Material Safety Data Sheet

HEMOGLOBIN 500

Section 1 - Chemical Product and Company Identification

MSDS Name:

HEMOGLOBIN 500

Catalog Numbers:

R451402

Company Identification:

Remel Inc.
12076 Santa Fe Trail Drive
Lenexa, KS 66215

Company Phone Number:
913-888-0939

InfoTrac Emergency Number:
(800) 535-5053

InfoTrac Emergency Number, international:
1-352-323-3500

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name:</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available</td>
<td>HEMOglobin 500</td>
<td>100</td>
<td>Not available</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Caution! May cause eye, skin, and respiratory tract irritation. This is expected to be a low hazard for usual industrial handling. No target organ information has been found.

Potential Health Effects

Eye:
May cause eye irritation.

Skin:
May cause skin irritation.

Ingestion:
May cause irritation of the digestive tract.
Inhalation:
   May cause respiratory tract irritation.

Chronic:
   No information found

Section 4 - First Aid Measures

Eyes:
   In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

Skin:
   In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.

Ingestion:
   If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:
   If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:
   Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:
   As in any fire, wear a self-contained breathing apparatus in pressure-demand, NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:
   Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Autoignition Temperature:
   Not available

Explosion Limits:
   Lower: Not available   Upper: Not available

Flash Point:
   Not available

NFPA Rating:
   (estimated) Health: 1; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

General Information:
   Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks:
Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Provide ventilation.

Section 7 - Handling and Storage

Handling:
Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage:
Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name:</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
<th>OSHA Vacated PELs</th>
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<tbody>
<tr>
<td>HEMOGLOBIN 500</td>
<td>None listed</td>
<td>None listed</td>
<td>None listed</td>
<td>None listed</td>
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</tbody>
</table>

Personal Protective Equipment

Eyes:
Wear chemical splash goggles.

Skin:
Wear appropriate protective gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

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<thead>
<tr>
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<tbody>
<tr>
<td>Color:</td>
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<tr>
<td>Odor:</td>
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<tr>
<td>pH:</td>
<td>No information found</td>
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<tr>
<td>Vapor Pressure:</td>
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</tr>
<tr>
<td>Vapor Density:</td>
<td>No information found</td>
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<tr>
<td>Evaporation Rate:</td>
<td>No information found</td>
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</table>
Viscosity: No information found
Boiling Point: No information found
Freezing/Melting Point: No information found
Decomposition Temperature: No information found
Solubility in water: No information found
Specific Gravity/Density: No information found
Molecular Formula: Mixture
Molecular Weight: No information found

Section 10 - Stability and Reactivity

Chemical Stability:
Stable under normal temperatures and pressures.

Conditions to Avoid:
Excess heat

Incompatibilities with Other Materials
Strong oxidizing agents

Hazardous Decomposition Products
None

Hazardous Polymerization
Will not occur

Section 11 - Toxicological Information

RTECS:
No information found

LD50/LC50:
No information found

Carcinogenicity:
No information found

Epidemiology:
No information found

Teratogenicity:
No information found

Reproductive:
No information found

Mutagenicity:
No information found

Neurotoxicity:
No information found

Other:
No information found
Section 12 - Ecological Information
No information found

Section 13 - Disposal Considerations
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Part 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P Series Wastes
None of the components are on this list.

RCRA U Series Wastes
None of the components are on this list.

Section 14 - Transport Information

US DOT
Proper Shipping Name: Not Regulated
Hazard Class:
UN Number:
Packing Group:

Canadian TDG
Not Regulated

Section 15 - Regulatory Information

US Federal

TSCA
This product is not listed on the TSCA Inventory. Individual components, however, may appear on the inventory. The use of this product is restricted to research and development or FDA regulated activities.

Health and Safety Reporting List
None of the components are on this list.

Chemical Test Rules
None of the components are on this list.

TSCA Section 12b
None of the components are on this list.

TSCA Significant New Use Rule (SNUR)
None of the components are on this list.

CERCLA Hazardous Substances and corresponding RQs
None of the components are on this list.
SARA Section 302 Extremely Hazardous Substances
None of the components are on this list.

SARA Hazard Categories
Not available

SARA Section 313
None of the components are on this list.

Clean Air Act - Hazardous Air Pollutants (HAPs)
None of the components are on this list.

Clean Air Act - Class 1 Ozone Depleters
None of the components are on this list.

Clean Air Act - Class 2 Ozone Depleters
None of the components are on this list.

Clean Water Act - Hazardous Substances
None of the components are on this list.

Clean Water Act - Priority Pollutants
None of the components are on this list.

Clean Water Act - Toxic Pollutants
None of the components are on this list.

OSHA - Highly Hazardous
None of the components are on this list.

OSHA - Specifically Regulated Chemicals
None of the components are on this list.

US State

State Right to Know
No information found

California Prop 65
None of the components are on this list.

California No Significant Risk Level
None of the components are on this list.

European/International Regulations

European Labelling in Accordance with EC Directives:
Hazard Symbols: None listed
Risk Phrases: None listed
Safety Phrases: S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)
No information found

United Kingdom Occupational Exposure Limits
No information found

United Kingdom Maximum Exposure Limits
No information found

Canadian DSL/NDSL
None of the chemicals in this product are listed on the DSL/NDSL list.
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Canadian WHMIS Classifications
No information found
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.

Canadian Ingredient Disclosure List
No information found

Section 16 - Other Information

This MSDS is intended for review and guidance in the receipt, storage, handling, use and disposal of product purchased from us, and for no other purpose. Use this product only as directed and in accordance with applicable instructions and warnings provided with the product. Please consult your institution’s policies regarding use of this product. If you have obtained this MSDS other than in connection with the supply of this product from us, this MSDS should be consulted for general information only, and should not be relied upon for any purpose. As with the use of all hazardous materials, you should in all instances follow the guidance of the MSDS provided or available with the specific product purchased.