Material Safety Data Sheet

Original Date: 11/04/1992
Revision Date: 01/07/1998

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3000 CONTINENTAL DRIVE NORTH

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BOTH NUMBERS ARE AVAILABLE DAYS, NIGHTS, WEEKENDS, & HOLIDAYS.

SECTION 1 - PRODUCT INFORMATION

PALATINOL(R) 711P
Product ID: NCO 526255
Common Chemical Name:
See SECTION II- INGREDIENTS
Synonyms:
None
Molecular Formula:
C26 H42 O4
Chemical Family: Phthalate Esters
Molecular Wt.: 418.0

SECTION 2 - INGREDIENTS

Chemical Name:		CAS	Amount
PALATINOL 711P CONTAINS:		N/A	100.0 %
PEL/TLV NOT ESTABLISHED 1,2-BENZENEDICARBOXYLIC ACID, DI(C11) ESTER. BR. & LINEAR	()	85507-79-5	PROPRIETARY
PEL/TLV NOT ESTABLISHED 1,2-BENZENEDICARBOXYLIC ACID, DI(C7) ESTER, BR. & LINEAR	()	68515-44-6	PROPRIETARY
PEL/TLV NOT ESTABLISHED 1,2-BENZENEDICARBOXYLIC ACID, DI(C9) ESTER. BR. & LINEAR	()	68515-45-7	PROPRIETARY
PEL/TLV NOT ESTABLISHED 1,2-BENZENEDICARBOXYLIC ACID, (C7, C9) ESTER, BR. & LINEAR	()	111381-89-6	PROPRIETARY
PEL/TLV NOT ESTABLISHED 1,2-BENZENEDICARBOXYLIC ACID, (C7,C11) ESTER, BR. & LINEAR	()	111381-90-9	PROPRIETARY
PEL/TLV NOT ESTABLISHED 1,2-BENZENEDICARBOXYLIC ACID, (C9,C11) ESTER, BR. & LINEAR	()	111381-91-0	PROPRIETARY

SECTION 2 - INGREDIENTS (cont)

Chemical Name:	CAS	Amount
PEL/TLV NOT ESTABLISHED		
MIXTURE OF PHTHALATES	*NC799.5025	0.0< 0.1 %
PEL/TLV NOT ESTABLISHED		

SECTION 3 - PHYSICAL PROPERTIES

Color:	Colorless				
Form/Appearance:	Oily Liquid				
Odor:	Characteristic				
Odor Intensity:	Slight				
	Typical	Low/High	U.O.M.		
Specific Gravity:	0.97				
Viscosity:	41		CENTIPOISE @	25	DEG.
pH:	NOT AVAILABLE				
	Typical	Low/High	Deg. @	Pressure	
Boiling Pt:	252		C 10	MM HG	
Freezing Pt:	NOT AVAILABLE				
Decomp. Tmp:	NOT AVAILABLE				
Solubility in Water Description:	Slightly Soluble				
	Typical	Low/High	U.O.M. @	Temperature	
Solubility:	0.6		MG/L	20 C	
Vapor Pressure:		0.3	MM HG X	180	DEG. C XX

Other Physical Properties:

POUR POINT: -50 C

SECTION 4 - FIRE AND EXPLOSION DATA

	Typical	Low/High	Deg.	Method
Flash Point:	227		C	CLEVELAND OPEN CUP
Autoignition:	249		C	NONE SPECIFIED

Extinguishing Media:

Use water fog, foam or dry chemical extinguishing media.

Fire Fighting Procedures:

Good firefighting practice dictates the use of self-contained breathing apparatus and turnout gear. Water fog should be used to keep fire exposed containers cool.

Unusual Hazards:

There are no known unusual fire or explosion hazards.

SECTION 5 - HEALTH EFFECTS

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

SECTION 5 - HEALTH EFFECTS (cont)

Toxicology Test Data:
Rat, 28-Day Feeding Study - DOSES TO 2 G/KG/DAY
Liver discoloration, males, >/ 750 mg/kg
Rat, 30 month chronic study (dietary) - 0.03 - 0.3 PERCENT IN DIET
No Compound Related Oncogenic Effects
Rat, Oral LD50 - > 15.8 G/KG
Practically Nontoxic
Rabbit, Dermal LD50 - > 7.9 G/KG
Practically Nontoxic
Rabbit, Primary Skin Irritation - MAX AVG 1.8 DRAIZE: MAX=8
Mildly Irritating
Rabbit, Eye Irritation - MAX AVG 9.3 DRAIZE: MAX=110
Minimally Irritating
Rat, Inhalation Safety Screen, 6 hr -
No Compound Related Adverse Effects
Rat, 3 month oral toxicity, dietary - NOEL: 3000 PPM
Liver effects at high dose(s)
Rat, 6 month aerosol inhalation study - 5 AND 25 MG/CU. M
No Compound Related Adverse Effects
Guinea pig, 6 month aerosol inhalation - 5 AND 25 MG/CU. M
No Compound Related Adverse Effects
Cynomolgus monkey, 6 month aerosol study - 5 AND 25 MG/CU. M
No Compound Related Adverse Effects
Ames Salmonella Assay (Direct Plate) - NEGATIVE
No increased mutation; 4 strains tested
Ames Salmonella Assay (Plate with S-9) - NEGATIVE
No increased mutation; 4 strains tested
Mouse Lymphoma Forward Mutation Assay - POSITIVE
Positive response, without activation
Mouse Lymphoma Assay (with S-9) - NEGATIVE
No increase in mutation frequency
Rat, oral teratology range finding test - NOEL: 2500 MG/KG/DAY
Increased embryonal or fetal losses
Rat, Oral Developmental Toxicity Study - @ 5000 MG/KG/DAY
Reduced fetal weights, not teratogenic
Rat 21 day oral study of liver & lipids - NOEL: 0.3 PERCENT IN DIET
Moderate peroxisome proliferation, males
USP VI, Systemic Toxicity, mice - FILM 27581
No significant difference from control
USP VI, Systemic Toxicity, mice - FILM 17581
No significant difference from control
USP VI, Intracutaneous Toxicity, rabbits - FILM 17581
No significant difference from control
USP VI, Intracutaneous Toxicity, rabbits - FILM 27581
No significant difference from control
USP VI, Implantation Test, rabbits - FILM 27581
No significant difference from control
USP VI, Implantation Test, rabbits - FILM 17581
No significant difference from control
USP VI, Intracutaneous Toxicity, rabbits - FILM 1-574-A
No significant difference from control

SECTION 5 - HEALTH EFFECTS (cont)

USP VI, Intracutaneous Toxicity, rabbits - FILM 1-574-E
No significant difference from control
USP VI, Intracutaneous Toxicity, rabbits - FILM 1-574-C
No significant difference from control
In vitro Hemolysis Cytotoxicity Assay - FILM 1-574-C
No hemolysis noted
In vitro Hemolysis Cytotoxicity Assay - FILM 1-574-A
No hemolysis noted
In vitro Hemolysis Cytotoxicity Assay - FILM 1-574-E
No hemolysis noted
MEM Elution Assay for Cytotoxicity - FILM 1-574-E
Not Toxic
MEM Elution Assay for Cytotoxicity - FILM 1-574-C
Not Toxic
MEM Elution Assay for Cytotoxicity - FILM 1-574-A
Not Toxic
MEM Elution Assay for Cytotoxicity - FILM 2-574-B
Not Toxic
MEM Elution Assay for Cytotoxicity - FILM 2-574-F
Not Toxic
MEM Elution Assay for Cytotoxicity - FILM 2-574-F
Not Toxic
In vitro Hemolysis Cytotoxicity Assay - FILM 2-574-F
Not Toxic
In vitro Hemolysis Cytotoxicity Assay - FILM 2-574-D
Not Toxic
In vitro Hemolysis Cytotoxicity Assay - FILM 2-574-B
Not Toxic
In vitro Hemolysis Cytotoxicity Assay - FILM 2-574-B
No significant difference from control
USP VI, Intracutaneous Toxicity, rabbits - FILM 2-574-B
No significant difference from control
USP VI, Intracutaneous Toxicity, rabbits - FILM 2-574-D
No significant difference from control
USP VI, Intracutaneous Toxicity, rabbits - FILM 2-574-D
No significant difference from control
USP VI, Intracutaneous Toxicity, rabbits - FILM 2-574-F
No significant difference from control
Mouse Lymphoma Forward Mutation Assay - NEGATIVE
No increase in mutation frequency
Mouse Lymphoma Assay (with S-9) - NEGATIVE
No increase in mutation frequency
BALB/c 3T3 Cell Transformation - INACTIVE
No increase in transformed foci
Rat, Oral Developmental Toxicity Study - NOEL: 200 MG/KG
Malformations at maternally toxic doses

Acute Overexposure Effects:

Prolonged or excessive contact with the liquid may cause skin or eye irritation.
The low vapor pressure of 711-P and 11PE essentially eliminates an inhalation hazard unless the material is heated or misted. Ingestion could cause abdominal cramps, nausea and diarrhea. In a 2 year

SECTION 5 - HEALTH EFFECTS (cont)

feeding study, a non-dose related increased incidence of leukemia was reported. Occupational exposure to this material has not been reported to cause any significant adverse human health effects. On the basis of the available information, 711-P is not expected to produce adverse human health effects if recommended safety precautions are followed.

Chronic Overexposure Effects:
711P lowered fetal body weight when given orally to rats at 5 g/kg on day 6-19 of pregnancy. In a more recent screening study, the obvious signs of developmental toxicity noted at 1000 mg/kg body weight appeared only when maternal toxicity was evident.

First Aid Procedures - Skin:
Wash affected areas with soap and water. Remove and launder contaminated clothing before reuse. If irritation develops, get medical attention.

First Aid Procedures - Eyes:
Immediately rinse eyes with running water for 15 minutes. If irritation develops, get medical attention.

First Aid Procedures - Ingestion:
If swallowed, dilute with water and immediately induce vomiting. Never give fluids or induce vomiting if the victim is unconscious or having convulsions. Get immediate medical attention.

First Aid Procedures - Inhalation:
Move to fresh air. Aid in breathing, if necessary, and get immediate medical attention.

First Aid Procedures - Notes to Physicians:
None known.

First Aid Procedures - Aggravated Medical Conditions:
No data is available which addresses medical conditions that are generally recognized as being aggravated by exposure to this product. Please refer to the Toxicological Information section for effects observed in animals.

First Aid Procedures - Special Precautions:
None

SECTION 6 - REACTIVITY DATA

Stability Data:
Stable; Excessive heat and ignition sources.

Incompatability:
Strong oxidizing agents.

Conditions/Hazards to Avoid:
No data available.

Hazardous Decomposition/Polymerization:
Hazardous decomposition products: CO and CO2.

Corrosive Properties:
Not corrosive to metal.

Oxidizer Properties:
Not an oxidizer

SECTION 7 - PERSONAL PROTECTION

Clothing:
Gloves, coveralls, apron, boots as necessary to minimize contact.
Eyes:
Chemical goggles; also wear a face shield if splashing hazard exists.
Respiration:
If vapors or mists are generated, wear a NIOSH/MSHA approved organic vapor/mist respirator or an air-supplied respirator as appropriate.
Ventilation:
Use local exhaust to control vapors/mists.
Explosion Proofing:
None required.
Other Personal Protection Data:
Eyewash fountains and safety showers must be easily accessible.

SECTION 8 - SPILL-LEAK/ENVIRONMENTAL

General:
Spills should be contained, solidified and placed in suitable containers for disposal in a licensed facility. The phthalate ester class of chemicals is included on the CERCLA Hazardous Substance List and RCRA Toxic Constituents List.
Waste Disposal:
Incinerate or bury in a licensed facility. Do not discharge into waterways or sewer systems without proper authority.
Container Disposal:
Dispose of in a licensed facility. Recommend crushing or other means to prevent unauthorized reuse.
Environmental Toxicity Test Data:
Daphnid, Chronic Toxicity, 21 day - MATC 1.3-2.5 MG/L
TEST RATING NOT FOUND
Daphnid, Static 48 hr LC50 - > 10 PPM
Slightly Toxic
Sheepshead Minnow, static 96 hr LC50 - > 1000 MG/L
Insignificant Hazard
Mysid Shrimp, Static 48 hr LC50 - > 1000 MG/L
Insignificant Hazard
M aeruginosa, 48 hr static algal EC50 - > 1000 MG/L
Insignificant Hazard
S costatum, 48 hr static algal EC50 - > 1000 MG/L
Insignificant Hazard
D tertiolecta, 48 hr static algal EC50 - > 1000 MG/L
Insignificant Hazard
N pelliculosa, 48 hr static algal EC50 - > 1000 MG/L
Insignificant Hazard
S capricornutum, 48 hr static algal EC50 - > 1000 MG/L
Insignificant Hazard
Rainbow Trout, static 96 hr LC50 - > 500 MG/L
Practically Nontoxic
Bluegill, 22 day Bioconcentration Factor - 27
Negligible tendency to bioaccumulate
Midge, 48 hour static LC50 - > 10 MG/L
Slightly Toxic
Fathead minnow, time independent LC50 - > 1.78 MG/L

SECTION 8 - SPILL-LEAK/ENVIRONMENTAL (cont)

Dynamic study observations 1, 2, 14 days
Fathead minnow, early lifestage study - MATC: > 265 UG/L
TEST RATING NOT FOUND
Daphnid, Static 48 hr LC50 - > 0.062 MG/L
Greater than the limit of solubility
Daphnid, Chronic Toxicity, 21 day - MATC 0.13 MG/L
Highly Toxic
Inherent Biodegradability: Modified SCAS - 65 PERCENT
Values >/ 60% indicate good elimination
Ultimate Biodeg. Shake Flask Method, CO2 - >99 (98) PERCENT
Primary degradation (% theoretical CO2)
S capricornutum, static algal EC50 - 7 DAY > 2.6 MG/L
Greater than the limit of solubility
Early Life Stage Study -
No Compound Related Adverse Effects

SECTION 9 - STORAGE AND HANDLING

General:
Keep containers closed.

SECTION 10 - REGULATORY INFORMATION

TSCA Inventory Status
Listed on Inventory: YES

RCRA Haz. Waste No .:
MASSACHUSETTS RIGHT-TO-KNOW LISTED: - NO
PENNSYLVANIA RIGHT-TO-KNOW LISTED: - NO

State Regulatory Information: (By Component)

		NJ/PA/MA RTK
CAS:	68515-44-6	NO
NAME:	1,2-BENZENEDICARBOXYLIC ACID, DI(C7) ESTER, BR. & LINEAR	
CAS:	68515-45-7	NO
NAME:	1,2-BENZENEDICARBOXYLIC ACID, DI(C9) ESTER. BR. & LINEAR	
CAS:	85507-79-5	NO
NAME:	1,2-BENZENEDICARBOXYLIC ACID, DI(C11) ESTER. BR. & LINEAR	
CAS:	111381-89-6	NO
NAME:	1,2-BENZENEDICARBOXYLIC ACID, (C7, C9) ESTER, BR. & LINEAR	
CAS:	111381-90-9	NO
NAME:	1,2-BENZENEDICARBOXYLIC ACID, (C7,C11) ESTER, BR. & LINEAR	
CAS:	111381-91-0	NO
NAME:	1,2-BENZENEDICARBOXYLIC ACID, (C9,C11) ESTER, BR. & LINEAR	

Hazard Ratings:

	Health:	Fire:	Reactivity:	Special:
HMIS	1	1	0	NA

This product is hazardous or contains components which are hazardous according to the OSHA Hazard Communication Standard.
Phthalate Esters are included in the CERCLA hazardous substance list and RCRA toxic substance list as members of the Phthalate Ester Class. Since this chemical is not a "LISTED" hazardous waste, if spilled on

SECTION 10 - REGULATORY INFORMATION (cont)

the ground, the Chemical/Soil mixture would have to exhibit RCRA hazardous waste characteristics of ignitability, corrosivity, or reactivity to be RCRA reportable. If your site has a hazardous waste permit, it should be checked to determine if any of the Phthalate Esters in this product are listed in the permit.

SECTION 11 - TRANSPORTATION INFORMATION

DOT Proper Shipping Name:
REFER TO BASF BILL OF LADING
DOT Technical Name:
REFER TO BASF BILL OF LADING
DOT Primary Hazard Class:
REFER TO BASF BILL OF LADING
DOT Secondary Hazard Class:
REFER TO BASF BILL OF LADING
DOT Label Required:
REFER TO BASF BILL OF LADING
DOT Placard Required:
REFER TO BASF BILL OF LADING
DOT Poison Constituent:
REFER TO BASF BILL OF LADING
BASF Commodity Codes: NA NA UN/NA Code: NONE E/R Guide:
Bill of Lading Description:
FOR THE MOST UP-TO-DATE D.O.T. SHIPPING DESCRIPTION, PLEASE REFER TO THE BASF BILL OF LADING!
"IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY BASF HEREUNDER ARE GIVEN GRATIS AND BASF ASSUMES NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK".

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