

# MATERIAL SAFETY DATA SHEET

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** PENTOSIN FFL-4  
**PRODUCT NUMBER:**

**TRADE NAME:** PENTOSIN FFL-4 Double Clutch Transmission Oil.  
**GENERAL USE:** Transmission Oil  
**CHEMICAL FAMILY:** Blend of Oil Based Lubricants and Additives.  
**PRODUCT DESCRIPTION:**  
 Dark yellow liquid with a characteristic odor.



**MANUFACTURED FOR**  
**CRP Industries**

**EFFECTIVE DATE:** January 18, 2011  
**DATE OF EXPIRATION:** January 17, 2014  
**SUPERSEDES DATE:** New Issue

**TELEPHONE NUMBER (General Inquiries)**  
**609-578-4100**

**ADDRESS (NUMBER, STREET, P.O. BOX)**  
 35 Commerce Drive

CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBERS		
	<b>1-800-255-3924</b> North America (Toll Free)	<b>813-248-0585</b> International and Local Calls

**(CITY, STATE AND ZIP CODE)** **COUNTRY**  
 Cranbury NJ 08512 USA

## SECTION 2 - HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW**

**OSHA HAZARDS:** None. **WHMIS Hazard Classes:** None. MAY BE HARMFUL IF INHALED. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. Do not breathe vapor or mist. Do not get in eyes. Avoid contact with skin and clothing.

USA (DOT)	CANADA (WHMIS) SYMBOL(S)	GHS HAZARD SYMBOLS
None	None	None

**HMIS HAZARD RATINGS**

<b>0 = INSIGNIFICANT, 1 = SLIGHT, 2 = MODERATE</b> <b>3 = HIGH, 4 = EXTREME</b> * - CHRONIC HEALTH HAZARD	HEALTH:	1
	FLAMMABILITY:	0
	PHYSICAL HAZARD:	0

**REQUIRED PERSONAL PROTECTIVE EQUIPMENT:**

**HMIS PERSONAL PROTECTIVE EQUIPMENT LETTER:**  
 B



**Wear safety glasses and impervious gloves. See Section 8 for details on Personal Protective Equipment.**

**POTENTIAL HEALTH EFFECTS**

**ACUTE EXPOSURE EFFECTS**

**INHALATION:**

Irritation of the respiratory tract may occur from inhalation of product mists, especially with prolonged exposure. Synthetic lubricant oil content can produce chemical pneumonitis.

**SKIN:**

Irritation and itching may occur and prolonged contact may cause dermatitis. The problem may be exacerbated by liquid becoming trapped against the skin by contaminated clothing and shoes; skin absorption can occur in these cases.

**EYES:**

Tearing, redness and pain may occur; chemical conjunctivitis may result, especially in cases where the eyes are not promptly rinsed.

**INGESTION:**

Ingestion may result in gastrointestinal irritation, nausea, vomiting, aspiration, and chemical pneumonitis. Product is an aspiration hazard if swallowed due to its synthetic lubricants content.

**CHRONIC EXPOSURE EFFECTS**

Dermatitis may occur from chronic or prolonged skin exposure. Eye irritation may occur with chronic/prolonged eye exposure to product.

**CARCINOGENICITY:**

NTP? <b>NO</b>	IARC MONOGRAPHS? <b>NO</b>	OSHA REGULATED? <b>NO</b>
CALIFORNIA, Prop.65? <b>NO</b>		ESIS NOTATION? <b>NO</b>

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<b>PRODUCT NAME:</b> PENTOSIN FFL-4	
<b>PRODUCT NUMBER:</b>	
<b>SECTION 3 - HAZARDOUS INGREDIENTS</b>	
<b>Hazardous Components</b>	<b>% (by Weight)</b>
<b>CAS #</b>	
No hazardous components are listed for this product.	
<p><b>NOTES:</b> This Material Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS). Hazard symbols and risk phrases are based on maximum listed concentration of each hazardous ingredient. Unlisted ingredients are not "hazardous" per the OSHA Hazard Communication Standard (29 CFR 1910.1200) or the Canadian Workplace Hazardous Materials Information System (WHMIS) and are considered trade secrets under relevant US and Canadian Federal Laws.</p>	
<b>SECTION 4 - FIRST AID MEASURES</b>	
<p><b>INHALATION:</b> Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, use mouth-to-mouth resuscitation.</p>	
<p><b>EYES:</b> Rinse eyes with cool potable water for 5 minutes, then remove contact lenses if present. Wash for at least 10 more minutes with cool potable water lifting upper and lower lids occasionally. Seek medical attention if irritation persists.</p>	
<p><b>SKIN:</b> Wash contact areas with soap and water. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury. If heated product causes burns, seek medical assistance.</p>	
<p><b>INGESTION:</b> <b>Contact medical authorities immediately. Do not induce vomiting unless directed to do so by medical personnel.</b> If vomiting occurs naturally, have victim lean forward to avoid aspiration of regurgitant. Give 1-2 glasses of water to victim if victim is conscious and able to swallow and seek immediate medical assistance. Never give anything by mouth to an unconscious person.</p>	
<b>SECTION 5 - FIRE FIGHTING MEASURES</b>	
<b>DATA RELATED TO FIRE:</b>	
<b>FLASH POINT:</b> 428°F / 220°C	<b>AUTO-IGNITION TEMPERATURE:</b> >250°C, >482°F
<b>FLAMMABLE/EXPLOSIVE LIMITS:</b>	<b>LOWER: NE</b> <b>UPPER: NE</b>
<b>SENSITIVITY TO MECHANICAL IMPACT/ STATIC DISCHARGE:</b> None	
<b>GENERAL HAZARDS:</b> Product is minimally combustibile at elevated temperatures. Irritating and/or harmful vapors may be emitted under fire conditions.	
<b>SUITABLE EXTINGUISHING MEDIA:</b> CO2, Dry Chemical, or Alcohol-Resistant Foam.	
<b>UNSUITABLE EXTINGUISHING MEDIA:</b> Choose extinguishing media with respect to total fire hazard. Avoid water streams as this will spread fire.	
<b>FIRE FIGHTING PROCEDURES:</b> Prevent product runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use protective equipment and self-contained breathing apparatus (SCBA), and should fight fire based on total fire hazards. Use of water spray or fog to cool fire exposed surfaces and prevent the rupture of containers is acceptable if runoff control is implemented.	
<b>UNUSUAL FIRE AND EXPLOSION HAZARDS:</b> Product containers will rupture and leak from heat; released product will pose a slip and fall hazard to fire-fighting personnel. Use water spray or fog to cool fire-exposed containers where runoff control is implemented.	
<b>HAZARDOUS COMBUSTION PRODUCTS:</b> Carbon monoxide and dioxide, hydrocarbon compounds, smoke, soot, fumes, - fire conditions only.	


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<b>PRODUCT NAME:</b> PENTOSIN FFL-4			
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<b>SECTION 6 - ACCIDENTAL RELEASE MEASURES</b>			
<b>STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:</b>			
Stop leak if you can do it without risk. Small Spills: Absorb with earth, sand or other noncombustible material and transfer to containers for later disposal. Recover by pumping or with suitable absorbent. Large Spills: Prepare earthen or manufactured dikes ahead of spill; prevent discharge or entry into bodies of water, sewers, basements or confined areas. For large spills or spills on water, contact local authorities and the National Response Center toll-free at (800)424-8802. Avoid direct discharge to watercourses.			
<b>SECTION 7 - HANDLING AND STORAGE</b>			
<b>PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:</b>			
<b>Handling:</b> Prevent small spills and leakage to avoid slip hazard. Wear personal protective equipment. Keep containers tightly closed. Do not store with incompatible materials. <b>KEEP OUT OF THE REACH OF CHILDREN.</b>			
<b>Storage:</b> Do not store in open or unlabelled containers.			
<b>SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION</b>			
<b>Component</b>	<b>CAS #</b>	<b>ACGIH Exposure Limits (mg/m<sup>3</sup> unless otherwise noted)</b>	<b>OSHA Exposure Limits (mg/m<sup>3</sup> unless otherwise noted)</b>
No exposure regulated components are listed for this product.			
<b>PERSONAL PROTECTION</b>			
<b>RESPIRATORY PROTECTION:</b>			
Not required for normal work situations where adequate ventilation is provided. Use NIOSH European EN-149 approved self contained, positive pressure respirators or Self-Contained Breathing Apparatus (SCBA) for emergencies and in situations where air may be displaced by vapors. Follow OSHA Std. 29CFR 1910.134.			
<b>PROTECTIVE GLOVES:</b>			
Use impervious gloves if there is prolonged or repeated contact of liquid with skin. Solvex gloves recommended.			
<b>EYE PROTECTION:</b>			
Safety glasses with side shields required.			
<b>OTHER PROTECTIVE CLOTHING OR EQUIPMENT:</b>			
No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.			
<b>ENGINEERING CONTROLS:</b>			
Eyewash fountain or emergency eyewash bottle should be present in work area. Personal protective clothing and use of equipment must be in accordance with 29CFR 1910.132 and 29CFR 1910.133.			
<b>WORK / HYGIENIC PRACTICES:</b>			
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.			
<b>SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES</b>			
<b>APPEARANCE AND ODOR</b>		<b>VAPOR PRESSURE</b>	
Dark yellow liquid with a characteristic odor.		NE	
<b>ODOR THRESHOLD</b>		<b>SPECIFIC GRAVITY (WATER = 1)</b>	
NA		0.839 g/cm <sup>3</sup> at 20°C, 68°F (ISO 12185)	
<b>FREEZING / MELTING POINT</b>		<b>BOILING POINT</b>	
NE		>392°F, 200°C	
<b>SOLUBILITY IN WATER</b>		<b>COEFFICIENT OF WATER / OIL DISTRIBUTION</b>	
Insoluble		Not Determined but favors oil.	
<b>pH</b>		<b>SOLUBILITY IN ORGANIC SOLVENTS</b>	
NA		Variable, dependent upon solvent	
<b>FLASH POINT</b>		<b>VISCOSITY</b>	
428°F / 220°C		7 mm <sup>2</sup> /s (DIN 51 562 T1) - Kinematic at 100°C, 212°F. 7400 mPas (ASTM D2983) Dynamic -40°C, -40°F.	

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<b>PRODUCT NAME:</b> PENTOSIN FFL-4			
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<b>SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES (Continued)</b>			
FLAMMABLE LIMITS LEL: NE UEL: NE	VAPOR DENSITY (AIR = 1) NE		
AUTOIGNITION TEMPERATURE >250°C , 482°F	EVAPORATION RATE (Butyl Acetate = 1) Not Determined		
VOLATILE ORGANIC COMPOUND (VOC) INFORMATION None.			
<b>SECTION 10 - STABILITY AND REACTIVITY</b>			
STABILITY Stable under normal conditions.	CONDITIONS TO AVOID: Excessive heat. Oxidizers.		
INCOMPATIBILITY (MATERIALS TO AVOID): Incompatible with strong oxidizing agents.			
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Carbon monoxide and dioxide, hydrocarbon compounds, smoke, soot, fumes, - fire conditions only.			
HAZARDOUS POLYMERIZATION: Will not occur.	CONDITIONS TO AVOID: None related to hazardous polymerization.		
<b>SECTION 11 - TOXICOLOGICAL INFORMATION</b>			
<b>Complete Product</b>			
<b>Oral LD<sub>50</sub></b>	Not Known - ingested product is aspirant hazard if regurgitated.		
<b>Dermal LD<sub>50</sub></b>	Not Known but capable of producing mild irritation.		
<b>Inhalation LC<sub>50</sub></b>	Not Known - ingested product is aspirant hazard if regurgitated.		
<b>Irritation / Sensitization</b>	Mild irritant to eyes; possible mild irritant to skin.		
<b>Carcinogenicity</b>	No ingredients have been identified by IARC, NTP, OSHA, or ECHA to be carcinogens.		
<b>Mutagenicity</b>	Not Known		
<b>Reproductive Toxicity</b>	Not Known		
<b>Teratogenicity</b>	Not Known		
<b>Product Components</b>			
<b>Component</b>	<b>CAS #</b>	<b>LD50 of Ingredient (Oral, Rat - unless otherwise specified)</b>	<b>LC50 of Ingredient (Inhalation, Rat - unless otherwise specified)</b>
No acute toxicity information is available for the components of this product.			
<b>SECTION 12 - ECOLOGICAL INFORMATION</b>			
The product is biodegradable. Water hazard class 2 (Self-assessment); hazardous for aquatic organisms. Do not allow product to reach ground water, water bodies or sewage system.			
<b>SECTION 13 - DISPOSAL CONSIDERATIONS</b>			
WASTE DISPOSAL METHOD: Recycling of used/waste product is preferable to simple disposal. Product is suitable for supervised incineration at very high temperatures to prevent formation of undesirable combustion products. End user bears the responsibility to discard unused or waste product in accordance with local, state, and federal laws and regulations.			
<b>SECTION 14 - TRANSPORT INFORMATION</b>			
PROPER SHIPPING NAME: <b>Not regulated</b>			
DOT HAZARD CLASS / Pack Group: <b>Not regulated</b>		IATA HAZARD CLASS / Pack Group: <b>Not regulated</b>	
REFERENCE: <b>49 CFR, IATA, IMDG, RID/ADR 2009</b>		IMDG HAZARD CLASS: <b>Not regulated</b>	
UN / NA IDENTIFICATION NUMBER: <b>None</b>		RID/ADR Dangerous Goods Code: <b>Not regulated</b>	
LABEL: <b>Not regulated</b>		TDG Class / Pack Group: <b>Not regulated</b>	
HAZARD SYMBOLS: <b>None</b>		Hazard Identification Number (HIN): <b>Not regulated</b>	
Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.			

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<b>PRODUCT NAME:</b> PENTOSIN FFL-4	
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<b>SECTION 15 - REGULATORY INFORMATION</b>	
TSCA (USA - Toxic Substance Control Act): <b>Components listed under section 8(b).</b>	
SARA TITLE III (USA - Superfund Amendments and Reauthorization Act):	
Acute Health: <b>NO</b>	Chronic Health: <b>NO</b>
Fire: <b>NO</b>	Sudden Release of Pressure: <b>NO</b>
Reactive: <b>NO</b>	
<b>SARA 313 REPORTABLE INGREDIENTS: No ingredients are reportable.</b>	
EPCRA (Emergency Planning and Community Right-to-Know Act): <b>This material contains no extremely hazardous substances.</b>	
CERCLA (USA - Comprehensive Response Compensation and Liability Act): <b>None listed.</b>	
Clean Water Act (CWA): <b>No listings as Hazardous Substances, Priority Pollutants, or Toxic Pollutants under the CWA.</b>	
Clean Air Act (CAA): <b>No listings under the CAA.</b>	
California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: <b>No components listed.</b>	
State Right to Know Laws: <b>None of the components are listed.</b>	
CPR (Canadian Controlled Products Regulations): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.	
<b>WHMIS Class: Not a WHMIS controlled substance.</b>	
IDL (Canadian Ingredient Disclosure List): <b>None listed.</b>	
DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List): <b>Listed on DSL.</b>	
<b>SECTION 16 - OTHER INFORMATION</b>	
<b>Legend:</b>	
ACGIH American Congress of Government Industrial Hygienists	
CAS Chemical Abstracts Service	
EINECS European Inventory of Existing Commercial Chemical Substances	
HMIS Hazardous Materials Identification System	
IARC International Agency for Research on Cancer	
NA Not Available ND Not Determined	
NE Not Established NR Not Reported	
NIOSH National Institute for Occupational Safety and Health	
NTP National Toxicology Program	
OSHA Occupational Safety and Health Administration	
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The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.	