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MATERIAL SAFETY DATA SHEET

TARCEL™ 40-A

Date Revised: November 8, 1993

Supersedes: April 25, 1989

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SECTION I - PRODUCT IDENTIFICATION

TRADE NAME: Tarcel 40-A
CHEMICAL NAME: Synthetic pine tar on silicon dioxide

HMIS RATING	
Health	1
Flammability	1
Reactivity	0

SECTION II - HAZARDOUS INGREDIENTS

The component(s) listed below is identified as a hazardous chemical under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

INGREDIENT	CAS REGISTRY	PERCENT
Silicon Dioxide	7631-86-9	26-30
Tall Oil Pitch	8016-81-7	56
Crude Tall Oil	8002-26-4	12
#2 Diesel Oil	68425-08-1	4

SECTION III - PHYSICAL DATA

Boiling Point: N/A	Specific Gravity: 1.138
Vapor Pressure (mm Hg): N/D	Percent Volatiles: Nil
Vapor Density (Air = 1): N/D	Evaporation Rate: N/D
Solubility in Water: Negligible	
Appearance and Odor: Tan, free flowing powder with pine tar odor.	

SECTION IV - FIRE & EXPLOSION DATA

FLASH POINT (Method Used): 300°F (COC)
FLAMMABLE LIMITS: N/D
AUTOIGNITION TEMPERATURE: N/D

EXTINGUISHING MEDIA: CO2, dry powder, chemical foam, water fog, or mist.

SPECIAL FIRE FIGHTING PROCEDURES: Avoid use of water, other than light fog or mist.

UNUSUAL FIRE & EXPLOSION HAZARDS: Liquid evaporates and forms vapor (fumes) which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment and electrical motors and switches.

SECTION V - PERMISSIBLE EXPOSURE LIMITS

Silicon Dioxide: OSHA: 6 mg/m3 (total dust), 8 hr. TWA; 29 CFR 1910.1000 (rev. 3/1/89). PPG Internal Permissible Exposure Limit (IPEL); Synthetic Precipitated Silicate: 5 mg/m3 (respirable dust), 8 hr. TWA.

MARKETED BY
**HARWICK STANDARD
DISTRIBUTION CORPORATION**
60 S. Seiberling Street • Akron, Ohio 44305

SECTION VI - HEALTH HAZARD DATA

CHRONIC HEALTH EFFECTS: Silicon Dioxide: An epidemiological study was conducted which included 165 precipitated silica workers who had been exposed for an average of 18 years. No adverse effects were noted in complete medical examination (including chest roentgenograms) of these workers. Pulmonary function decrements were correlated only with smoking and age but not with the degree or duration of dust exposure. Laboratory studies have also been conducted in small animals via inhalation to levels of precipitated silica dust of up to 126 mg/m³ for 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 all studies performed by, or known to, PPG indicate a very low order of pulmonary activity for synthetic precipitated silica.

PRIMARY ROUTE OF ENTRY- Inhalation, eye, skin.

CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN: None.

NTP: No **IARC:** No **OSHA:** No

EFFECTS OF EXPOSURE-

EYES- Mildly irritating. Excessive contact with powder can cause drying of mucous membranes of eyes due to absorption of moisture and oils.

SKIN- Mildly irritating. Prolonged or repeated contact may cause redness, burning and drying and cracking of the skin. Contact may result in skin absorption but symptoms of toxicity are not anticipated by this route alone under normal conditions of use. Persons with pre-existing skin disorders may be more susceptible to the effects of this material.

INHALATION- Nuisance dust. Excessive contact with powder can cause drying of mucous membranes of nose and throat due to absorption of moisture and oils. This material can also cause nasal irritation and nosebleeds. While this material has a low degree of toxicity, breathing high concentrations of vapors or mists may cause flushing, blurred vision, nausea, and signs of nervous system depression (e.g. headache, drowsiness, dizziness, loss of coordination and fatigue). Exposure to high concentrations may cause loss of consciousness, convulsions, respiratory collapse and death. Respiratory symptoms associated with pre-existing lung disorders (e.g. asthma-like conditions) may be aggravated by exposure to this material.

INGESTION- ASPIRATION HAZARD. May cause gastro-intestinal disorders. this material can enter lungs during swallowing or vomiting and cause lung inflammation and damage. Ingestion of excessive quantities of this material may cause irritation of the digestive tract and signs of nervous system depression (e.g. headache, drowsiness, dizziness, loss of coordination and fatigue).

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE- Persons with breathing problems or lung disease should not work in dusty areas unless a physician approves and certifies their fitness to wear respiratory protection.

SECTION VII - EMERGENCY & FIRST AID PROCEDURES

EYE CONTACT: If irritation or redness develops, move victim away from exposure and into fresh air. Immediately rinse with clean water for 15 minutes. Retract eyelids often. If irritation persists, seek medical attention.

SECTION VII - EMERGENCY & FIRST AID PROCEDURES

SKIN CONTACT: Immediately remove contaminated clothing. Wash skin thoroughly with mild soap and water. Flush with lukewarm water for 15 minutes. Seek medical attention if ill effect or irritation develops.

INHALATION: If overcome by exposure, remove victim to fresh air. If symptoms persist, call a physician immediately. If victim is not breathing, immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

INGESTION: DO NOT induce vomiting or give anything by mouth because this material can enter lungs and cause sever lung damage. If victim is drowsy or unconscious, place on side with head down. Seek medical attention.

NOTES TO PHYSICIAN: Exposure to high concentrations of this material (e.g. in enclosed spaces or with deliberate abuse) may be associated with cardiac arrhythmias. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. Other drugs with less arrhythmogenic potential should be considered. If sympathomimetic drugs are administered, observe for the development of cardiac arrhythmias.

SECTION VIII - REACTIVITY DATA

STABILITY: Stable.

MATERIALS TO AVOID- Avoid alteration of product properties before reuse. Calcining, which may result in crystalline formation or mixing with additives may alter toxicological properties. Strong oxidizing agents or alkali.

CONDITIONS TO AVOID- Avoid high temperatures (>800 C) treatment. Very high temperatures and open flames.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon, and reactive hydrocarbons (aldehydes, aromatics, etc.).

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION IX - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: MINIMIZE SPILL AREA. Vacuum spill material and place in closed plastic bags for disposal.

WASTE DISPOSAL METHOD: In accordance with local, state, and federal regulations.

SECTION X - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Use a respirator such as 3M 9900 or equivalent for protection against pneumoconiosis producing dusts.

VENTILATION: Provide explosion proof ventilation as required to control airborne dust levels. The sum total of all ingredients may emit vapors during normal processing. All possible health effects are not known and individual sensitivities will vary. Effective exhaust ventilation should always be provided to draw dust, fumes and vapors away from workers to prevent routine inhalation. Ventilation should be adequate to maintain ambient workplace atmosphere below the limits listed in Section V.

SECTION X - SPECIAL PROTECTION INFORMATION

PROTECTIVE GLOVES: Impervious gloves to protect against contact with product.

EYE PROTECTION: Chemical goggles.

OTHER PROTECTIVE EQUIPMENT: Protective clothing, eye wash station, safety shower.

SECTION XI - SPECIAL PRECAUTIONS

HANDLING AND STORAGE: Handling can create explosive dust clouds. Eliminate ignition sources, use explosive proof equipment. Conveying and processing equipment should be spark-proof, well bonded and grounded. Avoid dust accumulations.

OTHER PRECAUTIONS: Wash with soap and water before eating, drinking, smoking, or using toilet facilities. Launder contaminated clothing before reuse.

SECTION XII - ENVIRONMENTAL INFORMATION

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 (40 CFR 372):

CAS REGISTRY #	CHEMICAL NAME	PERCENT BY WEIGHT
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NONE.

This information must be included in all MSDS's that are copied and distributed for this material.

THE FOLLOWING INFORMATION MAY BE USEFUL IN COMPLYING WITH VARIOUS STATE AND FEDERAL LAWS AND REGULATIONS UNDER VARIOUS ENVIRONMENTAL STATUES:

Reportable Quantity (RQ), EPA Regulation 40 CFR 302 (CERCLA Section 102):

No RQ for product or any constituent greater than 1% or 0.1% (carcinogen).

Threshold Planning Quantity (TPQ), EPA Regulation 40 CFR 355 (SARA Sections 301-313):

No TPQ for product or any constituent greater than 1% or 0.1% (carcinogen).

Hazardous Chemical Reporting, EPA Regulation 40 CFR 370 (SARA Sections 311-312):

<u>Component Name</u>	<u>Physical Hazard</u>	<u>Health Hazard</u>
Silicon Dioxide	Acute	Irritant, inhalation
Tall Oil Pitch	Acute and chronic	Irritant, eye and skin
Crude Tall Oil	Acute and chronic	Irritant, eye and skin
#2 Diesel Oil	Combustible	Toxic

TOXIC SUBSTANCE CONTROL ACT: The components of this product are included on the TSCA Chemical Substance Inventory.

SECTION XII - ENVIRONMENTAL INFORMATION

TRANSPORTATION: Not regulated.

SECTION XIII - OTHER INFORMATION

Revision Note: Revised Date.

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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