

WHITMIRE RESEARCH LABORATORIES INC. -- PERMA-DUST PRESSURIZED BORIC ACID DUST --  
6840-01-287-3938

===== Product Identification =====

Product ID:PERMA-DUST PRESSURIZED BORIC ACID DUST

MSDS Date:05/08/1998

FSC:6840

NIIN:01-287-3938

Status Code:A

MSDS Number: CJLWK

=== Responsible Party ===

Company Name:WHITMIRE RESEARCH LABORATORIES INC.

Address:3568 TREE COURT INDUSTRIAL BLVD.

City:SAINT LOUIS

Stat

e:MO

ZIP:63122

Country:US

Info Phone Num:314-225-5371/AFTER HRS 576-0120

Emergency Phone Num:800-777-8570

Resp. Party Other MSDS Num.:PRODUCT CODE 02-0249

Preparer's Name:DANA M. THOMAS

Chemtrec Ind/Phone:(800)424-9300

CAGE:67184

=== Contractor Identification ===

Company Name:AMJAY CORP. DBA AMJAY CHEMICALS

Address:11200 WESTHEIMER SUITE 310

Box:218786

City:HOUSTON

State:TX

ZIP:77218-8786

Country:US

Phone:713-492-2000

Contract Num:SP0450-99-D-4059

CAGE:64184

Company Name:EHRlich J C CHEMICAL CO  
INC

Address:500 SPRING RIDGE DR

Box:City:READING

State:PA

ZIP:19612-3848

Country:US

Phone:610-372-9700/FAX: 610-378-9744

Contract Num:SP0450-99-M-C281

CAGE:8C885

Company Name:EHRlich J C CHEMICAL CO INC

Address:500 SPRING RIDGE DR

Box:City:READING

State:PA

ZIP:19612-3848

Country:US

Phone:610-372-9700/FAX: 610-378-9744

Contract Num:SP0450-99-M-NE77

CAGE:8C885

Company Name:WHITMIRE MICRO GEN RESEARCH LABORATORIES, INC.

Address:3568 TREE COURT IND. BLVD.

Box:City:ST LOUIS

Country:US  
Phone:636-225-5371  
CAGE:67184

=====  
Composition/Information on Ingredients  
=====

Ingredient Name:BORIC ACID  
CAS:10043-35-3  
RTECS #:ED4550000  
% Wt:35.5  
Other REC Limits:NONE RECOMMENDED

Ingredient Name:ISOPARAFFINIC PETROLEUM SOLVENT (INGREDIENT #2 TO 5 = 64.5%)  
CAS:64742-48-9  
Code:F  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:500 PPM

Ingredient Name:1,1,1,2-TETRAFLUOROETHANE (INGREDIENT #2 TO 5 = 64.5%)  
CAS:811-97-2  
Other REC Limits:1000 PPM AEL DUPONT

Ingredient Name:1,1-DIFLUOROETHANE (INGREDIENT #2 TO 5 = 64.5%)  
CAS:75-37-6  
RTECS #:K11410000  
Other REC Limits:1000 PPM AEL DUPONT

Ingredient Name:SILICON DIOXIDE (INGREDIENT #2 TO 5 = 64.5%)  
CAS:7631-86-9  
Other REC Limits:NONE RECOMMENDED  
ACGIH TLV:10 MG/M3

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

LD50 LC50 Mixture:LD50 (ORAL, RAT) > 5,000 MG/KG  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:TAR

GET ORGANS: N/P. ACUTE AND CHRONIC

- EYES: MAY CAUSE IRRITATION. PRODUCED CONJUNCTIVAL IRRITATION IN RABBITS AT 1 HR ONLY. NO CORNEAL OPACITY WAS OBSERVED DURING THE 7 DAY TESTING PERIOD. SKIN: PROLONGED EXPOSURE MAY CAUSE SKIN IRRITATION. PRIMARY SKIN IRRITATION INDEX = 1.63 (RABBIT).  
INGESTION AND INHALATION: UNLIKELY DUE TO PRODUCT BEING PRESSURIZED AND PRODUCING PARTICLES LARGE ENOUGH NOT TO BE RESPIRABLE.

Explanation of Carcinogenicity:NONE

Effects of Overexposure:EY

ES: MAY CAUSE IRRITATION. SKIN: PROLONGED EXPOSURE MAY CAUSE SKIN IRRITATION.

Medical Cond Aggravated by Exposure:NONE KNOWN.

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

First Aid:IF SWALLOWED: CALL A PHYSICIAN OR POISON CONTROL CENTER. DRINK 1 OR 2 GLASSES OF WATER AND INDUCE VOMITING BY TOUCHING BACK OF THROAT WITH FINGER. IF PERSON IS UNCONSCIOUS, DO NOT GIVE ANYTHING BY MOUTH AND DO NOT INDUCE VOMITING. IF IN EYES: FLUSH EYES WITH PLENTY OF WATER. CALL A PHYSICIAN IF IRRITATION PERSISTS. IF ON SKN: WASH WITH PLENTY OF SOAP AND WATER. GET MEDICAL ATTENTION. IF INHALED: REMOVE VICTIM TO FRESH AIR. IF NOT BREATHING, APPLY ARTIFICIAL RESPIRATION,PREFERABLY MOUTH-TO-MOUTH. GET MEDICAL ATTENTION.

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

Flash Point Method:TOC

Flash Point:>18" NONFLAMMABLE

Extinguishing Media:CARBON DIOXIDE (CO2), DRY CHEMICAL, FOAM.

Fire Fighting Procedures:NONE REQUIRED.

Unusual

Fire/Explosion Hazard:CONTENTS UNDER PRESSURE. EXPOSURE TO TEMPERATURES ABOVE 130F MAY CAUSE BURSTING.

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

Spill Release Procedures:IF CONTAINER BEGINS TO LEAK (THROUGH PUNCTURE, ETC.), ALLOW IT TO DISCHARGE COMPLETELY IN WELL VENTILATED AREA, THEN DISPOSE OF IN SAFE PLACE. IN CASE OF SPILLAGE ON SKIN, WASH THOROUGHLY WITH PLENTY OF SOAP AND WATER.

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

=====

Handling and Storage Precautions:DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE. STORE IN A COOL, DRY AREA AWAY FROM HEAT OR OPEN FLAME AND INASSESSIBLE TO CHILDREN. DO NOT STORE NEAR HEAT, SPARKS OR OPEN FLAME. CONTENTS UNDER PRE SSURE. DO NOT PUNCTURE OR INCINERATE CONTAINER.

Other Precautions:EXPOSURE TO HEAT ABOVE 130F MAY CAUSE BURSTING. FOR BEST RESULTS, USE IN UPRIGHT POSITION ONLY. HARMFUL IF SWALLOWED OR ABSORBED THROUH THE SKIN. AVOID CONTACT WITH SK IN, EYES OR CLOTHES.

WASH THOROUGH HLY WITH SOAP AND WATER AFTER HANDLING.DO NOT APPLY DIRECTLY TO WATER. APPLY ONLY AS SPECIFIED ON TH E LABEL.

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

Respiratory Protection:NONE REQUIRED IF APPLIED ACCORDING TO LABEL DIRECTIONS. DURING PROLONGED EXPOSURE OR WHEN EXPOSURE GUIDELINES EXCEEDED, USE AN APPROVED PESTICIDE DUST RESPIRATOR.

Ventilation:NONE NORMALLY REQUIRED. PROVIDE ADEQUATE VENTILATION OF TREATMENT A REA.

Protective Gloves:NONE REQUIRED. AVOID CONTACT WITH SKIN.

Eye Protection:NOT MANDATORY. GOGGLES OR FACE SHIELD SUGGESTED-AVOID EYE CONTACT.

Other Protective Equipment:NONE REQUIRED

Work Hygienic Practices:WASH THOROUGHLY AFTER HANDLING.

Supplemental Safety and Health

NONE SPECIFIED BY MANUFACTURER.

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

HCC:V2

Vapor Pres:70 PSIG @ 70F

Spec Gravity:0.86

Solubility in Water:4.72% @ 20C

Appearance and Odor:SPRAYS AS A DRY POWDER WITH A SLIGHT SOLVENT ODOR.

Percent Volatiles by Volume:64.19%

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

Stability Indicator/Materials to Avoid:YES NONE.

Stability Condition to Avoid:DO NOT SPRAY INTO OPEN FLAME OR ONTO VERY HOT SURFACES.

Hazardous Decomposition Products:THERMAL DECOMPOSITION IN OPEN FLAME WILL RESULT IN HALOGEN ACIDS.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

===== Toxicological Information =====

T

otoxicological Information:ACUTE DERMAL TOXICITY LD50 > 2000 MG/KG  
(RABBITS)

=====  
Ecological Information  
=====

Ecological:THIS PRODUCT IS TOXIC TO FISH, BIRDS AND OTHER WILDLIFE.

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

Waste Disposal Methods:DO NOT CONTAMINATE FOOD, WATER OR FEED BY  
DISPOSAL. PESTICIDE DISPOSAL: WASTES RESULTING FROM USE OF THIS  
PRODUCT MAY BE DISPOSED OF ON SITE OR AT AN APPROVED WASTE DISPOSAL  
FAC

ILITY. CONTAINER DISPOSAL: THE CONTAINER MAY BE RECYCLED  
WHERESTEEL AEROSOL CAN RECYCLING IS AVAILABLE. BEFORE DISPOSIING,  
EMPTY CAN BY USING THE PRODUCT IAW THE LABEL.

=====  
MSDS Transport Information  
=====

Transport Information:PROPER SHIPPING NAME: CONSUMER COMMODITY. HAZARD  
CLASS: ORM-D.

=====  
Regulatory Information  
=====

SARA Title III Information:THIS PRODUCT CONTAINS NO SECTION 313  
CHEMICALS. IN CASE OF  
SPILLAGE, THIS PRODUCT IS SUBJECT TO THE  
REPORTING REQUIREMENTS OF THE COMPREHENSIVE ENVIRONMENTAL RESPONSE,  
COMPENSATION AND LIABILITY ACT ( CERCLA).

Federal Regulatory Information:ALL COMPONENTS OF THIS PRODUCT ARE  
LISTED OR EXCLUDED FROM LISTING ON THE US TOXIC SUBSTANCE CONTROL  
ACT (TSCA) CHEMICAL SUBSTANCE INVENTORY.

State Regulatory Information:NONE SPECIFIED BY MANUFACTURER.

=====  
Other Information  
=====

Disclaimer (provided with th  
is information by the compiling agencies):  
This information is formulated for use by elements of the Department  
of Defense. The United States of America in no manner whatsoever,  
expressly or implied, warrants this information to be accurate and  
disclaims all liability for its use. Any person utilizing this  
document should seek competent professional advice to verify and  
assume responsibility for the suitability of this information to their  
particular situation.