C5148 -03
Effective: 03/09/92

Congo Red

J.T. BAKER INC., 222 Red School Lane, Phillipsburg, NJ 08865

SECTION I - PRODUCT IDENTIFICATION

Product Name: Congo Red
Common Synonyms: Sodium Diphenyl-bis-alpha-naphthylamine Sulfonate; Direct Red 28
Chemical Family: Dyes, Stains, and Indicators
Formula: C_{32}H_{22}O_6N_6S_2Na_2
Formula Wt.: 696.68
CAS No.: 573-58-0
NIOSH/RTECS No.: QK1400000
Product Use: Laboratory Reagent
Product Codes: F787,F788

PRECAUTIONARY LABELING

BAKER SAF-T-DATA* System

HEALTH
CANCER SEVERE

FLAMMABILITY
SLIGHT

REACTIVITY
SLIGHT

CONTACT
MODERATE

LABORATORY PROTECTIVE EQUIPMENT

U.S. Precautionary Labeling

WARNING!
OVEREXPOSURE MAY CAUSE CANCER RISK. MAY CAUSE ALLERGIC REACTION.
Avoid contact with eyes, skin, clothing. Keep in tightly closed container.
Wash thoroughly after handling.

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PRECAUTIONARY LABELING (CONTINUED)

International Labeling

Do not breathe dust. Avoid contact with skin and eyes.

SAF-T-DATA* Storage Color Code: Blue (health)

SECTION II - COMPONENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Weight %</th>
<th>OSHA/PEL</th>
<th>ACGIH/TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congo Red</td>
<td>573-58-0</td>
<td>90-100</td>
<td>N/E</td>
<td>N/E</td>
</tr>
</tbody>
</table>

SECTION III - PHYSICAL DATA

Boiling Point: N/A

Melting Point: N/A

Specific Gravity: N/A  
(H₂O=1)

Solubility (H₂O): Appreciable (>10%)  
(21°C)

% Volatiles by Volume: 0

pH: N/A

Odor Threshold (ppm): N/A

Physical State: Solid

Coefficient Water/Oil Distribution: N/A

Appearance & Odor: Red to brown powder. Odorless.

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SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Closed Cup): N/A
Autoignition Temperature: N/A
Flammable Limits: Upper - N/A  Lower - N/A

Fire Extinguishing Media
Use extinguishing media appropriate for surrounding fire.

Special Fire-Fighting Procedures
Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode.

Unusual Fire & Explosion Hazards
Dust may form explosive mixture with air. Contact with strong oxidizers may cause fire or explosion.

Toxic Gases Produced
ammonia, sulfur dioxide, oxides of nitrogen, carbon monoxide, carbon dioxide

Explosion Data-Sensitivity to Mechanical Impact
None identified.

Explosion Data-Sensitivity to Static Discharge
None identified.

SECTION V - HEALTH HAZARD DATA

Threshold Limit Value (TLV/TWA): Not Established
Short-Term Exposure Limit (STEL): Not Established
Permissible Exposure Limit (PEL): Not Established

Toxicity of components
Intravenous Rat LD₅₀ for Congo Red 190 mg/kg
Carcinogenicity: NTP: No  IARC: No  Z List: No  OSHA Reg: No
SECTION V - HEALTH HAZARD DATA (CONTINUED)

Carcinogenicity
Congo Red is anticipated to be a carcinogen since Congo Red is a Benzidine-based dye and Benzidine is a known carcinogen.

Reproductive Effects
None identified.

Effects of Overexposure

INHALATION: none identified

SKIN CONTACT: allergic reaction may develop

EYE CONTACT: none identified

SKIN ABSORPTION: none identified

INGESTION: none identified

CHRONIC EFFECTS: none identified

Target Organs
none identified

Medical Conditions Generally Aggravated by Exposure
none identified

Primary Routes of Entry
skin contact

Emergency and First Aid Procedures

INGESTION: CALL A PHYSICIAN. If swallowed, if conscious, immediately induce vomiting.

INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

SKIN CONTACT: In case of contact, flush skin with water.

EYE CONTACT: In case of eye contact, immediately flush with plenty of water for at least 15 minutes.
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SECTION V - HEALTH HAZARD DATA (CONTINUED)

SARA/TITLE III HAZARD CATEGORIES and LISTS

Acute: Yes  Chronic: Yes  Flammability: No  Pressure: No  Reactivity: No

Extremely Hazardous Substance: No  CERCLA Hazardous Substance: No  SARA 313 Toxic Chemicals: Yes  TSCA Inventory: Yes

SECTION VI - REACTIVITY DATA

Stability: Stable  Hazardous Polymerization: Will not occur

Conditions to Avoid: dusting

Incompatibles: strong acids, strong oxidizing agents, strong reducing agents

Decomposition Products: oxides of sulfur, ammonia, oxides of nitrogen, carbon monoxide, carbon dioxide

SECTION VII - SPILL & DISPOSAL PROCEDURES

Steps to be Taken in the Event of a Spill or Discharge

Wear self-contained breathing apparatus and full protective clothing. With clean shovel, carefully place material into clean, dry container and cover; remove from area. Flush spill area with water.

Disposal Procedure

Dispose in accordance with all applicable federal, state, and local environmental regulations.

SECTION VIII - INDUSTRIAL PROTECTIVE EQUIPMENT

Ventilation:

Use adequate general or local exhaust ventilation to keep fume or dust levels as low as possible.

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SECTION VIII - INDUSTRIAL PROTECTIVE EQUIPMENT (CONTINUED)

Respiratory Protection: None required where adequate ventilation conditions exist. If airborne concentration is high, a dust/mist respirator is recommended. If concentration exceeds capacity of respirator, a self-contained breathing apparatus is advised.

Eye/Skin Protection: Safety goggles, uniform, apron, rubber gloves are recommended.

SECTION IX - STORAGE AND HANDLING PRECAUTIONS

SAF-T-DATA+ Storage Color Code: Blue (health)

Storage Requirements
Keep container tightly closed. Store in secure poison area.

SECTION X - TRANSPORTATION DATA AND ADDITIONAL INFORMATION

Domestic (D.O.T.)
Proper Shipping Name: Chemicals, n.o.s. (Non-regulated)

International (I.M.O.)
Proper Shipping Name: Chemicals, n.o.s. (Non-regulated)
Marine Pollutants: No

AIR (I.C.A.O.)
Proper Shipping Name: Chemicals, n.o.s. (Non-regulated)

U.S. Customs Harmonization Number: 320412000004

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N/A = Not Applicable or Not Available
N/E = Not Established

The information in this Material Safety Data Sheet meets the requirements of the United States OCCUPATIONAL SAFETY AND HEALTH ACT and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and the Canadian WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM. This document is intended only as a guide to the appropriate precautionary handling of the material by a person trained in, or supervised by a person trained in, chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, Baker cannot warn of all of the potential dangers of use or interaction with other chemicals or materials. Baker warrants that the chemical meets the specifications set forth on the label. BAKER DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR PURPOSE.

The user should recognize that this product can cause severe injury and even death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Baker will periodically revise this Material Safety Data Sheet.

Note: CHEMREC, CANUTEC, and NATIONAL RESPONSE CENTER emergency telephone numbers are to be used ONLY in the event of CHEMICAL EMERGENCIES involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to Customer Service (1-800-JTBAKER) for assistance.

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Approved by Quality Assurance Department.