

MATERIAL SAFETY DATA SHEET: DARATHENE PLUS AEROSOL

Section I - General Information

(000000-000000- - 5625)

Date of Issue:

10/1/2007 12:00:00 AM

Supersedes:

9/14/2004 12:00:00 AM

Chemical Name & Synonyms:

N/A

Trade Name & Synonyms:

DARATHENE PLUS AEROSOL

Chemical Family:

Solvent mixture

Formula is a mixture: [√]

Manufacturer Name:

CERTIFIED LABS, DIV. OF NCH CORP.

Manufacturer Address:

BOX 152170
IRVING, TEXAS 75015

Prepared By:

M MCDOWELL/CHEMIST

Product Code Number:

5625

Emergency Phone Number:

800-424-9300

Section II - Hazardous Ingredients

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS

<u>Chemical Name (Ingredients)</u>	<u>Hazard</u>	<u>TLV</u>	<u>PEL</u>	<u>STEL</u>	<u>CAS #</u>
ALIPHATIC PETROLEUM DISTILLATES	IRR/COMB	100 ppm \$1	500 ppm \$2	N/E	#
BARIUM SULFONATE	IRRITANT	0.5mg/m3*1	0.5mg/m3*2	N/E	61790-48-5
PROPANE	FLAM/ASPHY	1000ppm**1	1000 ppm 1	N/E	74-98-6
N-BUTANE	FLAM/ASPHY	1000ppm**1	N/E 2	N/E	106-97-8

\$ Stoddard solvent values

* Barium soluble compounds

** Aliphatic hydrocarbon gases

64742-47-8, 64742-88-7, 8052-41-3

Section III - Physical Data

Boiling Point (°F): 300	Specific Gravity (H₂O=1): 0.74
Vapor Pressure (mm Hg): 1273	Color: Amber
Vapor Density (Air=1): 1.9	Odor: Solvent
pH @ 100% : N/A	Clarity: Transparent
% Volatile by Volume: 92	Evaporation Rate (BuAc=1): 21.9
H₂O Solubility: Negligible	Viscosity: NON-VISCOUS

Section IV - Fire and Explosion Hazard

Flash Point: 106°F	Method Used: Setaflash
Flammable Limits: Product mixture	UEL: 9.5
LEL: 0.8	Aerosol Level (NFPA 30B): 3

Extinguishing Media:

<input checked="" type="checkbox"/> Foam	<input type="checkbox"/> Alcohol Foam	<input checked="" type="checkbox"/> CO ₂
<input checked="" type="checkbox"/> Dry Chemical	<input checked="" type="checkbox"/> Water Spray	<input type="checkbox"/> Other

NFPA 704 Hazard Rating:

4-Extreme	Health: 1
3-High	Flammability: 4
2-Moderate	Instability: 0
1-Slight	Special:
0-Insignificant	

Special Fire Fighting Procedures:

Firefighters should wear a self-contained breathing apparatus and full protective gear. Cool fire-exposed containers with water spray to prevent

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bursting.

Unusual Fire and Explosion Hazards:

Vapors are heavier than air and may travel to distant and/or low-lying sources of ignition and flashback. Product may produce a floating fire hazard as liquid floats on water. The use of water spray (fog), while effective, may cause frothing and foaming. Never use a water jet as this will just spread the fire. Use care as spills may be slippery. Flame extension is 24 inches, burnback is 4 inches.

Section V - Health and Hazard Data

Threshold Limit Value:

Not Established for Mixture. See Section II.

Effects of Overexposure:

Acute: (Short Term Exposure)

EYE CONTACT: Causes irritation seen as stinging, tearing, redness, blurred vision, and a burning sensation.

SKIN CONTACT: Causes irritation seen as itching, redness, and a burning sensation. Injection under the skin, in muscle, or into the blood stream can cause irritation, inflammation, swelling, fever, and systemic effects, and mild central nervous system depression. Injection of pressurized Hydrocarbons can cause severe, permanent tissue damage. Initial symptoms may be minor. Prolonged or repeated contact, as from clothing wet with material, may cause drying, defatting, and cracking of the skin.

INHALATION: May cause respiratory irritation seen as coughing and sneezing. At low vapor concentrations, no harmful effects are expected. At high vapor concentrations, inhalation may cause central nervous system effects such as headache, dizziness, drowsiness, weakness, unconsciousness, possible anesthetic effects from central nervous system depression, and may be fatal.

INGESTION: May cause irritation with possible nausea, vomiting, and diarrhea. Ingestion and subsequent vomiting of this product can lead to aspiration of the product into the lungs which can cause damage and may be fatal. This product contains Barium compounds, which upon ingestion may be metabolized by the body to form Barium Chloride, a toxic material. Symptoms include acute gastroenteritis, loss of deep reflexes, prostration, muscle tremors, muscular paralysis related to severe hypokalemia, respiratory failure, and cardiac arrest.

Chronic: (Long Term Exposure)

On rare occasions, prolonged and repeated exposure to Hydrocarbon Mist poses a risk of chronic lung inflammation. This condition is usually asymptomatic as a result of repeated small aspirations. Shortness of breath and coughing are the most common symptoms. Aspiration may lead to pulmonary edema and hemorrhage and may be fatal. Signs of lung involvement include increased respiration and heart rates as well as a bluish discoloration of the skin. Chronic skin contact may promote dermatitis and oil acne. In rarer cases, an increased sensitivity to sunlight (photosensitivity) may occur. Chronic abuse of similar materials has been associated with irregular heart rhythms and cardiac arrest.

Medical conditions aggravated by exposure are pre-existing respiratory and skin conditions such as asthma, emphysema, and dermatitis; pre-existing heart rhythm conditions.

TARGET ORGANS: Central Nervous System, cardiovascular system, heart, and liver. The primary routes of exposure are skin and eye contact.

Primary Routes of Entry

Inhalation Ingestion Absorption

Emergency First Aid Procedures:

Inhalation:

Remove from the area to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

Eye Contact:

Rinse the eyes with water. Remove any contact lenses and continue flushing with plenty of water for several minutes. Seek medical attention if irritation develops.

Skin Contact:

Wash affected areas with large amounts of soap and water for 15 minutes. Remove contaminated clothing and shoes. Seek medical attention if irritation persists. Wash clothing and clean shoes before re-use.

Ingestion:

Give 3 to 4 glasses of water, but DO NOT induce vomiting. If vomiting occurs, give fluids again. Get immediate medical attention. Do not give anything by mouth to an unconscious or convulsing person.

Notes to Physician:

Ingestion and subsequent vomiting of this product can lead to aspiration of the product into the lungs which can cause damage and may be fatal. Depending on the amount ingested and retained as well as the toxicity of the product, gastric lavage should be considered. Keep patient's head below hips to prevent pulmonary aspiration. If comatose, a cuffed endotracheal tube will prevent aspiration. In the event of injection in underlying tissue, immediate treatment should include extensive incision, debridement and saline irrigation. Inadequate treatment can result in ischemia and gangrene. Early symptoms may be minimal.

Section VI - Toxicity Information

Product Contains Chemicals Listed as Carcinogen or Potential Carcinogen By:

IARC NTP OSHA ACGIH Other

VOC Content: 90% by weight; 92% by volume, 663 g/L

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ALIPHATIC PETROLEUM DISTILLATES

ORL-RAT LD₅₀: >5,000 mg/kg 3.

SKN-RBT LD₅₀: >3,160 mg/kg 3.

IHL-RAT LC₅₀: >5.2 mg/L/4 hr 5.

SKN-RBT: Moderate irritation 3.

EYE-RBT: Mild irritation 3.

Similar materials were administered orally 5 days/week to male and female rats at 100, 500 or 1000 mg/kg for 13 weeks. An additional group was dosed with 100 mg/kg for 13 weeks followed by a 4-week recovery period. No mortalities or clinical effects were observed. Liver and kidney weights for the 500 and 1000 mg/kg exposure groups were significantly increased. After the 4-week recovery period, there were no differences in organ weights. 3.

Animal data suggest that slight anemia, adaptive liver changes, and kidney toxicity may be caused by repeated overexposure to some similar solvents. The significance of this to humans is unknown. 3.

Hydrocarbon mists derived from highly refined petroleum distillates are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation, and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations at or near current work place exposure levels produced no significant toxicological effects. In long term studies (up to two years) no carcinogenic effects have been reported in any animal species tested. These petroleum distillates are severely hydrotreated, severely solvent extracted, and/or processed by mild hydrotreatment and extraction. For this reason, they are not classified as cancer hazards. 3.

BARIUM SULFONATE

No toxicity data available

PROPANE

IHL-LC₅₀ >40% by volume 4.

N-BUTANE

IHL-RAT LC₅₀: 658 g/m³/4h 3.

Human volunteers exposed repeatedly to gases of similar hydrocarbon mixtures ranging from 250 to 1000 ppm exhibited no cardiac or pulmonary function abnormalities. 3.

Section VII - Reactivity Data

Stability

Stable Unstable

Conditions to Avoid:

Avoid heat, hot surfaces, sparks, and open flames.

Hazardous Polymerization

Will not occur May occur

Conditions to Avoid:

N/A

Incompatibility (Materials to Avoid):

Strong oxidizing agents such as Chlorine bleach and concentrated Hydrogen Peroxide.

Hazardous Decomposition Products:

Oxides of Carbon and Barium; Aldehydes and other products of incomplete combustion.

Section VIII - Spill Or Leak Procedures

Steps to be Taken if Material is Released or Spilled:

Due to the nature of the aerosol packaging, a large spill is unlikely. For a small spill, wear appropriate protective clothing, ventilate the area, absorb with an inert material and transfer all material into a properly labeled container for disposal. Use care as spills may be slippery.

Waste Disposal Method(s):

Dispose of in accordance with all Federal, state, and local regulations. Typical disposal is to wrap the empty aerosol container in several layers of newspaper and dispose of in the trash. Aerosol recycling programs are available in many areas. Do not puncture or incinerate this container.

Neutralizing Agent:

N/A

Section IX - Special Protection Information

Required Ventilation:

Local ventilation is recommended to control exposure from operations that can generate excessive levels of mists or vapors. Local ventilation is preferred, because it prevents dispersion into work areas by controlling it at its source.

Respiratory Protection:

Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in

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OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2-1992). For concentrations above the TLV and/or PEL but less than 10 times these limits, a NIOSH approved half-facepiece respirator equipped with appropriate chemical cartridges may be used. For concentrations greater than 10 times the TLV and/or PEL, consult the NIOSH respirator decision logic found in publication No. 87-116 or ANSI Z88.2-1992.

Glove Protection:

Neoprene or nitrile rubber gloves if repeated or prolonged skin contact is likely. Ensure compliance with OSHA's Personal Protective Equipment (PPE) standard for hand protection, 29 CFR 1910.138.

Eye Protection:

Safety glasses with side shields if the method of application presents the likelihood of eye contact. Ensure compliance with OSHA's Personal Protective Equipment (PPE) standard for eye and face protection, 29 CFR 1910.133.

Other Protection:

Wear general-duty work clothes and shoes. A safety shower and an eyewash station should be available. Remove soaked clothing and shoes. Wash clothing and clean shoes before re-use.

Section X - Storage and Handling Information

Storage Temperature Max: 120°F Min: 30°F	Storage Conditions <input checked="" type="checkbox"/> Indoors <input type="checkbox"/> Outdoors <input type="checkbox"/> Heated <input type="checkbox"/> Refrigerated
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Precautions to be Taken in Handling and Storing:

Use with caution around heat, sparks, pilot lights, static electricity, and open flame.

Other Precautions:

Keep out of reach of children. Read the entire label before using the product. Follow the label directions.

Section XI - Regulatory Information

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Upper % Limit</u>
BARIUM COMPOUNDS	N/A	5

Those Ingredients listed above are subject to the reporting requirements of 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

Please call 1-800-527-9919 for additional information if you are a California customer. This MSDS is not intended for users in the state of California.

Section XII - References

1. Threshold Limit Values for chemical substances and physical agents and biological exposure indices, ACGIH, 2007.
2. OSHA PEL.
3. Vendor's MSDS.
4. Registry of toxic effects of chemical substances, CCINFOWeb, 2007.
5. European Chemical Substances Information System (ESIS), International Uniform Chemical Information Database (IUCLID) Chemical Data Sheets.

All the components of this product are in compliance with the Toxic Substances Control Act (TSCA) and are either listed on the TSCA inventory or otherwise exempted from listing.

IRR: Irritant, OSHA: Occupational Safety & Health Administration, IARC: International Agency for the Research on Cancer, TOX: Toxic, NFPA: National Fire Protection Association, ppm: Parts Per Million, UEL: Upper Explosion Limit, STEL: Short-term Exposure Limit, SKN: Skin, IHL: Inhalation, COMB: Combustible, CORR: Corrosive, MUT: Mutagenic, CARC: Carcinogenic, N/A: Not Applicable, TLV: Threshold Limit Value, N/E: Not Established, ORL: Oral, FLAM: Flammable, ASPHYX: Asphyxiant, C.O.C.: Cleveland Open Cup, PNOR: Particles Not Otherwise Regulated, LEL: Lower Explosion Limit, mg/L: Milligrams per Liter, PNOS: Particles Not Otherwise Specified, g/L: Grams per Liter, PMCC: Pensky-Martin Closed Cup, NTP: National Toxicology Program, µg/L: Micrograms per Liter, TCC: Tagliabue Closed Cup, SEV: Severe, RBT: Rabbit, INV: Intravenous, ACGIH: American Conference of Governmental Industrial Hygienists, PEL: Permissible Exposure Limit, MOD: Moderate, IPT: Intraperitoneal, gm/kg: Grams per Kilogram, C.C.C.: Cleveland Closed Cup, HMN: Human, mg/m3: Milligrams per Cubic Meter, mg/kg: Milligrams per Kilogram, VOC: Volatile Organic Compound, SDT: Standard Draize Test, MSE: Mouse, GPG: Guinea Pig.

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