DIAMOND DR.®

Emergency Phone Numbers: 330-456-3121

MATERIAL SAFETY DATA SHEET

SECTION I -- IDENTIFICATION OF SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

TRADE NAME: DIAMOND DR.®

CHEMICAL NAME: SYNTHETIC ORGANIC DUST CONTROL AGENT FOR BALL DIAMONDS

SYNONYMS: DUST RETARDANT

CHEMICAL FAMILY: N/A MOLECULAR WEIGHT: N/A FORMULA: N/A

CAS REGISTRY NO.: PRODUCT A BLEND - NO NUMBER ASSIGNED

SECTION II -- COMPOSITION/INFORMATION ON INGREDIENTS

CAS REG. NO. NAME 178603-64-0

Severely hydrotreated, hydrocracked, hydroisomerized, 25 - 100

high viscosity synthetic

iso-alkane

SECTION III -- HAZARDS IDENTIFICATION

Synthetic Product Product is essentially non-hazardous if used as directed.

If heated, fluid mist 8 hour TLV-TWA = 5mg/m^3 (ACGIH)

SECTION IV -- FIRST AID MEASURES

EYES: Flush eyes with flowing water at least 15 minutes, get medical attention.

Do not use any eye ointment. Remove contact lenses.

INHALATION: If problems are experienced because of heated material, move subject to fresh air.

> If victim is not breathing perform artificial respiration. Administer oxygen if

available. Keep victim warm and at rest. Seek medical attention as soon as possible.

SKIN: Product is essentially non-hazardous. If you experience irritation, flush with large

amount of waters or wash with soap and water. Seek medical attention if irritation

persists.

INGESTION: DO NOT induce vomiting because of aspiration into the lungs. Diamond Dr.®

has

a laxative effect and will be eliminated quickly. Seek medical attention. NEVER GIVE FLUIDS OR INDUCE VOMITING IF PATIENT IS UNCONSCIOUS OR HAVING CONVULSIONS.

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NOTE TO PHYSICIAN: Monitor respiratory distress. If cough or difficulty breathing develops,

evaluate for respiratory tract irritation, bronchitis or pneumonitis.

SECTION V -- FIRE FIGHTING MEASURES

FLAMMABILITY: Nonflammable, but will burn an prolonged exposure to flame

or high temperature.

FLASH POINT (TEST METHOD): >338⁰F (>170⁰C), open cup, ASTM D92, Cleveland

AUTOIGNITION TEMPERATURE: 664⁰F (351⁰C)

UNUSUAL FIRE AND EXPLOSION HAZARDS: Do not cut, weld, heat of drill or pressurize empty container.

MATERIALS TO AVOID: Low fire hazard. Must be moderately heated before ignition

will occur. Avoid contact with strong oxidizing agents,

including peroxides, chlorine and strong acids.

PRODUCTS OF COMBUSTION: Carbon dioxide, carbon monoxide, smoke and irritating

fumes as products of incomplete combustion.

EXTINGUISHING MEDIA AND INSTRUCTIONS:

If a tank, railcar of tank truck is involved in a fire isolate for 0.5 miles in all directions. Shut off fuel to fire if it is possible to do so without hazard. If this is impossible, withdraw from the area and let the fire burn itself out under controlled conditions. Withdraw immediately in case of rising sound from venting safety device or any discoloration of the tank due to fire. Cool containing vessels with water spray in order to prevent pressure build-up, autoignition or explosion.

SMALL FIRE: use dry chemicals, foam, CO₂.

LARGE FIRE: use water spray, fog of foam. For small outdoor fires portable extinguishers may be used and

SCBA (self contained breathing apparatus) may not be required. For all indoor fires and any significant outdoor fires SCBA if required. Respiratory and eye protection are required for fire

fighting personnel.

SECTION VI - ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK PROCEDURES:

ELIMINATE ALL IGNITION SURCES. Stop leak without risk and contain spill. Absorb with inert absorbent materials such as clay or sand. Place absorbent in closed metal containers for later disposal or burn in appropriate facility. Keep spills out of sewers and open bodies of water.

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SECTION VII -- HANDLING AND STORAGE

STORAGE: Keep in a cool, dry, ventilated storage area and in closed containers. Keep

away from sources of ignition and oxidizing materials.

HANDLING: KEEP AWAY FROM SOURCES OF IGNITION. Do not reuse empty

containers. Practice good hygiene. Wash hands before eating. Launder

clothes before reuse.

SECTION VIII -- EXPOSURE CONTROL/PERSONAL PROTECTION

RESPIRATORY PROTECTION: None required if good ventilation is maintained. If mist is generated

by heating use a NIOSH approved organic respirator with a mist

filter.

VENTILATION: Under normal handling conditions special ventilation is not necessary. If

operation generates mist or fumes use ventilation of keep exposure to

airborne contaminants below exposure limits.

EYE PROTECTION: Chemical splash, goggles recommended.

PROTECTIVE CLOTHING: Clothing to minimize skin contact, long sleeves, boots or shoes. For

casual

contact PVC gloves are suitable, for prolonged contact use neoprene or

nitrile gloves.

SECTION IX -- PHYSICAL AND CHEMICAL PROPERTIES

BOILING/MELTING POINT @ **760** mm Hg: $>600^{\circ}\text{F} (>316^{\circ}\text{C})$

VAPOR PRESSURE mm Hg @ 20°C: negligible at ambient temperature

SPECIFIC GRAVITY OR BULK DENSITY: 0.83

SOLUBILITY IN WATER: insoluble in water

APPEARANCE: viscous, clear liquid

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ODOR: none

POUR POINT: $-33^{0}\text{F} (-36^{0}\text{C})$

pH: N/A not an aqueous solution or emulsion

ACIDITY: none
ALKALINITY: none

SECTION X -- STABILITY AND REACTIVITY

STABILITY: Stable under normal handling conditions.

CHEMICAL INCOMPATIBILITY: Can react with strong organic oxidizing materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Heating of Diamond Dr.® causes thermal decomposition. In

the presence of air may yield carbon monoxide and/or carbon

dioxide, smoke, hydrocarbons and irritating fumes.

HAZARDOUS POLYMERIZATION: Does not occur under normal industrial conditions.

CONDITIONS TO AVOID: Excessive heat and flame.

CORROSIVE TO METAL: No

SECTION XI -- TOX ICOLOGICAL INFORMATION

EFFECTS OF OVEREXPOSURE

INHALATION: Inhalation is highly unlikely. However prolonged or repeated inhalation of heated

product fumes or mists may cause irritation to the respiratory tract and lungs and may

lead to fibrosis and reduced pulmonary function.

SKIN: It is not a skin irritant However prolonged or repeated contact may cause skin

irritation, dermatitis or oil acne.

EYES: Prolonged or repeated contact may be irritating to eyes. Will not cause permanent

damage.

INGESTION: Relatively non toxic to digestive tract.

MUTAGENIC: Mutagenic activity test are negative toward: Salmonella Typhimurium, Salmonella-

Eschrichia coli and Chinese Hamster ovary.

REPRODUCTIVE TOXICITY: Based on data to date it does not pose a reproductive risk.

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OSHA PEL (8 hour TWA) = 5mg/m^3 for synthetic fluid mists. **CARCINOGENICITY:**

Based on studies to date Diamond Dr.® is not known to be carcinogenic to humans.

ACGIH (mists) - Based on available human studies, exposure to product mist alone has not demonstrated to cause human effects at levels below 5 mg/m³.

IARC - IARC group 3; cannot be classified as to carcinogenicity to humans.

NTP - No studies were found.

IRIS - No studies were found.

OSHA - OSHA PEL (8 hour TWA) = 5 mg/m³ for synthetic product mists.

SECTION XII -- ECOLOGICAL INFORMATION

The product has the potential for degradation by hydroxyl radicals in the troposphere under the influence of sunlight, and by bacteria in soil water. Potential for food chain concentration is low.

The acute oral toxicity toward acquatic organisms is none to low: LC50 (rainbow trout) >400,000 ppm in 96 hours; LC50 (Mysidopsis bahai) >500,000 ppm in 96 hours. Passed the EPS 1/RM/24 Microtox test luminescent bacteria.

When used and applied properly Diamond Dr.® will not contribute BOD.

SECTION XIII -- DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:

Consult your local authorities for regulations. Preferred waste management: recycle or reuse, incinerate with energy recovery, disposal in a licensed facility. Disposal facility should be compliant with state, local and federal government regulations.

SECTION XIV -- TRANSPORTATION INFORMATION

D.O.T. PROPER SHIPPING NAME (49CFR172.101): None

HAZARDOUS SUBSTANCE (40CFR116): N/A

REPORTABLE QUANTITY (RQ): N/A

D.O.T. HAZARD CLASSIFICATION (49CFR172.101): Non-regulated

D.O.T. PLACARDS REQUIRED: None

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POISON CONSTITUENT	(49CFR173.343)): N/A
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BILL OF LADING DESCRIPTION: Synthetic organic dust suppressant

C NO.:

UN/NA CODE: N/A

SECTION XV-- REGULATORY INFORMATION

EPA SARA Title III hazard class: None

OSHA HCS hazard class: Non-OSHA hazardous (29CFR1910.1200)

EPA SARA Title III Section 313 (40CFR372) Toxic Chemicals present in quantities greater

than the "de minimus" level are:

None

This product is not a "controlled product" under the Canadian Workplace Hazardous Material Information System (WHMIS)

SECTION XVI -- OTHER INFORMATION

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ABBREVIATIONS AND SYMBOLS:

N.D. - Not Determined N.A. - Not Applicable N.T. - Not Tested

- LESS THAN > - MORE THAN