

MATERIAL SAFETY DATA SHEET DRAYNAMITE

DATE OF ISSUE: 01/01/2004  
SUPERCEDES:

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SECTION I - GENERAL INFORMATION

Chemical Name & Synonyms: N/A Trade Name & Synonyms: DRAYNAMITE

Chemical Family: ALKALINE/ALUMINUM BLEND Formula Mixture: X

Manufacturer's Name: PLUMMASTER PRO.GROUP OF PLUMMASTER INC.

Address: P.O. BOX 850  
CONCORDVILLE, PA 19331

Prepared By: C Williamson/Chemist  
Product Code Number: 94534  
Emergency Phone Number: CHEMTRAC: 800-424-9300

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SECTION II - HAZARDOUS INGREDIENTS

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS:

Chemical Name (Ingredients): SODIUM HYDROXIDE  
Percent: 60-70  
Hazard: CORROSIVE  
TLV: 2MG/M3 \$1  
PEL: 2MG/M3 2  
STEL: NOT EST.  
CAS#: 1310-73-2

Chemical Name (Ingredients): SODIUM NITRATE  
Percent: 35-40  
Hazard: \*  
TLV: 3 MG/M3 #1  
PEL: 5 MG/M3 #2  
STEL: NOT EST.  
CAS#: 7631-99-4

Chemical Name (Ingredients): POTASSIUM HYDROXIDE  
Percent: 1-2  
Hazard: CORROSIVE  
TLV: 2MG/M3 \$1  
PEL: 2MG/M3 2  
STEL: NOT EST.  
CAS#: 1310-58-3

Chemical Name (Ingredients): ALUMINUM DUST  
Percent: 2-10  
Hazard: IRR/FLAM  
TLV: 10MG/M3 1  
PEL: 5MG/M3 2

STEL: NOT EST.  
CAS#: 7429-90-5

Chemical Name (Ingredients): \$ CEILING LIMIT # PNOS  
Percent:  
Hazard:  
TLV:  
PEL:  
STEL:  
CAS#:

Chemical Name (Ingredients): \* IRRITANT/OXIDIZER/SLIGHTLY TOXIC  
Percent:  
Hazard:  
TLV:  
PEL:  
STEL:  
CAS#:

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SECTION III - PHYSICAL DATA

Boiling Point (f): >200°  
Specific Gravity (H2O=1): >1  
Vapor Pressure (MM HG): <1  
Color: BLUE  
Vapor Density (Air=1): N/A  
Odor: NONE  
PH @ 100%: 10%=14  
Clarity: OPAQUE  
Volatile by Volume: 0  
Evaporation Rate (BU A/C=1): <1  
H2O Solubility: COMPLETE  
Viscosity: GRANULAR

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SECTION IV - FIRE AND EXPLOSION HAZARD

Flash Point: NON-FLAM / T.C.C.  
Flammable Limits: HYDROGEN GAS LEL: 4% UEL:75%

Extinguishing Media:  
Foam: X Alcohol Foam: CO2: X  
Dry Chemical: X Water Spray: Other:

Special Fire Fighting Procedures:  
FIREFIGHTERS SHOULD WEAR A SELF CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR.

Unusual Fire and Explosion Hazards:  
YIELDS GASEOUS OXIDES OF NITROGEN. CONTACT WITH NITRO-COMPOUNDS MAY FORM SHOCK SENSITIVE SALTS. DO NOT USE WATER TO EXTINGUISH FIRES WHERE THIS PRODUCT IS INVOLVED AS WATER WILL CAUSE A VIOLENT OR EXPLOSIVE REACTION. PRODUCT MAY FORM AN EXPLOSIVE MIXTURE WHEN FINELY DIVIDED AND SUSPENDED IN AIR.

Aerosol Level (NFPA 30B): N/A

NFPA 704 Hazard Rating:

(0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme)

Health: 3      Flammability: 0      Instability: 1      Special: W

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SECTION V - HEALTH HAZARD DATA

Threshold Limit Value:

NOT ESTABLISHED FOR MIXTURE. SEE SECTION II.

Effects of Overexposure:

-Acute (Short Term Exposure)

SKIN CONTACT: CORROSIVE. CAUSES BURNS WITH REDNESS, SWELLING AND POSSIBLE DEEP ULCERATIONS. REPEATED OR PROLONGED CONTACT CAN LEAD TO SCARRING, CRACKING AND DERMATITIS. EYE CONTACT: CORROSIVE. DUST CAUSES BURNS TO THE EYES WITH POSSIBLE CORNEAL DAMAGE OR BLINDNESS. MAY CAUSE EXCESSIVE BLINKING, TEAR PRODUCTION, REDNESS, PAIN, SCARRING, INFECTION AND SWELLING OF THE CONJUNCTIVA. INGESTION: CORROSIVE. CAUSES SEVERE BURNS TO THE MOUTH, THROAT, STOMACH, ESOPHAGUS AND DEEP TISSUES. MAY CAUSE NAUSEA, VOMITING AND DIARRHEA. MAY CAUSE IRRITATION WITH POSSIBLE NAUSEA, VOMITING, DIARRHEA, ABDOMINAL CRAMPS, DIZZINESS, CONVULSIONS AND COLLAPSE. PURGING AND DIURESIS CAN BE EXPECTED. SMALL REPEATED DOSES MAY CAUSE HEADACHE AND MENTAL IMPAIRMENT. RARE CASES OF NITRATES BEING CONVERTED TO THE MORE TOXIC NITRITES HAVE BEEN REPORTED, MOSTLY WITH INFANTS. INHALATION: CORROSIVE. DUST CAUSES BURNS TO THE RESPIRATORY TRACT, NOSE, MOUTH, AND THROAT WITH DISCOMFORT, NASAL DISCHARGE, SNEEZING, COUGHING, LABORED BREATHING AND CHEST PAIN.

-Chronic (Long Term Exposure)

LUNGS MAY BE AFFECTED BY REPEATED OR PROLONGED EXPOSURE TO DUST PARTICLES; MAY HAVE EFFECTS ON THE CENTRAL NERVOUS SYSTEM, RESULTING IN IMPAIRED FUNCTIONS. METHEMOGLOBINEMIA OCCURS IN INDIVIDUALS WHEN THE NITRATE IS CONVERTED BY BACTERIA IN THE STOMACH TO NITRITE. IF THIS CONVERSION TAKES PLACE, IT MAY CAUSE NAUSEA, VOMITING, DIZZINESS, RAPID HEART BEAT, IRREGULAR BREATHING, CONVULSIONS, COMA AND DEATH. MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE ARE PRE-EXISTING LUNG AND KIDNEY DISEASES AND SKIN AND EYE CONDITIONS SUCH AS DERMATITIS AND CONJUNCTIVITIS. TARGET ORGANS: LUNGS, KIDNEYS AND CENTRAL NERVOUS SYSTEM.

Primary Routes of Entry: Inhalation: X Ingestion: X Absorption:

Emergency and First Aid Procedures:

-Inhalation:

IF DUST IS INHALED, REMOVE FROM THE AREA TO FRESH AIR. HAVE THE PERSON BLOW THEIR NOSE TO REMOVE THE SUBSTANCE FROM THE NASAL PASSAGES AND KEEP FROM INHALING FURTHER. IF NOT BREATHING, CLEAR THE AIRWAY AND START MOUTH-TO-MOUTH ARTIFICIAL RESPIRATION. GET IMMEDIATE MEDICAL ATTENTION.

-Eye Contact:

IMMEDIATELY RINSE THE EYES WITH WATER. REMOVE ANY CONTACT LENSES AND CONTINUE FLUSHING FOR AT LEAST 15 MINUTES. HOLD THE EYELIDS APART TO ENSURE RINSING OF THE ENTIRE SURFACE OF THE EYES AND LIDS WITH WATER. GET IMMEDIATE MEDICAL ATTENTION.

-Skin Contact:

IMMEDIATELY WIPE AWAY MATERIAL WITH A CLOTH WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. WASH THOROUGHLY WITH LARGE AMOUNTS OF SOAP AND WATER FOR AT LEAST 15 MINUTES. GET IMMEDIATE MEDICAL ATTENTION. DISCARD OR CLEAN CLOTHING AND SHOES.

-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:  
TREAT AS WITH ANY STRONGLY ALKALINE PRODUCT.

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SECTION VI - TOXICITY INFORMATION

Product Contains Chemicals Listed as Carcinogen or Potential  
Carcinogen By:

IARC: No                      NTP: No                      OSHA: No                      ACGIH: No  
OTHER: No

SODIUM HYDROXIDE

IHL-RAT LC50 > 0.018 < 0.20 MG/L 4.  
ORL-RAT LD50: 140 - 340 MG/KG 4.  
SKN-RAT LD50 = 1,350 MG/KG 4.  
SKN-RBT SDT: 500 MG/24H SEVERE 3.  
EYE-RBT SDT: 50 UG/24H SEVERE 3.

SODIUM NITRATE

ORL-RAT LD50: 1267 MG/KG 3.  
ORL-HMN TDLO: 14 MG/KG 3.

POTASSIUM HYDROXIDE

SKN-HMN SDT: 50 MG/24H SEVERE 3.  
SKN-RBT SDT: 50 MG/24H SEVERE 3.  
EYE-RBT: (RINSED WITH WATER) 1 MG/24H MODERATE 3.  
ORL-RAT LD50: 273 MG/KG

ALUMINUM DUST

NO TOXICOLOGICAL DATA AVAILABLE

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SECTION VII - REACTIVITY DATA

Stability:                      Stable: X                      Unstable:

Conditions to Avoid: ELIMINATE IGNITION SOURCES. AVOID HEAT, HOT SURFACES,  
SPARKS AND OPEN FLAMES.

Incompatibility (Materials to Avoid):

STRONG ORGANIC AND MINERAL ACIDS, STRONG BASES, FLAMMABLE LIQUIDS,  
COMBUSTIBLE MATERIALS, ORGANIC HALOGENS, ZINC, TIN, LEAD; NITROMETHANE AND NITRO  
COMPOUNDS, OXIDIZING AGENTS, REDUCING AGENTS AND WATER. PRODUCT WILL ATTACK SOME  
PLASTICS, RUBBER OR COATINGS.

Hazardous Decomposition Products:

OXIDES OF NITROGEN.

Hazardous Polymerization:

May Occur:                      Will Not Occur: X

Conditions to Avoid: NONE KNOWN.

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SECTION VIII - SPILL OR LEAK PROCEDURES

Steps to be Taken if Material is Released or Spilled:

WEAR APPROPRIATE PROTECTIVE CLOTHING. VENTILATE THE AREA. TRANSFER SOLID TO APPROPRIATELY LABELLED CONTAINER FOR REUSE OR DISPOSAL. ELIMINATE IGNITION SOURCES OF ELECTRICAL, STATIC OR FRICTIONAL SPARKS. NEUTRALIZE REMAINING TRACES OF MATERIAL WITH DILUTE ACID THEN FLUSH AREA WITH WATER FOLLOWED BY LIBERAL COVERING OF SODIUM BICARBONATE. AVOID CREATING DUSTY CONDITIONS. PREVENT PRODUCT FROM CONTAMINATING SOIL OR FROM ENTERING SEWAGE AND DRAINAGE SYSTEMS AND BODIES OF WATER.

Waste Disposal Method(s):

DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

Neutralizing Agent:

USE DILUTE ACIDS SUCH AS HYDROCHLORIC ACID OR VINEGAR. ADD CAUTIOUSLY WHILE MIXING. WEAR APPROPRIATE PROTECTIVE CLOTHING.

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SECTION IX - SPECIAL PROTECTION INFORMATION

Required Ventilation:

MECHANICAL EXHAUST VENTILATION TO CONTROL AIRBORNE DUST. LOCAL EXHAUST MAY BE NECESSARY AT HANDLING SITES.

Respiratory Protection:

TYPICAL USE DOES NOT NORMALLY REQUIRE THE USE OF A RESPIRATOR. WEAR A NIOSH/MSHA APPROVED RESPIRATOR WITH A DUST CARTRIDGE FILTER IF EXPOSURE CAN EXCEED TLV/PEL. <10X PEL, USE AN N95 QUARTER OR HALF MASK RESPIRATOR; <50X PEL, USE A FULL FACE RESPIRATOR EQUIPPED WITH N95 FILTERS; <200X PEL, USE A POWDERED AIR PURIFYING RESPIRATOR (POSITIVE PRESSURE) WITH N95 FILTERS; >200X PEL, USE A FULL FACE, TYPE C SUPPLIED AIR RESPIRATOR (CONTINUOUS FLOW MODE).

Glove Protection:

NEOPRENE OR NITRILE RUBBER GLOVES SHOULD BE WORN.

Eye Protection:

CHEMICAL GOGGLES AND A FACE SHIELD SHOULD BE WORN.

Other Protection:

WEAR A NEOPRENE OR POLYVINYL ALCOHOL APRON AND BOOTS.

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SECTION X - STORAGE AND HANDLING INFORMATION

Storage Temperature:      Indoors: X                      Outdoors:                      Heated:  
                                 Refrigerated:

Minimum Temperature: 32°F                      Maximum Temperature: 120° F

Precautions to be taken in Handling and Storing:

STORE IN COOL, DRY PLACE. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE NEAR STRONG OXIDIZING AGENTS, REDUCING AGENTS, ACIDS, BASES OR WATER.

Other Precautions:

CONSIDERABLE HEAT IS GENERATED WHEN WATER IS ADDED TO THIS PRODUCT. DO NOT USE WHERE ACIDIC DRAIN OPENERS MAY BE PRESENT AS A VIOLENT REACTION CAN OCCUR. KEEP OUT OF REACH OF CHILDREN. READ THE ENTIRE LABEL BEFORE USING THE PRODUCT. FOLLOW THE LABEL DIRECTIONS.

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SECTION XI - REGULATORY INFORMATION

Chemical Name	CAS Number	Upper % Limit
ALUMINUM DUST	7429-90-5	10

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

CALIFORNIA PROPOSITION 65

WARNING: This product contains the following chemical(s) know to the State of California to cause (1)Cancer or (2)Birth Defects or other reproductive harm. THIS PRODUCT CONTAINS NONE.

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SECTION XII - REFERENCES

1. THRESHOLD LIMIT VALUES FOR CHEMICAL SUBSTANCES AND PHYSICAL AGENTS AND BIOLOGICAL EXPOSURE INDICES, ACGIH, 2001.
2. OSHA PEL.
3. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES, CCINFODisc, 2001.
4. SAX'S DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS, EIGHTH EDITION, RICHARD J. LEWIS, SR.

ALL COMPONENTS IN THIS PRODUCT CAN BE FOUND IN THE CURRENT TSCA INVENTORY.

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---- IRR:IRRITANT, FLAM/FLAMM:FLAMMABLE, COMB:COMBUSTIBLE, CORR:CORROSIVE  
CARC:CARCINOGENIC, TOX:TOXIC, N/A:NOT APPLICABLE, N/E:NOT ESTABLISHED,  
COC:CLEVELAND OPEN CUP, PMCC:PENSKY-MARTIN CLOSED CUP, TCC:TAGLIABUE CLOSED CUP,  
LEL:LOWER EXPLOSION LIMIT, UEL:UPPER EXPLOSION LIMIT, NFPA:NATIONAL FIRE  
PROTECTION ASSOCIATION, IARC:INTERNATIONAL AGENCY FOR THE RESEARCH ON CANCER,  
NTP:NATIONAL TOXICOLOGY PROGRAM, OSHA:OCCUPATIONAL SAFETY & HEALTH  
ADMINISTRATION, ACGIH:AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS,  
TLV:THRESHOLD LIMIT VALUE, PEL:PERMISSIBLE EXPOSURE LIMIT, STEL:SHORT-TERM  
EXPOSURE LIMIT, MLD:MILD, MOD:MODERATE, SEV:SEVERE, MUT:MUTAGENIC,  
ASPHYX:ASPHYXIAN, PNO: PARTICULATES NOT OTHERWISE CLASSIFIED, SDT:STANDARD  
DRAIZE TEST, ORL: ORAL, HMN: HUMAN, IHL:INHALATION  
THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE IN LIGHT  
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