep away from heat, sparks and open flame. Electrical equipment should be approved for classified area. Bond and ground containers during product transfer to reduce the possibility of static initiated fire/explosion.

Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil) is loaded into tanks previously



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containing low flash point products such as this product. See API Publication 2003 “Protection Against Ignition Arising Out of Static, Lightning and Stray Currents.”

Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Store in a well-ventilated area. This storage area should comply with NFPA 30 “Flammable and Combustible Liquid Code.” Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP)2013 “Cleaning mobile Tanks in Flammable and Combustible Liquid Service. And API RP 2015 “Cleaning Petroleum Storage Tanks.”  
Avoid contact with: Acids, halogens, strong oxidizing agents.

## SECTION 8: Exposure controls/personal protection

**VENTILATION:** Use local exhaust to capture vapor, mists or fumes. If necessary, provide ventilation sufficient to prevent exceeding recommended exposure limit or buildup of explosive concentrations of vapor in air. Use explosion-proof equipment. No smoking or open lights.

**RESPIRATORY PROTECTION:** Use supplied-air respiratory protection in confined or enclosed spaces if needed.

**EYE PROTECTION:** Use splash goggles or face shield when eye contact may occur.

**OTHER PROTECTIVE EQUIPMENT:** Use chemical-resistant apron or other impervious clothing, if needed, to avoid contaminating regular clothing which could result in prolonged or repeated skin contact.

**PERSONAL HYGIENE:** Minimize breathing vapor, mist or fumes. Avoid prolonged or repeated contact with skin. Remove contaminated clothing; launder or dry-clean before reuse. Remove contaminated shoes and thoroughly clean before reuse; discard if oil-soaked. Cleanse skin thoroughly after contact, before breaks and meals, and at end of work period. Product is readily removed from skin by waterless hand cleaners followed by washing thoroughly with soap and water.

## SECTION 9: Physical and chemical properties

The following data are approximate or typical values and should not be used for precise design purposes.

FLASH POINT (minimum)	275 deg. F ASTM D 92, Cleveland Open Cup
BOILING POINT	500 deg. F (IBP approx. by ASTM D 2887)
SPECIFIC GRAVITY	0.83 (15.6 C. / 15.6 C.)
VAPOR PRESSURE	< than 0.1 mmHg (mmHg @ 20 deg. C.)
VAPOR DENSITY	> than 5 (Air = 1)
PERCENT VOLATILE BY VOLUME	negligible (from open container 4 hrs. @ 38 deg. C.(100 deg. F.))
SOLUBILITY IN WATER	negligible (@ 1 ATM @ 25 deg. C. 77 deg. F.)
APPEARANCE	clear amber liquid
ODOR	mild petroleum odor

## SECTION 10: Stability and reactivity

This product is stable and will not react violently with water. Hazardous polymerization will not occur. Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite or calcium hypochlorite.



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## SECTION 11: Toxicological information

### Inhalation:

Toxicity:	No end point data
Conclusion:	Minimally Toxic: Based on assessment of components
Irritation:	No end point data
Conclusion:	Negligible hazard at ambient/normal handling temperature. Based on

assessment of the components

### Ingestion:

Toxicity (Rat):	LD50 > 5000 mg/kg
Conclusion:	Minimally Toxic – Based on test data for similar materials.

### Skin:

Toxicity (Rabbit)	LD50 > 5000 mg/kg
Conclusion:	Minimally Toxic – Based on test data for similar materials.
Irritation (Rabbit):	Data Available
Conclusion:	Negligible irritation to skin at ambient temperatures. Based on

assessment of the components.

### Eye:

Irritation (Rabbit):	Data Available
Conclusion:	May cause mild, short-lasting discomfort to eyes. Based on assessment

of the components.

### CHRONIC EFFECTS

Base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346. Modified Ames test, and/or other screening tests. Dermal and inhalation studies show minimal effects: lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation. Not sensitizing in test animals.

## SECTION 12: Ecological information

Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable with Federal/State/International regulations.

## SECTION 13: Disposal considerations

See section 7 on Handling and Storage for Disposal Considerations.

## SECTION 14: Transport information

DOT Status	Not a U. S. Department of Transportation regulated material.
Proper Shipping Name	Not a D. O. T. Hazardous Material
Hazard Class	Not Regulated
UN/NA ID	Not Regulated
Packing Group(s)	N/A
Reportable Quantity	N/A
Emergency Response Guide Number	N/A
Placards	N/A
HAZMAT STCC Number	N/A
MARPOL III Status	This product is NOT a Marine Pollutant



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## SECTION 15: Regulatory information

**TSCA** All of components of this product are listed on the Toxic Substance Control Act (TSCA) inventory.

**SARA 302/304** The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302,304,311 and 312). No chemical components present in this product exceed the de minimus reporting level established under this statute.

**SARA 311/312** The Superfund Amendments and Reauthorization Act of 1989 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by Hazard Category as defined in 40 CFR 370.2. This product would be classified under the following health categories: Delayed (Chronic) Health Hazard

**SARA 313** The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of an annual Toxic Chemicals Release Inventory report under 40 CFR 372. Chemical substances that must be accounted for under SARA Section 313 must also be identified in all product SDSs that are impacted by the regulation. No chemical components present in this product exceed the de minimus reporting level established under this statute.

**CERCLA** The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of Hazardous Substances equal to or greater than the Reportable Quantities (RQs) listed in 40 CFR 302.4. No chemical components present in this product are subject to the reporting requirements under this statute.

**California Prop 65** Per the California Safe Drinking Water and Toxics Enforcement Act of 1986, this product DOES NOT contain any of the ingredients for which the State of California has found to cause cancer, birth defects, or other reproductive harm, which requires a warning under the statute.

**Additional Regulatory Remarks** No additional comments.

## SECTION 16: Other information

The information in this Safety Sheet was obtained from sources which we believe are reliable. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT. This safety sheet was prepared and is to be used only for this product. If the product is used as a component in another product, this safety sheet information may not be applicable.