



SAFETY DATA SHEET

1. Identification

Product identifier	Food Grade Hydraulic Oil ISO 32
Other means of identification	
Product code	04221
Recommended use	Hydraulic oil
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Company name	CRC Industries, Inc.
Address	885 Louis Dr. Warminster, PA 18974 US
Telephone	
General Information	215-674-4300
Technical Assistance	800-521-3168
Customer Service	800-272-4620
24-Hour Emergency (CHEMTREC)	800-424-9300 (US) 703-527-3887 (International)
Website	www.crcindustries.com

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Sensitization, skin	Category 1
Environmental hazards	Hazardous to the aquatic environment, long-term hazard	Category 3
OSHA defined hazards	Not classified.	
Label elements		
Hazard symbol	None.	
Signal word	None.	
Hazard statement	The mixture does not meet the criteria for classification.	
Precautionary statement		
Prevention	Use with adequate ventilation. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. Observe good industrial hygiene practices.	
Response	Wash hands after handling.	
Storage	Store away from incompatible materials.	
Disposal	Dispose of contents/container in accordance with local/regional/national regulations.	
Hazard(s) not otherwise classified (HNOC)	None known.	

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
white mineral oil		8042-47-5	90 - 100
2,6-di-tert-butyl-p-cresol		128-37-0	< 1

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact	Wash off with soap and water. Get medical advice/attention if you feel unwell. Wash contaminated clothing before reuse.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.

5. Fire-fighting measures

Suitable extinguishing media	Water spray. Foam. Dry chemical powder. Dry chemicals. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire-fighting equipment/instructions	Cool containers exposed to heat with water spray and remove container, if no risk is involved.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Prevent entry into waterways, sewer, basements or confined areas.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. When using, do not eat, drink or smoke. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices. For product usage instructions, please see the product label.
Conditions for safe storage, including any incompatibilities	Keep away from heat and sources of ignition. Store in a cool, dry place out of direct sunlight. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

U.S. - OSHA Material

Material	Type	Value	Form
Food Grade Hydraulic Oil ISO 32	TWA	5 mg/m3	White mineral oil, mist

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Components

Components	Type	Value	Form
white mineral oil (CAS 8042-47-5)	PEL	5 mg/m3	Mist.

ACGIH Material

Material	Type	Value	Form
Food Grade Hydraulic Oil ISO 32	STEL	10 mg/m3	White mineral oil, mist
	TWA	5 mg/m3	White mineral oil, mist

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
2,6-di-tert-butyl-p-cresol (CAS 128-37-0)	TWA	2 mg/m3	Inhalable fraction and vapor.
white mineral oil (CAS 8042-47-5)	TWA	5 mg/m3	Inhalable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
2,6-di-tert-butyl-p-cresol (CAS 128-37-0)	TWA	10 mg/m3	
white mineral oil (CAS 8042-47-5)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. General ventilation normally adequate.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear protective gloves such as: Nitrile. Rubber.
Other	Wear suitable protective clothing.
Respiratory protection	If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties**Appearance**

Physical state	Liquid.
Form	Liquid.
Color	Clear.

Odor Mild.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range 450 °F (232.2 °C) estimated

Flash point 420 °F (215.6 °C) Cleveland Open Cup

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Vapor pressure 1.3 hPa estimated

Vapor density Not available.

Relative density 0.86

Solubility (water) Not available.

Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	500 °F (260 °C) estimated
Decomposition temperature	Not available.
Viscosity (kinematic)	34 cSt (104 °F (40 °C))
Percent volatile	98.5 % estimated
Other information	
Pour point	-41 °F (-40.6 °C)

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Prolonged skin contact may cause temporary irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
2,6-di-tert-butyl-p-cresol (CAS 128-37-0)		
Acute		
Oral		
LD50	Rat	890 mg/kg
white mineral oil (CAS 8042-47-5)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	> 5 mg/l, 4 hours
Oral		
LD50	Rat	> 5000 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

2,6-di-tert-butyl-p-cresol (CAS 128-37-0)	3 Not classifiable as to carcinogenicity to humans.
lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (CAS 72623-86-0)	3 Not classifiable as to carcinogenicity to humans.
white mineral oil (CAS 8042-47-5)	3 Not classifiable as to carcinogenicity to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not available.
Chronic effects	Prolonged inhalation may be harmful.
Further information	This product has no known adverse effect on human health.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
2,6-di-tert-butyl-p-cresol (CAS 128-37-0)		
Aquatic		
Crustacea	EC50 Water flea (<i>Daphnia pulex</i>)	1.44 mg/l, 48 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal of waste from residues / unused products	This product is not a RCRA hazardous waste (See 40 CFR Part 261.20 – 261.33). Empty containers may be recycled. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.
Hazardous waste code	Not regulated.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.

15. Regulatory information

US federal regulations	This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	Not regulated.

SARA 304 Emergency release notification

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

CERCLA Hazardous Substances: Reportable quantity

Not listed.

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 Immediate Hazard - No
Hazard categories Delayed Hazard - No
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

US state regulations**US. New Jersey Worker and Community Right-to-Know Act**

2,6-di-tert-butyl-p-cresol (CAS 128-37-0)

US. Massachusetts RTK - Substance List

white mineral oil (CAS 8042-47-5)

US. Pennsylvania Worker and Community Right-to-Know Law

2,6-di-tert-butyl-p-cresol (CAS 128-37-0)

white mineral oil (CAS 8042-47-5)

US. Rhode Island RTK

2,6-di-tert-butyl-p-cresol (CAS 128-37-0)

white mineral oil (CAS 8042-47-5)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

Volatile organic compounds (VOC) regulations**EPA**

VOC content (40 CFR 51.100(s)) 100 %

Consumer products (40 CFR 59, Subpt. C) Not regulated

State

Consumer products Not regulated

VOC content (CA) 0 %

VOC content (OTC) 0 %

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	03-09-2017
Revision date	03-09-2017
Prepared by	Allison Cho
Version #	02
Further information	Not available.
HMIS® ratings	Health: 1 Flammability: 1 Physical hazard: 0 Personal protection: B
NFPA ratings	Health: 1 Flammability: 1 Instability: 0

NFPA ratings



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Revision Information

Physical & Chemical Properties: Multiple Properties