

HERCULES INCORPORATED -- PROPELLANT,EXPLOSIVE,SOLID,M6+2F/76MM --  
1376-00N010938

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Product Identification  
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Product ID:PROPELLANT,EXPLOSIVE,SOLID,M6+2F/76MM  
MSDS Date:01/09/1986  
FSC:1376  
NIIN:00N010938  
MSDS Number: BHVKT  
=== Responsible Party ===  
Company Name:HERCULES INCORPORATED  
Address:RADFORD ARMY AMMUNITION PLANT  
City:RADFORD  
State:VA  
ZIP:24141  
Info Phone Num:703-639-7294  
Emergency Phone Num:703-639-7294  
CAGE:2D295

=== Contractor Identification ===  
Company Name:HERCULES INC  
Address:RADFORD ARMY AMMUNITION PLANT  
Box:City:RADFORD  
State:VA  
ZIP:24141  
Country:US  
Phone:703-639-7294  
CAGE:2D881  
Company Name:HERCULES INCORPORATED  
Address:84 5TH AVE  
City:NEW YORK  
State:NY  
ZIP:10011-7603  
Country:US  
CAGE:2D295

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Composition/Information on Ingredients  
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Ingred Name:DIBUTYL PHTHALATE (SARA III)  
CAS:84-74-2  
RTECS #:TI0875000  
Fraction by Wt: 3.00%  
Other REC Limits:N/K  
OSHA PEL:5 MG/M3  
ACGIH TLV:5 MG/M3; 9192  
EPA Rpt Qty:10 LBS  
DOT Rpt Qty:10 LBS

Ingred Name:DIPHENYLAMINE  
CAS:122-39-4  
RTECS #:JJ7800000  
Fraction by Wt: 1.00%  
Other REC Limits:N/K  
OSHA PEL:10 MG/M3  
ACGIH TLV:10 MG/M3; 9192

Ingred Name:POTASSIUM SULFATE

CAS:7778-80-5  
RTECS #:TT5900000  
Fraction by Wt: 2.00%  
Other REC Limits:N/K  
OSHA PEL:N/K  
ACGIH TLV:N/K

Ingred Name:NITROCELLULOSE (FLAMMABLE SOLID)  
Fraction by Wt: 87.00%  
Other REC Limits:N/K  
OSHA PEL:N/K  
ACGIH TLV:N/K

Ingred Name:DINITROTOLUENE (SARA III)  
CAS:25321-14-6  
RTECS #:XT1300000  
Fraction by Wt: 10.00%  
Other REC Limits:N/K  
OSHA PEL:S;A2;0.15 MG/M3;9293  
ACGIH TLV:S, 1.5 MG/M3  
EPA Rpt Qty:10 LBS  
DOT Rpt Qty:10 LBS

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===== Hazards Identification =====

LD50 LC50 Mixture:N/K  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:SEE SIGNS AND SYMPTOMS OF  
OVEREXPOSURE.  
Explanation of Carcinogenicity:NONE  
Effects of Overexposure:EYES:N/K .SKIN:TOXIC,AVOID SKIN  
CONTACT.INGESTION:TOXIC,AVOID INGESTION.INHALATION:TOXIC,AVOID  
INHALATION.  
Medical Cond Aggravated by Exposure:N/K

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===== First Aid Measures =====

First Aid:EYES:IN CASE OF CONTACT,IMMEDIATELY FLUSH WITH PLENTY OF LOW  
PRESSURE WATER FOR AT LEAST 15 MINUTES.REMOVE ANY CONTACT LENSES TO  
ASSURE THOROUGH FLUSHING.CALL A PHYSICIAN.SKIN:WASH WITH SOAP AND  
RUNNING WATER.INGESTION:CONTACT MD IMMEDIATELY .INHALATION:REMOVE  
TO FRESH AIR.TREAT ANY IRRITATION SYMPTOMATICALLY.CALL A PHYSICIAN.

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===== Fire Fighting Measures =====

Extinguishing Media:SELF-OXIDIZING,DELUGE W/ H\*20.MAY NOT BE ABLE TO  
EXTING MATL BEFORE IT IS CONSUMED UNLESS LRG QTY USED IN SHORT  
TIME.  
Fire Fighting Procedures:USE NIOSH/MSHA APPROVED SCBA AND FULL  
PROTECTIVE EQUIPMENT .EVACUATE THE AREA.  
Unusual Fire/Explosion Hazard:EASILY IGNITED,HIGHLY COMBUSTIBLE;PROTECT  
FROM FIRE,SPARKS & EXTREME HEAT.AUTOIGNITION  
TEMP:383F,195C.HAZARDOUS DECOMPOSITION PRODUCTS:OXIDES OF CARBON.

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===== Accidental Release Measures =====

Spill Release Procedures:CLEAN UP SPILLS IMMEDIATELY USING A SOFT BRISTLE BRUSH AND A CONDUCTIVE RUBBER OR PLASTIC SHOVEL.USE CAUTION,MATERIAL SENSITIVE TO IMPACT,FRICTION AND ELECTROSTATIC DISCHARGE.

Neutralizing Agent:N/K

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===== Handling and Storage =====

Handling and Storage Precautions:AVOID PRLNG TEMP ABOVE 50C,125F.REC:21C,75F;50% HUMIDITY.STOR MUST CONFORM TO LOCAL,STATE,FEDERAL REGS (OSHA 29CFR1910.109;BATF 27CFR55 SUBPART K).

Other Precautions:WARNING,FLAMMABLE SOLID.KEEP AWAY FROM HEAT,SPARKS AND OPEN FLAME.KEEP CONTAINERS CLOSED.USE WITH ADEQUATE VENTILATION.

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===== Exposure Controls/Personal Protection =====

Respiratory Protection:NIOSH/MSHA APPROVED RESPIRATOR APPROPRIATE FOR EXPOSURE OF CONCERN .

Ventilation:LOCAL AND GENERAL VENTILATION NECESSARY TO KEEP AIR CONCENTRATION BELOW TLV .

Protective Gloves:COTTON OR LEATHER.

Eye Protection:SAFETY GLASSES

Other Protective Equipment:FLAMEPROOF COVERALLS AND CONDUCTIVE SHOES.

Work Hygienic Practices:N/K

Supplemental Safety and Health

ROUTES OF ENTRY:INGEST/SKIN/INHAL .

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===== Physical/Chemical Properties =====

Melt/Freeze Pt:M.P/F.P Text:N/K

Decomp Temp:Decomp Text:N/K

Vapor Pres:NEGLIGIBLE

Spec Gravity:1.4955,WATER=1

Evaporation Rate & Reference:<1 (BUTYL ACETATE=1)

Solubility in Water:NEGLIGIBLE

Appearance and Odor:HARD CYLINDER,PERFORATED,SMOOTH,GREENISH YELLOW COLOR.ODORLESS.

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===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

OXIDES OF NITROGEN AND CARBON.

Stability Condition to Avoid:AVOID OPEN FLAME,SPARKS AND HEAT.

Hazardous Decomposition Products:OXIDES OF CARBON.

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===== Disposal Considerations =====

Waste Disposal Methods:DISPOSAL MUST BE IN ACCORDANCE WITH FEDERAL,STATE AND LOCAL REGULATIONS .BURN IN OPEN BURNING GROUND IN ACCORDANCE WITH REGULATIONS.MAY ALSO BE BURNED IN AN INCINERATOR APPROVED FOR EXPLOSIVES.

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