MATERIAL SAFETY DATA SHEET
POLYESTER G-41 DLC®-A

Date Revised: March 26, 2004

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

TRADE NAME: POLYESTER G-41 DLC-A
CHEMICAL NAME: Polyester adipate plasticizer on silicon dioxide.

HMIS RATING	
HEALTH	1
FLAMMABILITY	1
REACTIVITY	0

Company: NATROCHEM, INC.
P.O. Box 1205
Savannah, GA 31402-1205

Telephone Numbers:
Transportation Emergencies:
CHEMTREC (U.S.A.): (800) 424-9300 (24 hours)
CHEMTREC (International): (202) 483-7616 (24 hours, call collect)
Product Information: (912) 236-4464 (EST, 8:00AM – 4:00PM M-F)

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT NAME	CAS#	PERCENT
Polyester Adipate	NJTSRN: 8009285007P	72
Silicon Dioxide	112926-00-8	28

Contains no detectable crystalline silica (detection limit <0.01% by weight).

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

CAUTION! May cause irritation.

EYE: Avoid contact with eyes, may cause irritation and pain. Symptoms include stinging, tearing, and redness.
SKIN: Avoid prolonged, repeated, or excessive contact with skin, may cause irritation and discomfort.
INGESTION: N/DA
INHALATION: Avoid prolonged or repeated inhalation of dust, may irritate the respiratory tract or cause dizziness.

4. FIRST AID MEASURES

INHALATION: If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult. Person should be moved to fresh air environment.

EYE/SKIN CONTACT: In case of contact, immediately flush eyes and skin with plenty of water (soap and water on skin) for at least 15 minutes. If drying occurs a topical lotion should be applied. Get medical attention if irritation persists.

INGESTION: Not a likely route of exposure.

NOTES TO PHYSICIAN: Treat symptomatically.

5. FIRE FIGHTING MEASURES

FLASH POINT: 550° F

EXTINGUISHING MEDIA: CO_2, Dry Chemical, Water Fog

SPECIAL FIREFIGHTING PROCEDURES: A MSHA/NIOSH approved self-contained breathing apparatus should be worn. Use water spray to cool fire-exposed containers.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Water may cause frothing.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Contain spill with inert material (sand, earth, sawdust), sweep up and transfer to separate containers for disposal. Wash floor area with hot water solution. Remove contaminated clothing and wash before reuse. Wash affected skin areas with soap and water. Keep spills out of all sewers and bodies of water.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN DURING HANDLING AND STORAGE:
Store in a dry area. When transferring material into flammable solvents, use proper grounding to avoid electrical sparks. Product surface alterations caused by calcining or mixing with additives may alter toxicological properties.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:
8-hour Time Weighted Average (TWA); 15-minute Short-Term Exposure Limit (STEL)

OSHA: 6 mg/m^3 (total dust) TWA. 29 CFR 1910.1000

ACGIH: 10 mg/m^3 (total amorphous dust) TWA. 3 mg/m^3 (respirable nuisance particulate) TWA.

RESPIRATORY PROTECTION: Use NIOSH approve dust filter respirator for exposure above permissible exposure limits. The respiratory use limitations made by NIOSH or the manufacturer must be observed. Respiratory protection programs must be in accordance with 29 CFR 1910.134.

VENTILATION: General or local exhaust sufficient to maintain employee exposure below permissible exposure limits.

EYE AND FACE PROTECTION: If eye exposure to powder is likely, use tight fitting protective goggles.

PROTECTIVE GLOVES: Cloth. Leather. Rubber

OTHER PROTECTIVE EQUIPMENT: Boots, apron, or chemical suits should be used when necessary to prevent skin contact. Personal protective clothing and use of equipment must be in accordance with 29 CFR 1910.132 (general requirements), .133 (eye and face protection), and .138 (hand protection).

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: N/A
SPECIFIC GRAVITY (Water = 1): 1.28
SOLUBILITY (wt.% in water): Negligible
VAPOR PRESSURE: 0.01
PHYSICAL STATE: Free-flowing powder
COLOR: Off-white

VAPOR DENSITY (Air=1): N/A
FREEZING/MELTING POINT:
% VOLATILE: 0.0
EVAPORATION RATE: N/A
ODOR: Mild

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.

HAZARDOUS POLYMERIZATION: Will not occur under normal circumstances.

INCOMPATIBILITY (CONDITIONS TO AVOID): High temperatures (>800°C) treatment (calcining). Avoid alteration of product properties before use. Calcining, which may result in crystalline formation, or mixing with additives may alter toxicological properties.

HAZARDOUS THERMAL DECOMPOSITION/COMBUSTION PRODUCTS:
None known under normal use conditions; oxides of carbon when burned.

11. TOXICOLOGICAL INFORMATION

ACUTE INHALATION LC50: Nuisance dust
ACUTE DERMAL LD50 (rabbits): >2.0 g/kg
SKIN IRRITATION: Mildly irritating.
EYE IRRITATION: Mildly irritating.
ACUTE ORAL LD50 (rats): Estimated >5 g/kg. Not significantly toxic.

CHRONIC EFFECTS/CARCINOGENICITY: This product is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.

MEDICAL CONDITIONS AGGRAVATED: None known.

EFFECTS OF OVEREXPOSURE:

ACUTE: Excessive contact with powder can cause drying of mucous membranes of nose, eyes, and throat due to absorption of moisture and oils. This material can also cause nasal irritation and nosebleeds. Eye contact with powder can result in mild irritation.

CHRONIC: An epidemiological study was conducted which included 165 precipitated silica workers who had been exposed an average time span of 8.6 years. Of these 165 workers, 44 had bee exposed for an average of 18 years. No adverse effects were noted in complete medical examinations (including chest roentgenograms) of these workers. Pulmonary function decrements were correlated only with smoking and age but not with the degree of duration of dust exposures. Laboratory studies have also been conducted in small animals via inhalation to levels of precipitated silica dust of up to 126 mg/m^3 per periods from six months to two years. Although precipitated silica was temporarily deposited in the animals' lungs, most of the deposited material was cleared soon after the dust exposure ended. The results of the studies performed by, or known to, PPG indicate a very low order of pulmonary activity for synthetic precipitated silicas.

PPG recommends that person with breathing problems or lung disease should not work in dusty areas unless a physician approves and certifies their fitness to wear respiratory protection.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:
EC_0: >1000 ppm (daphnia magna) (24-hour acute immobilization test)
EC_0: >10,000 ppm (rainbow trout) (4-day static study)
EC_0: >10,000 ppm (freshwater fish (96-hour static acute toxicity study)

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD:
Waste from this product may be disposed of in a sanitary landfill if state and local regulations permit. Care should be taken to avoid creation of dust during disposal operations.

14. TRANSPORT INFORMATION

USA DOT DESCRIPTION:
Proper Shipping Name: Not regulated

15. REGULATORY INFORMATION

USA TSCA: Silicon dioxide is listed on the TSCA Inventory as its general CAS# 7631-86-9
EUROPE EINECS: Silicon dioxide is listed on EINECS (231-545-4) as its general CAS# 7631-86-9
CANADA DSL: Silicon dioxide is listed on the Canadian DSL.
AUSTRALIA AICS: Silicon dioxide is listed on AICS.
KOREA ECL: Silicon dioxide is listed on ECL.
JAPAN MITI (ENCS): This product is listed on MITI.
PHILIPPINES PICCS: Silicon dioxide is listed on the Philippines Inventory of Chemicals and Chemical Substances (PICCS).

SARA TITLE III:
SARA (311,312) Hazard Class: Silicon Dioxide – Acute Health Hazard.
SARA (313) Chemicals: Not listed.
SARA Section 302: Not listed as an Extremely Hazardous Substance.

16. OTHER INFORMATION

Revision Note: Converted to International format.
Prepared by: James L. Pye, Jr.
Title: Safety Coordinator

N/A = Not applicable N/D = Not determined N/DA = No Data Available N/E = Not established

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