SAFETY DATA SHEET

SECTION 1
PRODUCT NAME: IRON DEXTRAN 20% with Vitamin B₁₂
PRODUCT & COMPANY IDENTIFICATION
GENERIC DESCRIPTION: Iron Dextran 20% with Vitamin B₁₂
SUPPLIED BY: Dextran Products Limited.
FORMULA: N/A
RECOMMENDED USE: Raw Material for the preparation of a Veterinary Hematinic
USES ADVISED AGAINST: No Information available

Details of the supplier of the safety data sheet:
Company: Dextran Products
421 Comstock Rd
Scarborough, Ontario
M1L 2H5

Emergency Telephone Number:
416-755-2231

SECTION 2
POTENTIAL HEALTH EFFECTS:
HAZARDOUS IDENTIFICATION
Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

CLASSIFICATION:
Classification under 2012 OSHA Hazard Communication (29 CFR 1910.1200)

LABEL ELEMENTS:
Not required

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC): None identified

SECTION 3
COMPONENTS:
COMPOSITION
Iron Dextran 20%, Water, Phenol as a preservative, Vitamin B₁₂ as desired.

CAS-No: 9004-66-4

SECTION 4
INSTRUCTIONS
EYES:
Flush eyes with large amounts of water for at least 15 minutes. Hold the eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. Obtain immediate medical attention.

SKIN:
Wipe off and flush with water.

INHALATION:
Remove victim from further exposure and restore breathing, if required.

IRON DEXTRAN 20% WITH VITAMIN B12
INGESTION: Do not take internally. Rinse mouth with large amounts of water. Seek medical help.

MOST IMPORTANT SYMTOMS/EFFECTS: No information available.

NOTES TO PHYSICIAN: Treat symptomatically.

SECTION 5
FLAMMABILITY: Not available.
EXTINGUISHING MEDIA: Water spray, CO₂, Dry Chemical or Foam
SPECIAL PROCEDURES: Self contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals.
FLASH POINT: Not applicable.
AUTO IGNITION TEMPERATURE: Not available.
UNUSUAL FIRE AND EXPLOSION HAZARDS: None known.
HAZARDOUS COMBUSTION PRODUCTS: None known.
EXPLOSION DATA
MAX. PRES. OUTPUT: Not available.
MAX. PRES. RISE RATE: Not available.
DEFLAGRATION INDEX: Not available.
DISCHARGE
SENSITIVITY TO IMPACT: Not applicable.
RATE OF BURNING: Not available.

UNSUITABLE EXTINGUISHING MEDIA: No information available

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: Keep product and empty container away from heat and sources of ignition.

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide (CO) Carbon Dioxide (CO₂)

PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS:
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>N/A</td>
</tr>
</tbody>
</table>

SECTION 6
PERSONAL PRECAUTIONS

ENVIRONMENTAL PRECAUTIONS: Should not be released into the environment. See Section 12 for additional ecological information.

IRON DEXTRAN 20% WITH VITAMIN B12
LEAK/SPILL: Use absorbent material to collect and contain for salvage or disposal according to local laws.

SECTION 7  HANDLING AND STORAGE
HANDLING PROCEDURES AND EQUIPMENT: Maintain good personal hygiene, any gross amount of chemical should be removed from the skin as soon as possible, especially before eating or smoking. Wear personal protective equipment. Ensure ventilation. Avoid contact with skin, eye, and clothing.

STORAGE NEEDS: Store in a cool dry place away from heat and ignition sources.

SECTION 8  EXPOSURE CONTROLS/PERSONAL PROTECTION
GLOVES/TYE: Butyl rubber gloves.
RESPIRATOR/TYE: In the absence of proper environmental controls, an approved dust mask is recommended.
EYE/TYE: Chemical safety goggles.
FOOTWEAR/TYE: Safety boots.
CLOTHING/TYE: Normal protective overalls.
OTHER/TYE: Safety Showers and Eye Wash Stations.
ENGINEERING CONTROLS: Electrical and mechanical equipment should be explosion and dust proof. Exhaust equipment is recommended over the work area with make up air to balance air exhausted.

EYE/ PROTECTION: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection in 29 CFR 1910.133 or European standard EN166.

RESPIRATORY PROTECTION: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European standard EN 149. Use a NIOSH/MSHA or European standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

SECTION 9  PHYSICAL AND CHEMICAL PROPERTIES
PHYSICAL STATE: Dark Brown slightly viscous liquid
ODOR: Slight phenolic smell.
BOILING POINT: 100C
FREEZING POINT: 0C
pH: 4.5 – 7.0
SPECIFIC GRAVITY: 1.3 to 1.4.
SOLUBILITY IN WATER: Fully soluble.
MELTING POINT/RANGE: No data available.
FLASH POINT: No data available.
EVAPORATION RATE: Negligible.
FLAMMABILITY (solid, gas): No information available.
FLAMMABILITY or EXPLOSIVE LIMITS:
UPPER: No data available
LOWEST: No data available
VAPOR PRESSURE: Negligible
VAPOR DENSITY: No information available.
RELATIVE DENSITY: 1.3 to 1.4
SOLUBILITY: Soluble in water.
PARTITION COEFFICIENT; n-octanol/water: No data available.
AUTOIGNITION TEMPERATURE: No information available.
DECOMPOSITION TEMPERATURE: No information available.
VISCOSITY: No information available.

SECTION 10

STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.
COMPATIBILITY WITH OTHER SUBSTANCES:
Mixing with any other chemical should be avoided or discussed first with supplier.
REACTIVITY CONDITIONS:
Avoid excessive heat, open flames and all ignition sources.
HAZARDOUS POLYMERIZATION: Not available.
HAZARDOUS PRODUCTS OF DECOMPOSITION:
None known.
REACTIVE HAZARD:
None known.
INCOMPATIBLE MATERIALS:
Strong oxidizing agents.

SECTION 11

TOXICOLOGICAL INFORMATION

ROUTE OF ENTRY
SKIN CONTACT: Little known effect.
SKIN ABSORPTION: Little known effect.
EYE CONTACT: Can cause irritation.
INHALATION: Can cause irritation to lungs.
INGESTION: May cause irritation.

EFFECTS OF ACUTE EXPOSURE:
None known.

EFFECTS OF CHRONIC EXPOSURE:
None known.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:
Lung or breathing problems may be aggravated.

LD 50 OF MATERIAL:
>450mg/kg (f)c/kg (Mouse)
CARCINOGENICITY:
Not available.
REPRODUCTIVE EFFECTS:
Not available.
ENVIRONMENTAL TOXICITY:
Not available.
CARCINOGENICITY: The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>IARC</th>
<th>NTP</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron Dextran</td>
<td>9004-66-4</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Listed</td>
<td>TBD</td>
</tr>
</tbody>
</table>

SECTION 12

ECOLOGICAL INFORMATION

TOXICITY:
No data available

PERSISTENCE & DEGRADABILITY:
No data available

BIOACCUMULATIVE POTENTIAL:
No data available
MOBILITY IN SOIL: No data available

PBT and vPvB ASSESSMENT: No data available

OTHER ADVERSE EFFECTS: No data available

SECTION 13
WASTE DISPOSAL:

DISPOSAL CONSIDERATION
All local, provincial and federal regulations concerning health and pollution must be reviewed to determine the approved disposal procedures.

CONTAMINATED PACKAGING: Dispose of as unused product.

SECTION 14
BASIC SHIPPING INFO:

TRANSPORT INFORMATION
Not dangerous goods.

SECTION 15
WHIMIS CLASSIFICATION:

REGULATORY INFORMATION

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 regulation.

INTERNATIONAL INVENTORIES:

<table>
<thead>
<tr>
<th>Component: TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>NLP</th>
<th>PICCS</th>
<th>ENCS</th>
<th>AICS</th>
<th>IECSC</th>
<th>KECL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron Dextran</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>232-677-5</td>
<td>TBD</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Legend:
X-Listed
E- Indicates a substance that is the subject of a section 5(e) Consent order under TSCA.
F- Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
N- Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
P- Indicates a commenced PMN substance.
R- Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
S- Indicates a substance that is identified in a proposed or final Significant New Use Rule.
T- Indicates a substance that is the subject of a Section 4 test rule under TSCA.
XU- Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).
Y1- Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
Y2- Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concerns reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. FEDERAL REGULATIONS:

TSCA 12(b) Not applicable
SARA 313 Not applicable

SARA 311/312 Hazardous Categorization
**Acute Health Hazard:** No  
**Chronic Health Hazard:** No  
**Fire Hazard:** No  
**Sudden Release of Pressure Hazard:** No  
**Reactive Hazard:** No

**CLEAN WATER ACT:** No  
**CLEAN AIR ACT:** No

**OSHA: Occupational Safety and Health Administration:** Not Applicable

**CERCLA:** Not Applicable

**U.S. DEPARTMENT of TRANSPORTATION:**

- Reportable Quantity (RQ): N  
- DOT Marine Pollutant: N  
- DOT Severe Marine Pollutant: N

**WHMIS Hazard Class:** Non-controlled

<table>
<thead>
<tr>
<th>SECTION 16</th>
<th>OTHER INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMERGENCY TELEPHONE NUMBER:</td>
<td>416-755-2231</td>
</tr>
<tr>
<td>PREPARED BY:</td>
<td>Dextran Products</td>
</tr>
<tr>
<td>DATE:</td>
<td>June 7, 2019</td>
</tr>
</tbody>
</table>

These data are offered in good faith as typical values and not as a product specification. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user must review these recommendations in the specific context of the intended use and determine whether they are appropriate.