



# RADCOLUBE® 2110 (2110-T-H)

## Safety Data Sheet

**MIL-PRF-17672F ISO VISCOSITY GRADE 46, MILITARY SYMBOL 2110-T-H, GRADE CODE B Hydraulic Fluid, Petroleum, Inhibited**

Issue date: 8/25/2014

Revision date: 4/28/2025

Supersedes: 4/25/2025

Version: 13.0

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

### SECTION 1: Identification

#### 1.1. Identification

Trade name	RADCOLUBE® 2110 (2110-T-H)
Specification:	MIL-PRF-17672F ISO Viscosity Grade 46, Military Symbol 2110-T-H, Grade Code B Hydraulic Fluid, Petroleum, Inhibited
Qualification Number (Date):	NAVSEA Letter Ser 05S/2015-250 (22 July 2015) NAVSEA Letter Ser 05S/2021-289 (13 August 2021)
Military Symbol:	2110-T-H
NATO Code:	H-573
National Stock Number(s) (NSN):	9150-00-753-4799 Oblong Gallon 9150-00-985-7234 5 Gallon Pail 9150-00-582-5480 55 Gallon Drum

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture:	This specification covers petroleum base hydraulic fluids for use in hydraulic systems and in other applications where a high grade hydraulic fluid having anti-corrosion and anti-oxidation properties are required. This hydraulic fluid is not an extreme pressure (EP) or anti-wear (AW) fluid. This hydraulic fluid should not be used in systems where a fire-resistant fluid is required.
Use of the substance/mixture:	Hydraulic fluids and additives
Recommended use:	Hydraulic fluids

#### 1.3. Supplier

##### Manufacturer

Radco Industries Inc.  
CAGE Code 6ZS16  
700 Kingsland Drive  
Batavia, Illinois 60510  
United States  
T (630) 232-7966  
[www.radcoind.com](http://www.radcoind.com)

#### 1.4. Emergency telephone number

Emergency number:	For Chemical Emergency Call CHEMTREC 24hr/day 7days/week Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)
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## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

#### GHS US classification

Acute toxicity (inhalation:dust,mist), Category 4

H332

Harmful if inhaled.

Full text of H statements : see section 16

### 2.2. GHS Label elements, including precautionary statements

#### GHS US labeling

Hazard pictograms (GHS US):



Signal word (GHS US):

Warning

Hazard statements (GHS US):

H332 - Harmful if inhaled

Precautionary statements (GHS US):

P261 - Avoid breathing fume, mist, spray, vapors.

P271 - Use only outdoors or in a well-ventilated area.

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.

P312 - Call a doctor if you feel unwell.

### 2.3. Other hazards which do not result in classification

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
Distillates (petroleum), solvent-dewaxed heavy paraffinic	CAS-No.: 64742-65-0	40 – 75	Acute Tox. 4 (Inhalation:dust,mist), H332 Aquatic Chronic 4, H413
Distillates (petroleum), hydrotreated light paraffinic	CAS-No.: 64742-55-8	0 – 40	Acute Tox. 4 (Inhalation:dust,mist), H332 Aquatic Chronic 4, H413
Distillates (petroleum), hydrotreated heavy paraffinic	CAS-No.: 64742-54-7	0 – 40	Not classified

Full text of hazard classes and H-statements : see section 16

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

No additional information available

### 4.2. Most important symptoms and effects (acute and delayed)

No additional information available

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### **4.3. Immediate medical attention and special treatment, if necessary**

No additional information available

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## **SECTION 5: Fire-fighting measures**

### **5.1. Suitable (and unsuitable) extinguishing media**

No additional information available

### **5.2. Specific hazards arising from the chemical**

No additional information available

### **5.3. Special protective equipment and precautions for fire-fighters**

No additional information available

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## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

#### **6.1.1. For non-emergency personnel**

No additional information available

#### **6.1.2. For emergency responders**

No additional information available

### **6.2. Environmental precautions**

No additional information available

### **6.3. Methods and material for containment and cleaning up**

No additional information available

### **6.4. Reference to other sections**

No additional information available

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## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

No additional information available

### **7.2. Conditions for safe storage, including any incompatibilities**

No additional information available

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## **SECTION 8: Exposure controls/personal protection**

### **8.1. Control parameters**

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No additional information available

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<b>Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)</b>	
No additional information available	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH OEL TWA	5 mg/m <sup>3</sup> (8 Hours Inhalable fraction)
<b>USA - OSHA - Occupational Exposure Limits</b>	
OSHA PEL TWA	5 mg/m <sup>3</sup> 8 Hours
<b>USA - NIOSH - Occupational Exposure Limits</b>	
NIOSH REL TWA	5 mg/m <sup>3</sup> (10 Hours)
NIOSH REL STEL	10 mg/m <sup>3</sup> (15 minutes)

<b>Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)</b>	
No additional information available	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Mineral oil, excluding metal working fluids Pure, highly and severely refined
ACGIH OEL TWA	5 mg/m <sup>3</sup> (I - Inhalable particulate matter)
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2025

<b>Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)</b>	
No additional information available	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH OEL TWA	5 mg/m <sup>3</sup> 8 Hours. Form: inhalable
<b>USA - OSHA - Occupational Exposure Limits</b>	
OSHA PEL TWA	5 mg/m <sup>3</sup> 8 Hours
<b>USA - NIOSH - Occupational Exposure Limits</b>	
NIOSH REL TWA	5 mg/m <sup>3</sup> 15 Hours. Form: mist
NIOSH REL STEL	10 mg/m <sup>3</sup> 15 minutes. Form: mist

**8.2. Appropriate engineering controls**

No additional information available

**8.3. Individual protection measures/Personal protective equipment**

No additional information available

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**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state:	Liquid
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Appearance:	Liquid.
Color:	Yellow
Odor:	slight Petroleum-like odor
Odor threshold:	No data available
pH:	No data available
Melting point:	No data available
Freezing point:	≤ -23 °C (ASTM D97 Pour point)
Boiling point:	No data available
Flash point:	224 (> 163) °C (ASTM D92 Flash point)
Relative evaporation rate (butyl acetate=1):	No data available
Flammability:	No data available
Vapor pressure:	No data available
Relative vapor density at 20°C:	No data available
Relative density:	0.87 at 15.6°C (Water = 1)
Solubility:	Insoluble in water.
Partition coefficient n-octanol/water (Log Pow):	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity, kinematic:	41.4 – 50.6 mm <sup>2</sup> /s at 40°C (104°F)
Viscosity, dynamic:	No data available
Explosion limits:	No data available
Explosive properties:	Not classified as explosive according to EC criteria, but may present risks in the event of a fire.
Oxidizing properties:	No data available

**9.2. Other information**

No additional information available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No additional information available

**10.2. Chemical stability**

No additional information available

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**10.3. Possibility of hazardous reactions**

No additional information available

**10.4. Conditions to avoid**

No additional information available

**10.5. Incompatible materials**

No additional information available

**10.6. Hazardous decomposition products**

No additional information available

**SECTION 11: Toxicological information****11.1. Information on toxicological effects**

Acute toxicity (oral):	Not classified
Acute toxicity (dermal):	Not classified
Acute toxicity (inhalation):	Inhalation:dust,mist: Harmful if inhaled.
Skin corrosion/irritation:	Not classified
Carcinogenicity:	Not classified
Aspiration hazard:	Not classified
Viscosity, kinematic:	41.4 – 50.6 mm <sup>2</sup> /s at 40°C (104°F)
STOT-single exposure:	Not classified
STOT-repeated exposure:	Not classified
Reproductive toxicity:	Not classified

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ATE US (dust, mist):	2.199 mg/l/4h
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**Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)**

LD50 oral rat:	> 5000 mg/kg body weight (OECD 401 method)
LD50 dermal rabbit:	> 5000 mg/kg body weight (OECD 402 method)
LC50 Inhalation - Rat:	2.18 (1.8 – 2.55) mg/l/4h (OECD 403 method)
ATE US (vapors):	2.18 mg/l/4h
ATE US (dust, mist):	2.18 mg/l/4h

**Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)**

LD50 oral rat:	> 5000 mg/kg body weight (OECD 401 method)
LD50 dermal rabbit:	> 2000 mg/kg IUCLID reference substance
ATE US (dust, mist):	2.18 mg/l/4h

**Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)**

LD50 oral rat:	> 5000 mg/kg body weight (OECD 401 method) (OECD 420 method)
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<b>Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)</b>	
Serious eye damage/irritation:	Not classified
<b>Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)</b>	
Serious eye damage/irritation:	Not classified
<b>Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)</b>	
Serious eye damage/irritation:	Not classified
<b>Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)</b>	
Respiratory or skin sensitization:	Not classified
<b>Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)</b>	
Respiratory or skin sensitization:	Not classified
<b>Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)</b>	
Respiratory or skin sensitization:	Not classified
<b>Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)</b>	
Germ cell mutagenicity:	Not classified
<b>Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)</b>	
Germ cell mutagenicity:	Not classified
<b>Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)</b>	
Germ cell mutagenicity:	Not classified
<b>Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)</b>	
NOAEL (animal/male, F0/P):	≥ 1000 mg/kg body weight (OECD 421 method)
NOAEL (animal/female, F0/P):	≥ 1000 mg/kg body weight (OECD 421 method)
NOAEL (animal/male, F1):	≥ 1000 mg/kg body weight (OECD 421 method)
NOAEL (animal/female, F1):	≥ 1000 mg/kg body weight (OECD 421 method)
<b>Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)</b>	
LOAEL (oral, rat, 90 days):	125 mg/kg body weight (OECD 408 method)
NOAEL (dermal, rat/rabbit, 90 days):	1000 mg/kg body weight (OECD 410 method)
NOAEC (inhalation, rat, dust/mist/fume, 90 days):	> 0.98 mg/l Air (OECD 412 method)
<b>Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)</b>	
LOAEL (oral, rat, 90 days):	125 mg/kg body weight (OECD 408 method)

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**Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)**

NOAEC (inhalation, rat, dust/mist/fume, 90 days):	> 0.98 mg/l Air (OECD 412 method)
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**Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)**

LOAEL (oral, rat, 90 days):	125 mg/kg body weight (OECD 408 method)
NOAEC (inhalation, rat, dust/mist/fume, 90 days):	> 0.98 mg/l Air (OECD 412 method)

**SECTION 12: Ecological information****12.1. Toxicity****Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)**

LC50 - Fish [1]:	> 5000 mg/l IUCLID reference substance
EC50 - Crustacea [1]:	> 1000 mg/l (IUCLID reference substance)

**12.2. Persistence and degradability****Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)**

Persistence and degradability:	Biodegradability in water: no data available.
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**12.3. Bioaccumulative potential****Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)**

Partition coefficient n-octanol/water (Log Pow):	2 – 6
Bioaccumulative potential:	No bioaccumulation data available.

**Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)**

Partition coefficient n-octanol/water (Log Pow):	3.9 – 6 (IUCLID reference substance)
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**12.4. Mobility in soil**

No additional information available

**12.5. Other adverse effects**

No additional information available

**SECTION 13: Disposal considerations****13.1. Disposal methods**

No additional information available



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**SECTION 14: Transport information**

In accordance with DOT / TDG / IMDG / IATA / ICAO / ADN / RID / ADG

DOT	TDG	IMDG	IATA
<b>14.1. UN number</b>			
Not regulated for transport			
<b>14.2. Proper Shipping Name</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>Transport document description</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>			
Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available			

**14.6. Special precautions for user****DOT**

No data available

**TDG**

No data available

**IMDG**

No data available

**IATA**

No data available

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

**SECTION 15: Regulatory information****15.1. US Federal regulations**

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

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This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

### 15.2. International regulations

#### CANADA

##### Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)

Listed on the Canadian DSL (Domestic Substances List)

##### Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)

Listed on the Canadian DSL (Domestic Substances List)

##### Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations

No additional information available

#### National regulations

##### Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

##### Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

## SECTION 16: Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date: 04/28/2025

#### Full text of hazard classes and H-statements

H332	Harmful if inhaled
H413	May cause long lasting harmful effects to aquatic life

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This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any particular process or for any particular purpose. Such information stated is to the best of Radco's knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made to its accuracy, reliability, or completeness, purchasers, users and distributors are not relying on any promise, representation, or recommendation made by Radco, and Radco does not accept liability for any loss or damage that may occur from the use of this information. Final determination of suitability of any material is the sole responsibility of the user. All material should be used with caution to guard against unknown hazards. Although certain hazards are described herein, Radco does not guarantee that these are the only hazards that exist.