1 Identification

- Product identifier
  - Trade name: Pentosin FFL-3
- Recommended use and restriction on use
  - Recommended use: Lubricant
  - Restrictions on use: Contact manufacturer/supplier

Details of the supplier of the Safety Data Sheet

- Manufacturer/Supplier:
  CRP Industries
  35 Commerce Dr.
  Cranbury, NJ 08512
  (609) 578-4100
  info@crpindustries.com

- Emergency telephone number:
  ChemTel Inc.
  (800)255-3924, +1 (813)248-0585

2 Hazard(s) identification

- Classification of the substance or mixture
  The product is not classified as hazardous according to the Globally Harmonized System (GHS).

Label elements

- GHS label elements: Not regulated.
- Hazard pictograms: None.
- Signal word: None.
- Hazard statements: None.
- Precautionary statements: None.
- NFPA ratings (scale 0 - 4)
  - Health = 0
  - Fire = 1
  - Reactivity = 0

- HMIS-ratings (scale 0 - 4)
  - Health = 0
  - Fire = 1
  - Reactivity = 0

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Components: None in reportable quantities.
- Additional information: For the wording of the listed Hazard Statements refer to section 16.

(Cont'd. on page 2)
4 First-aid measures

- Description of first aid measures
  - General information: No special measures required.
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.
  - After eye contact: Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  - After swallowing: Rinse out mouth and then drink plenty of water. Do not induce vomiting; immediately call for medical help.

- Most important symptoms and effects, both acute and delayed: Gastric or intestinal disorders

- Danger: No relevant information available.

- Indication of any immediate medical attention and special treatment needed: No relevant information available.

5 Fire-fighting measures

- Extinguishing media
  - Suitable extinguishing agents:
    - Foam
    - Fire-extinguishing powder
    - Carbon dioxide
    - Gaseous extinguishing agents
  - For safety reasons unsuitable extinguishing agents: Water

- Special hazards arising from the substance or mixture: No relevant information available.

- Advice for firefighters
  - Protective equipment: Wear self-contained respiratory protective device. Wear fully protective suit.

- Additional information: No relevant information available.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  - Ensure adequate ventilation.
  - Wear protective equipment. Keep unprotected persons away.
  - Particular danger of slipping on leaked/spilled product.

- Environmental precautions: Do not allow to enter sewers/surface or ground water.

- Methods and material for containment and cleaning up
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Send for recovery or disposal in suitable receptacles.
7 Handling and storage

- **Handling**
  - **Precautions for safe handling:** Prevent formation of aerosols.
  - **Information about protection against explosions and fires:** No special measures required.

- **Conditions for safe storage, including any incompatibilities**
  - **Storage**
    - **Requirements to be met by storerooms and receptacles:** No special requirements.
    - **Information about storage in one common storage facility:** Store away from foodstuffs.
    - **Further information about storage conditions:** None.
    - **Specific end use(s)** No relevant information available.

8 Exposure controls/personal protection

- **Control parameters**
  - **Components with limit values that require monitoring at the workplace:**
    The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **Exposure controls**
  - **Personal protective equipment:**
    - **General protective and hygienic measures:** No relevant information available.
    - **Engineering controls:** Provide adequate ventilation.
  - **Breathing equipment:**
    - Not required under normal conditions of use.
    - Use suitable respiratory protective device when aerosol or mist is formed.
  - **Protection of hands:**
    - Gloves not required under normal conditions of use.
    - Wear protective gloves to handle contents of damaged or leaking units.
    - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
    - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
  - **Material of gloves**
    - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
  - **Penetration time of glove material**
    - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Cont'd. on page 4)
Eye protection:
Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

Body protection: Oil resistant protective clothing

Limitation and supervision of exposure into the environment: No special requirements.

Risk management measures: No special requirements.

### 9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Information on basic physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
</tr>
<tr>
<td>Form: Fluid</td>
</tr>
<tr>
<td>Color: According to product specification</td>
</tr>
<tr>
<td>Odor: Characteristic</td>
</tr>
<tr>
<td>Odor threshold: Not determined.</td>
</tr>
<tr>
<td>pH-value: Not determined.</td>
</tr>
<tr>
<td>Melting point/Melting range: Not determined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range: &gt;200 °C (&gt;392 °F)</td>
</tr>
<tr>
<td>Flash point: &gt;220 °C (&gt;428 °F)</td>
</tr>
<tr>
<td>Flammability (solid, gaseous): Not applicable.</td>
</tr>
<tr>
<td>Auto-ignition temperature: Not determined.</td>
</tr>
<tr>
<td>Decomposition temperature: Not determined.</td>
</tr>
<tr>
<td>Danger of explosion: Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>Explosion limits: Not determined.</td>
</tr>
<tr>
<td>Upper: Not determined.</td>
</tr>
<tr>
<td>Vapor pressure: Not determined.</td>
</tr>
<tr>
<td>Density at 20 °C (68 °F): 0.84 g/cm³ (7.01 lbs/gal)</td>
</tr>
<tr>
<td>Relative density: Not determined.</td>
</tr>
<tr>
<td>Vapor density: Not determined.</td>
</tr>
<tr>
<td>Evaporation rate: Not determined.</td>
</tr>
<tr>
<td>Solubility in / Miscibility with Water: Fully miscible.</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water): Not determined.</td>
</tr>
<tr>
<td>Viscosity</td>
</tr>
<tr>
<td>Dynamic: Not determined.</td>
</tr>
<tr>
<td>Kinematic at 40 °C (104 °F): 36 mm²/s</td>
</tr>
</tbody>
</table>
10 Stability and reactivity

- **Reactivity**: No relevant information available.
- **Chemical stability**:
  - **Thermal decomposition / conditions to be avoided**: No decomposition if used and stored according to specifications.
  - **Possibility of hazardous reactions** Reacts with strong oxidizing agents.
- **Conditions to avoid** No relevant information available.
- **Incompatible materials** No relevant information available.
- **Hazardous decomposition products** Possible in traces.
  - Carbon monoxide and carbon dioxide

11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity**: None.
  - **LD/LC50 values that are relevant for classification**: None.
  - **Primary irritant effect**:
    - **On the skin**: No irritant effect.
    - **On the eye**: Based on available data, the classification criteria are not met.
  - **Sensitization**: No sensitizing effects known.
- **IARC (International Agency for Research on Cancer)**: None of the ingredients are listed.
- **NTP (National Toxicology Program)**: None of the ingredients are listed.
- **OSHA-Ca (Occupational Safety & Health Administration)**: None of the ingredients are listed.
- **Probable route(s) of exposure**:
  - Ingestion.
  - Inhalation.
  - Eye contact.
  - Skin contact.
- **Acute effects (acute toxicity, irritation and corrosivity)**: From product as supplied: None.
- **Repeated dose toxicity**: No relevant information available.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
  - **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
  - **Carcinogenicity** Based on available data, the classification criteria are not met.
  - **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
### 12 Ecological information

- **Toxicity**
  - *Aquatic toxicity* No relevant information available.
  - *Persistence and degradability* The product is partially biodegradable. Significant residuals remain.
  - *Bioaccumulative potential:* No relevant information available.
  - *Mobility in soil:* No relevant information available.
- **Ecotoxicological effects:**
  - *Remark:* The product is oxygen-consuming. The declared action may be partly caused by lack of oxygen.
- **Additional ecological information**
  - *General notes:* Do not allow product to reach ground water, water course or sewage system, even in small quantities. Avoid transfer into the environment. Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.
- **Results of PBT and vPvB assessment**
  - *PBT:* Not applicable.
  - *vPvB:* Not applicable.
  - **Other adverse effects** No relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
  - **Recommendation:** Product is recyclable as a waste oil. Deliver unused and/or contaminated product to waste oil collectors. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.
- **Uncleaned packagings**
  - **Recommendation:** Disposal must be made according to official regulations.
  - **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

- **UN-Number**
  - DOT, ADR, IMDG, IATA Not regulated.
- **UN proper shipping name**
  - DOT, ADR, IMDG, IATA Not regulated.
Trade name: Pentosin FFL-3

- Transport hazard class(es)
  - DOT, ADR, IMDG, IATA
    - Class: Not regulated.

- Packing group
  - DOT, ADR, IMDG, IATA: Not regulated.

- Environmental hazards
  - Marine pollutant: No

- Special precautions for user: Not applicable.

- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - United States (USA)
    - SARA
      - Section 302 (extremely hazardous substances):
        None of the ingredients are listed.
      - Section 355 (extremely hazardous substances):
        None of the ingredients are listed.
      - Section 313 (Specific toxic chemical listings):
        None of the ingredients are listed.
    - TSCA (Toxic Substances Control Act)
      - All ingredients are listed.
  - Proposition 65 (California)
    - Chemicals known to cause cancer:
      None of the ingredients are listed.
    - Chemicals known to cause reproductive toxicity for females:
      None of the ingredients are listed.
    - Chemicals known to cause reproductive toxicity for males:
      None of the ingredients are listed.
    - Chemicals known to cause developmental toxicity:
      None of the ingredients are listed.
  - Carcinogenic categories
    - EPA (Environmental Protection Agency):
      None of the ingredients are listed.
Trade name: Pentosin FFL-3

- **IARC (International Agency for Research on Cancer):**
  None of the ingredients are listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health):**
  None of the ingredients are listed.

- **Canadian Domestic Substances List (DSL):**
  All ingredients are listed.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Date of preparation / last revision** 12/13/2016 / -

- **Abbreviations and acronyms:**
  ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road  
  IMDG: International Maritime Code for Dangerous Goods  
  DOT: US Department of Transportation  
  IATA: International Air Transport Association  
  CAS: Chemical Abstracts Service (division of the American Chemical Society)  
  NFPA: National Fire Protection Association (USA)  
  HMIS: Hazardous Materials Identification System (USA)  
  LC50: Lethal concentration, 50 percent  
  LD50: Lethal dose, 50 percent  
  PBT: Persistent, Bioaccumulative and Toxic  
  vPvB: very Persistent and very Bioaccumulative  
  NIOSH: National Institute for Occupational Safety  
  OSHA: Occupational Safety & Health  
  LDLo: Lowest Lethal Dose Observed

- **Sources**
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  Website: www.chemtelinc.com