Section 1 - Product and Company Information

Product Name: Dipyrindamide, minimum 98% TLC
Product Number: CS766
Brand: Sigma Chemical
Company: Sigma-Aldrich
Street Address: 3050 Spruce Street
City, State, Zip, Country: SAINT LOUIS, MO 63103 US
Technical Phone: 800-225-5552
Fax: 800-226-5552
Emergency Phone: 314-776-6555

Section 2 - Composition/Information on Ingredient

**Substance Name:** DIPYRIDAMOLE
**CAS #:** 58-32-2
**SARA 313:** No
**EC no:** 200-374-7

**Formula:** C2H4(N8C4)
**Synonyms:** Anginat, 2,6-Bis(diphenylamino)-4,8-dipiperidino-pyrimidin-(5,4-d)pypyridine, Cardonil, Cledrion 150, Coronate, Curlytal, 2,2,2',2',6,6,6,6-Dipiperidino-pyrimidin-(5,4-d)pypyridine, Dipyrindamide, Dipyrindamol, Dipyridamide, Dipyridamol, Dipyramine, Gullimot, Notil, Panamol, Persantin, Piroxan, Persantin, Piran, Piradon, RA-8, Pyrimido(5,4-d)pypyrodine, 2,6-Di(iso-propyl)-2-ethoxyethylamino)-4,8-dipiperidino, USAF GE-12

Section 3 - Hazards Identification

**Emergency Overview:** Instantly irritating to eyes, respiratory system and skin. Target organs: Heart; Blood.

**HIDIS Rating:** Flammability: 0 Reactivity: 1
**NFPA Rating:** Flammability: 0 Reactivity: 1

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

**Eye Exposure:** In case of contact, immediately flush with copious amounts of water for at least 15 minutes.

**Section 5 - Fire Fighting Measures**

**Autoignition Temp:** N/A

**Extinguishing Media:** Suitable
Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

**Firefighting:**

**Protective Equipment:** Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Specific Hazard(s):** Emit toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

**Procedure(s) of Personal Precaution:**
Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

**Methods for Cleaning Up:** Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

**Handling:**
Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

**Storage:**
Suitable
Keep tightly closed. Store in a cool dry place. Store in the dark. Store at 20°C

Section 8 - Exposure Controls / PPE

**Engineering Controls:** Safety shower and eye bath. Mechanical exhaust required.

**Personal Protective Equipment:**

**Respiratory:** Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator.

**Hand:**
Compatible chemical-resistant gloves.

**Eye:**
Chemical safety goggles.
General Hygiene Measures
Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Solid</td>
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<tr>
<td>Physical State</td>
<td>Color</td>
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<tr>
<td>Molecular Weight</td>
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<tr>
<td>pH</td>
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<td>BP/MP Range</td>
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<tr>
<td>MP/MP Range</td>
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<td>Freezing Point</td>
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<td>Saturated Vapor Conc.</td>
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<td>SG/Density</td>
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<td>Volatile%</td>
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<tr>
<td>Water Content</td>
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<tr>
<td>Evaporation Rate</td>
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<td>Partition Coefficient</td>
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<td>Flash Point °F</td>
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<tr>
<td>Flash Point °C</td>
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<td>Safety Data</td>
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</tr>
<tr>
<td>RTECS Number</td>
<td>N/A</td>
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</tbody>
</table>

Section 10 - Stability and Reactivity

Stability: Stable

Conditions to Avoid: Light, Strong oxidizing agents

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides

Section 11 - Toxicological Information

Hazardous Polymerization
Will not occur.

Route of Exposure
Skin Contact
Causes skin irritation.

Skin Absorption
May be harmful if absorbed through the skin.

Eye Contact
Causes eye irritation.

Inhalation
Material is irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

Ingestion
May be harmful if swallowed.

Target Organ(s) or System(s)
Heart, Blood.

Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS Number: KK7450000

Toxicity Data

Oral: Rat & Mouse 1400 mg/kg (LD50)
Remarks: Cardiac, Cardiomyopathy including infarction.

Oral: Rat & Mouse 240 mg/kg (LD50)
Remarks: Cardiac, Cardiomyopathy including infarction.

Oral: Rat: 8400 mg/kg (LD50)
Remarks: Behavioral, Altered sleep time (including change in righting reflex), Behavioral Somnolence (general depressed activity), Behavioral Inability.

Oral: Rat: 8400 mg/kg (LD50)
Remarks: Behavioral, Altered sleep time (including change in righting reflex), Behavioral Somnolence (general depressed activity), Behavioral Inability.

Subcutaneous: Rat: 1650 mg/kg (LD50)
Remarks: Behavioral Somnolence (general depressed activity), Lungs, Thorax, Respiration: Respiratory depression, Behavioral Ataxia.

Intraperitoneal: Rat: 1260 mg/kg (LD50)
Remarks: Lungs, Thorax, Gastrintestinal, Hypermotility, diarrhea.

Subcutaneous: Rat: 1650 mg/kg (LD50)
Remarks: Behavioral, Somnolence (general depressed activity), Lungs, Thorax, Respiration: Respiratory depression, Behavioral Ataxia.

Oral: Mouse: 2150 mg/kg (LD50)
Remarks: Lungs, Thorax, Respiration: Respiratory depression, Gastrintestinal, Hypermotility, diarrhea.

Intraperitoneal: Mouse: 1500 mg/kg (LD50)
Remarks: Lungs, Thorax, Respiration: Respiratory depression, Gastrintestinal, Hypermotility, diarrhea.

Oral: Mouse: 2150 mg/kg (LD50)
Intraperitoneal - Mouse: 150 mg/kg (LD50)
Subcutaneous - Mouse: 2700 mg/kg (LD50)
Intravenous - Mouse: 85 mg/kg (LD50)
Subcutaneous - Mouse: 2700 mg/kg (LD50)
Intravenous - Mouse: 85 mg/kg (LD50)
Oral - Rabbit: 4250 mg/kg (LD50)

Chronic Exposure - Mutagen

<table>
<thead>
<tr>
<th>Species</th>
<th>Dose</th>
<th>Route</th>
<th>Mutation test</th>
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<tbody>
<tr>
<td>Rat</td>
<td>40 MG/KG</td>
<td>Intravenous</td>
<td>DNA inhibition</td>
</tr>
<tr>
<td>Rat</td>
<td>40 MG/KG</td>
<td>Intravenous</td>
<td>DNA inhibition</td>
</tr>
<tr>
<td>Rat</td>
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<td>Liver</td>
<td>DNA inhibition</td>
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<tr>
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<td>200 NMOL/L</td>
<td>Liver</td>
<td>DNA inhibition</td>
</tr>
<tr>
<td>Rat</td>
<td>300 NMOL/L</td>
<td>Liver</td>
<td>DNA inhibition</td>
</tr>
<tr>
<td>Rat</td>
<td>300 NMOL/L</td>
<td>Liver</td>
<td>DNA inhibition</td>
</tr>
<tr>
<td>Mouse</td>
<td>60 UMOL/L</td>
<td>Ascoric tumor</td>
<td>DNA inhibition</td>
</tr>
<tr>
<td>Mouse</td>
<td>60 UMOL/L</td>
<td>Ascoric tumor</td>
<td>DNA inhibition</td>
</tr>
</tbody>
</table>

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation
Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT
Proper Shipping Name: None
Non-Hazardous for Transport
This substance is considered to be nonhazardous for transport.

IATA
Non-Hazardous for Air Transport
Non-hazardous for air transport.

Section 15 - Regulatory Information

EU Additional Classification
Symbol of Danger: Xi
Indication of Danger: Instant.
Risk Statements: R: 36/37/38
Inhalation to eyes, respiratory system and skin.
Safety Statements: S: 26, 38
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice;
Wear suitable protective clothing.

US Classification and Label Text
Indication of Danger: Instant.
Risk Statements: Inhaling to eyes, respiratory system and skin.
Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice;
Wear suitable protective clothing.

Sigma Chemical - D0766
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