

Flexsys America L.P.

Material Safety Data Sheet

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Draft Date: 2/11/00

MSDS Number: FLXP0044

SANTOWEB D

Section 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product: **SANTOWEB D**
MSDS Number: FLXP0044
Chemical Name: Treated cellulose fibers
Synonyms: Short fiber rubber composite

Supplying Company: Flexsys America L.P.
260 Springside Drive
Akron, Ohio 44333 USA

**EMERGENCY NUMBERS: CHEMTREC 800-424-9300 TOLL FREE [USA and TERRITORIES]
703-527-3887 ELSEWHERE [COLLECT CALLS ACCEPTED]
CANUTEC 613-996-6666 [Canada] SETIQ 91-800-00-214 [Mexico]**

Section 2. COMPOSITION/INFORMATION ON INGREDIENTS

Component:	CAS Number:	Usage Percentage:
Bleached Hardwood Pulp	65996-61-4	65-70
Carbon Black *	1333-86-4	3-5
Severely solvent refined light paraffinic petroleum oil *	64741-89-5	0-3
Resorcinol *	108-46-3	1-2
Severely solvent refined heavy paraffinic petroleum oil *	64741-88-4	10-13
Resorcinol homopolymer, resorcinol-formaldehyde resin	65876-95-1	4-6
Styrene-butadiene copolymer	9003-55-8	7-9

* This material is identified as a hazardous chemical under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Hazardous Products Act (Canada)

Section 3. HAZARDS IDENTIFICATION

CAUTION!

Emergency Overview: PROCESSING RELEASES VAPORS OR FUMES WHICH MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
CONTAINS CARBON BLACK - POSSIBLE HUMAN CARCINOGEN

Potential Routes of Exposure:

Eye Contact: Material and processing fumes may cause eye irritation.
Skin Contact: Processing fumes may cause skin irritation.
Inhalation: Processing fumes may cause respiratory tract irritation. Repeated or prolonged exposure to vapors and fumes may cause nausea, drowsiness, weakness and headache.
Ingestion: Practically non-toxic if swallowed.

MARKETED BY
**HARWICK STANDARD
DISTRIBUTION CORPORATION**

60 S. Seiberling Street • Akron, Ohio 44305

Section 4. FIRST AID MEASURES

EYE CONTACT WITH PROCESSING FUMES OR VAPORS: Flush eyes with plenty of running water for at least fifteen minutes. Remove contact lenses if worn. Hold eyelids apart to ensure complete rinsing of entire eye surface. Get medical attention if irritation develops.

SKIN CONTACT WITH PROCESSING FUMES OR VAPORS: Flush the area with water. Promptly remove contaminated clothing and wash the affected area with plenty of soap and water. Launder clothing and clean protective equipment before reuse. Get medical attention if skin irritation develops.

IF FUMES OR VAPORS ARE INHALED: Remove person to fresh air. If breathing is difficult, give oxygen. If breathing stops, begin artificial respiration and get immediate medical attention.

Section 5. FIRE FIGHTING MEASURES

Black, fibrous aggregate with a rubbery odor.

Flash Point °F/°C: >350°F / 176°C

Autoignition Temp °F/°C: 368°F / 187°C

Flash Method: Pensky-Martens Open Cup

Extinguishing Method: Water spray (fog), foam, dry chemical or carbon dioxide (CO₂).

Procedures and Equipment: Firefighters and other emergency responders who may be exposed to dust, fibers and products of combustion should wear positive pressure/pressure demand self-contained breathing apparatus, impervious protective clothing and boots. Dike fire water for later disposal. Do not allow contaminated water to enter storm sewers, watersheds and waterways. Equipment should be thoroughly decontaminated after use.

Hazardous Products: Carbon monoxide is emitted when the material is ignited.

Fire & Explosion Hazards: Not available at this time.

Section 6. ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK:

Wear protective clothing and gloves to avoid skin contact.

Shovel, scoop, sweep or vacuum up spilled material. Place in a clean, dry covered container for reuse or disposal.

CERCLA REPORTABLE QUANTITY (RQ): Not Applicable

Section 7. HANDLING AND STORAGE

Handling: Handle in accordance with good Industrial Hygiene and safety practices. Wash exposed skin thoroughly after handling and before eating, drinking, smoking or applying makeup.

Avoid breathing process fumes and vapors.

Process using adequate ventilation.

Empty container retains vapor and product residue. Observe all label safeguards until container is destroyed.

Do not reuse this container for other materials.

Storage: Store closed container in a cool, dry, well-ventilated area

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Keep away from sources of ignition.
Avoid temperature extremes and high humidity.
Avoid exposure to direct sunlight.
DO NOT DOUBLE STACK!

Section 8. EXPOSURE CONTROL/PERSONAL PROTECTION

EYE PROTECTION:

Good industrial practice should be used to avoid eye contact. Where there is significant potential for eye contact, wear appropriate eye protection and have eye flushing equipment available in the immediate area.

SKIN PROTECTION:

Wear protective gloves and clothing to minimize skin contact. Wash hands and contaminated skin with soap and water after handling and before eating, drinking, smoking or applying cosmetics. Change work clothes promptly if contaminated and launder before reuse.

RESPIRATORY PROTECTION:

Avoid breathing dust or process vapors. Use NIOSH/MSHA approved respiratory protection equipment when airborne exposure is excessive. Observe respirator use limitations specified by NIOSH/MSHA or the manufacturer. Respiratory protection programs must comply with 29 CFR 1910.134.

VENTILATION:

Provide natural or mechanical ventilation to minimize exposure. If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

AIRBORNE EXPOSURE LIMITS

Product: Cellulose fiber (pulp) treated with bonding and dispersing agents

OSHA PEL/8-Hr TWA: None Established

ACGIH TLV/8-Hr TWA: None Established

OSHA/ACGIH Nuisance Dust levels

OSHA PEL/8-Hr TWA: 15 mg/m³ (Total Dust)

OSHA PEL/8-Hr TWA: 5 mg/m³ (Respirable Dust)

ACGIH TLV/8-Hr TWA: 10 mg/m³ (Total Dust)

NOTE: History of use has not shown this material to create a nuisance dust. Control of the product within these levels should result in component levels below the applicable limits stated below.

Component: Carbon Black

OSHA PEL/8-Hr TWA : 3.5 mg/m³

ACGIH TLV/8-Hr TWA: 3.5 mg/m³

Component: Resorcinol

OSHA PEL/8-Hr TWA: 10 ppm (45 mg/m³)

OSHA STEL: 20 ppm (90 mg/m³)

ACGIH TLV/8-Hr TWA: 10 ppm (45 mg/m³)

ACGIH STEL: 20 ppm (90 mg/m³)

Component: Severely solvent refined heavy and light paraffinic petroleum oils

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OSHA PEL/8-Hr TWA: 5 mg/m³

ACGIH TLV/8-Hr TWA: 5 mg/m³

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Black, fibrous aggregate
Odor: Rubbery
Specific Gravity: Not available at this time.
Water Solubility: Insoluble
Other Solubility: Not available at this time.
Density: 1.4 g/ml
Note: Bulk Density: 500 kg/m³
Heat Loss: 0.75-3.00%
Ash: 0.6 max

Section 10. STABILITY AND REACTIVITY

Stability: Product is stable under normal conditions of storage and handling.

Materials to avoid: None known.

Hazardous decomposition products: Combustion produces carbon monoxide

Hazardous polymerization: Does not occur

Section 11. TOXICOLOGICAL INFORMATION

Target organs: Skin, eyes, respiratory tract

Oral LD50 (rat):	>12,000 mg/kg	Practically Non-Toxic
Dermal LD50 (rabbit):	> 7,940 mg/kg	Practically Non-Toxic
Eye Irritation (rabbit):	4.4/110.0	Slightly Irritating
Skin Irritation (rabbit):	0.3/8.0	Practically Non-Irritating

Skin: A similar SANTOWEB fiber tested in controlled skin contact studies with human volunteers produced no primary or cumulative irritation, and no allergic skin reactions were observed.

COMPONENTS

CARBON BLACK: Exposure to carbon black may cause respiratory tract irritation. Fibrosis and other physical changes have been reported in the lungs, respiratory passages and mouth following prolonged and repeated inhalation exposures to carbon black dust. Repeated skin contact may lead to skin irritation and lesions. Toxicity tests show carbon black to be practically non-irritating to skin and practically non-toxic orally. Repeated inhalation exposures produced lung changes in various laboratory animals. No genetic effects were observed in standard tests using animal and bacterial cells as well as insects. No tumors were observed after repeated oral and skin exposure as well as repeated inhalation exposures.

RESORCINOL: Animal studies indicate that resorcinol is moderately toxic orally, slightly toxic after skin application, and severely irritating to eyes. No evidence of toxicity was reported in laboratory animals after single inhalation or repeated exposure. No significant increase in tumors and no birth defects were observed in animal studies. No adverse genetic changes were reported in standard tests using bacterial, yeast, or

animals cells or insects.

SEVERELY SOLVENT-REFINED HEAVY and LIGHT PARAFFINIC PETROLEUM OILS: These oils are reported to have a low order of acute oral and dermal toxicity. Eye contact with the liquid concentrated material may cause temporary pain, tearing and redness. Prolonged and repeated contact with the liquid may remove the oils from the skin to produce dermatitis. Exposure to high atmospheric concentrations of the vapors and mists of petroleum oils of this type are irritating to the eyes, skin and respiratory tract. The oils can be drawn into the lungs during spontaneous or induced vomiting following accidental ingestion of the liquid material. Symptoms of the resulting injury can include coughing, choking and increased breathing and heart rates. Swallowing of larger quantities of the liquid material may cause nausea and diarrhea due to a laxative effect.

NOTE: The International Agency for Research on Cancer (IARC) evaluates the carcinogenic risk to humans from exposure to chemicals, chemical mixtures and other agents by reviewing existing data. This Agency has classified the following product components:

Carbon Black - Group 2B - Possible human carcinogen

Resorcinol - Group 3 - Not classifiable as to human carcinogenicity

Section 12. ECOLOGICAL INFORMATION

Acute aquatic toxicity tests have not been performed on this material. Data on individual components are listed below:

RESORCINOL

96-Hr LC50 Trout:	>100 mg/l	Practically Non-Toxic
96-Hr LC50 Goldfish:	57.4 mg/l	Slightly Toxic
96-Hr LC50 Daphnia Magna:	0.25 mg/l	Highly Toxic

Biodegradation tests on resorcinol reported in the literature suggest that this material would meet the OECD guidelines for classification of "ready biodegradability".

Section 13. DISPOSAL CONSIDERATIONS

When discarded, this material is not a hazardous waste as that term is defined by the Resource Conservation and Recovery Act (RCRA), 40 CFR Part 261. Disposal via incineration is recommended.

Burn in an approved incinerator or landfill in a secure landfill in accordance with all applicable federal, state and local regulations.

Empty containers retain product residue. Burn in an approved incinerator or landfill in a secure landfill in accordance with all applicable federal, state and local regulations.

Section 14. TRANSPORT INFORMATION

Not regulated in transport.

Section 15. REGULATORY INFORMATION

Worldwide chemical inventory status: TSCA USA
(all components) DSL Canada
AICS Australia
EINECS Europe

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ECL Korea

CERCLA: Not Applicable
FDA: Not Regulated For Use In 21 CFR

SARA Hazard Notification:
Hazard Categories under Title III Rules: Immediate
Title III Section 313 Toxic Chemicals: None

Component "Resorcinol" is regulated as follows:
Clean Water Act Section 311 Hazardous Substances
Clean Air Act Section 111 Volatile Organic Compounds (VOCs)
RCRA Hazardous Substance
CERCLA Hazardous Substance
ACGIH Threshold Limit Value Chemicals
National Toxicology Program (NTP) Testing Substance
DOT Hazardous Material
DOT Hazardous Substance
Massachusetts Substance List
New Jersey Right-To-Know Hazardous Substance List
Pennsylvania Hazardous Substance List
WHMIS Ingredient Disclosure List (Canada)

Component "Carbon Black" appears on the following lists:
TSCA Chemical Hazard Information Profile (CHIP) Substances
NIOSH Recommendation Substances
OSHA Air Contaminants
ACGIH Threshold Limit Value Substances
IARC Group 2-B Substances
WHMIS Ingredient Disclosure List (Canada)
Massachusetts Substance List
Pennsylvania Hazardous Substance List
New Jersey Right-To-Know Hazardous Substance List

Hazard Rating	Health	Flammability	Reactivity	Other
NFPA	1	1	0	N/A
HMIS	1	1	0	N/A

Section 16. OTHER INFORMATION

Last Revision: Add CANUTEC and SETIQ phone numbers (Section 1)

FOR NON-EMERGENCY INFORMATION: FLEXSYS AMERICAS PRODUCT SAFETY (330) 668-8281

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