

MATERIAL SAFETY DATA SHEET

IDENTITY: DSC-30

SECTION I - Preparation/Product Information

MANUFACTURED FOR AND SUPPLIED BY: PolyOne Corporation
TELEPHONE NUMBER: (330) 837-8679
DATE PREPARED: June 10, 1997
PREPARER: Health, Safety, & Environment
PRODUCT USE: Rubber Additive
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SECTION II - Ingredients/Identity Information

Table with 5 columns: COMPONENTS, CHEMICAL IDENTITY/CAS#, EXPOSURE LIMITS (PEL, TLV, OTHER), TOXICITY (LD50/LC50), AMOUNT (%). Rows include Polysulfide Silanes, Calcium Silicate, and Ethyl Alcohol (Ethanol).

SECTION III - Physical/Chemical Characteristics

BOILING POINT: Not Available
FREEZING POINT: Not Available
VAPOR PRESSURE (mm Hg): Not Available
VAPOR DENSITY (AIR=1): Not Available
SOLUBILITY IN WATER: Reacts Slowly
APPEARANCE (PHYSICAL STATE) AND ODOR: Powder; Tan Odor; Mild
SPECIFIC GRAVITY (H2O=1): 1.32
pH: Not Determined
ODOR THRESHOLD (ppm): Not Determined
COEF. WATER/OIL DIST.: Not Applicable
EVAPORATION RATE: Slower than n-Butylacetate

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SECTION IV - Fire and Explosion Hazard Data  
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FLASH POINT (Method): 132°F (PMCC ASTM D93)

EXTINGUISHING MEDIA: CO<sub>2</sub> and dry chemical for small fires. Apply alcohol or all- purpose-type foam by manufacturer's recommended techniques for large fires.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus and protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Reaction with water can be rapid and exothermic. The addition of water can generate ethanol. Ethanol (55°F flash point) may accumulate in the head space of the container. Eliminate all ignition sources when opening.

HMIS RATING: 2

FLAMMABLE LIMITS LEL: Not Determined  
UEL: Not Determined

AUTOIGNITION TEMPERATURE: Not Determined

SENS. TO MECHANICAL IMPACT: Not Determined

SENS. TO STATIC DISCHARGE: Not Determined

HAZARDOUS COMBUSTION PRODUCTS: SiO<sub>x</sub>, SO<sub>x</sub>, CO<sub>x</sub>. CO is highly toxic if inhaled; CO<sub>2</sub> in sufficient concentration can act as an asphyxiant. Acute overexposure to the products of combustion may result in irritation of the respiratory tract.

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SECTION V - Reactivity Data  
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STABILITY

STABLE: X

UNSTABLE:

CONDITIONS TO AVOID (Cond. of Reactivity): None Known

INCOMPATIBILITY (Materials to Avoid): Reacts with water or moisture to liberate ethanol.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: SiO<sub>x</sub>, SO<sub>x</sub>, CO<sub>x</sub>

HAZARDOUS POLYMERIZATION

MAY OCCUR:

WILL NOT OCCUR: X

CONDITIONS TO AVOID: None Known

HMIS RATING: 1

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SECTION VI - Health Hazard Data  
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PRIMARY ROUTES OF EXPOSURE

INHALATION: SKIN CONTACT: X  
SKIN ABSORPTION: INGESTION: X EYE CONTACT:

HEALTH HAZARDS

ACUTE: May cause minor skin irritation with itching and possible slight local redness. Ingestion may cause dizziness, faintness, drowsiness, decreased awareness and responsiveness, euphoria, abdominal discomfort, nausea, vomiting, staggering gait, lack of coordination and coma.

CHRONIC: Long term repeated oral exposure to ethanol may result in the development of progressive liver injury with fibrosis.

SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH: The following information is based on ethanol: The International Agency for Research on Cancer (IARC) has determined that the consumption of alcoholic beverages is causally related to the occurrence of malignant tumors of the oral cavity, pharynx, larynx, esophagus and liver in humans. The carcinogenic response attributed to drinking alcoholic beverages has not been verified in studies with laboratory animals. Established uses of denatured ethanol and non-beverage uses of pure ethanol are not considered to pose any significant cancer hazard. Repeated ingestion of ethanol by pregnant mothers has been shown to adversely affect the central nervous system of the fetus, producing a collection of effects which together constitute the fetal alcohol syndrome. These include mental and physical retardation, disturbances of learning, motor and language deficiencies, behavioral disorders, and small size head.

CARCINOGENICITY

NTP: No IARC: No OSHA: No

SIGNS AND SYMPTOMS OF EXPOSURE: See Health Hazards above.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Repeated exposure to ethanol may aggravate liver injury produced from other causes.

OECD TEST VALUES FOR:

IRRITANCY: Not Determined REPRODUCTIVE TOXICITY: Not Determined  
SENSITIZATION: Not Determined TERATOGENICITY: Not Determined  
MUTAGENICITY: Not Determined

SYNERGISTIC PRODUCTS: None Known

HMIS RATING: 1

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SECTION VII - First Aid Measures  
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EMERGENCY AND FIRST AID PROCEDURES

INHALATION: Move to fresh air. No emergency care anticipated.

INGESTION: Drink 2 glasses of water, induce vomiting. Consult a physician.

SKIN CONTACT: Wash with soap and water.

EYE CONTACT: Flush with water for 15 minutes. If irritation develops, consult a physician.

NOTES TO PHYSICIAN:

The following information is based on ethanol: Symptoms vary with the alcohol level of the blood. Mild alcohol intoxication occurs at blood levels between 5-15% and approximately 25% of individuals will show signs of intoxication at these levels. Above 15% the person is definitely under the influence of ethanol and 50-95% of individuals at this level are clinically intoxicated. Severe poisoning occurs when the blood ethanol level is .3-.5%. Below .5% the individual will be comatose and death can occur. The unabsorbed ethanol should be removed by gastric lavage after intubating the patient to prevent aspiration. Avoid the use of depressant drugs or the excessive administration of fluids. In the presence of hypoglycemia, administer 5-10% glucose intravenously, plus thiamine 100 mg intramuscularly. Hemodialysis is indicated if the blood ethanol is above 5 mg/ml. Naloxone may be useful to reverse clinical alcoholic coma and .4-1.2 mg intravenously may arouse ethanol-intoxicated patients.

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SECTION VIII - Precautions for Safe Handling and Use  
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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Collect for disposal. Avoid runoff to sewers or waterways. This product may be toxic to fish; avoid discharge to natural waters.

WASTE DISPOSAL METHODS: In accordance with all Federal, State, and Local regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep away from heat, sparks, and open flames. Avoid contact with eyes, skin, and clothing.

OTHER PRECAUTIONS: Hot organic chemical vapors or mists are susceptible to sudden spontaneous combustion when mixed with air. Ignition may occur at temperatures below those published in the literature as "autoignition" or "ignition" temperatures. Ignition may occur at typical elevated-temperature process conditions, especially in processes operating under vacuum if subjected to sudden ingress of air, or outside process equipment operating under elevated pressure if sudden escape of vapors or mists to the atmosphere occurs.

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SECTION IX - Control Measures  
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RESPIRATORY PROTECTION: (Specify Type)  
A NIOSH/MSHA approved respirator above PEL or TLV or as necessary.

VENTILATION

LOCAL EXHAUST: Recommended to minimize exposure.

MECHANICAL (General): Recommended to minimize exposure.

PROTECTIVE GLOVES: Impervious

EYE PROTECTION: Safety glasses with side shields.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Eyewash station.

WORK/HYGENIC PRACTICES: Wash thoroughly after handling and before eating or smoking.

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SECTION X - Additional Information  
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SPECIAL SHIPPING INFORMATION: Not Available

TSCA INVENTORY STATUS:  
Chemical components are listed on the TSCA Inventory.

SARA TITLE III:  
This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40 CFR 372:

None

RCRA STATUS:  
The following chemical components are listed under (40 CFR 261):

Ignitable D001

CALIFORNIA PROPOSITION 65:  
This product contains Toluene (<100 ppm) which the State of California has found to cause reproductive harm. (Toluene is on the 1/1/91 repro-toxicant list.)

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