



MATERIAL SAFETY DATA SHEET

1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: QuietShield 3105S

Manufacturer Name:

Federal-Mogul World Headquarters
26555 Northwestern Highway
Southfield, Michigan 48033
USA

Emergency Telephone:

24hr EP (INFOTRAC): 1-800-535-5053
International: (001) 352-323-3500

Non-emergency Telephone:

1-248-354-9844

Intended Use: Nonwoven material with attached scrim treated with binder.

Contact Person:

MSDS Request (voicemail) 1-248-354-9844

2 HAZARDS IDENTIFICATION

Emergency Overview

Physical State: Solid, Nonwoven

Color: Various

Odor: Odorless

Used as intended, this product is not expected to generate potentially hazardous quantities of dust. Processing may generate hazardous fumes and dusts.

Potential Health Effects

Inhalation: No inhalation hazard under normal conditions. Dust released from the material can enter the body by inhalation or ingestion. High concentrations of dust may irritate throat and respiratory system and cause coughing. May cause damage to mucous membranes in nose, throat, lungs and bronchial system.

Eye Contact: Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate the eyes.

Skin Contact: Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate skin.

Ingestion: Not relevant, due to the form of the product.

Chronic Health Effects: Repeated exposure to high concentrations of dust may adversely affect the lungs. Carbon black has caused cancer in experimental animals. Inhalation of airborne titanium dioxide dust may cause cancer.

Target Organ(s): | Lung |

Potential Physical / Chemical Effects: This product is not flammable or combustible. Will burn if involved in a fire.

OSHA Regulatory Status: Under some use conditions, this material may be considered to be hazardous in accordance with OSHA 29 CFR 1910.1200.

Environment: The product is not expected to be hazardous to the environment.

3 COMPOSITION / INFORMATION ON INGREDIENTS

General Information: QuietShield 3105S is a nonwoven material treated with a binder and die cut to shape.

Chemical Name	CAS-No.	Concentration*
†Titanium dioxide	13463-67-7	1 - 5%
†Carbon black	1333-86-4	1 - 5%

* All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

† This chemical is hazardous according to OSHA/WHMIS criteria.

4 FIRST AID MEASURES

Inhalation: In case of inhalation of dusts or fumes from heated product: Move the exposed person to fresh air at once. In case of persistent throat irritation or coughing: Seek medical attention and take along these instructions.

Eye Contact: Flush thoroughly with water. Do not rub eye. If irritation occurs, get medical assistance. If molten material contacts the eye, immediately flush with plenty of water for at least 15 minutes.

Skin Contact: Wash skin with soap and water. Get immediate medical attention if symptoms occur after washing. If burned by contact with hot material, cool molten material adhering to skin as quickly as possible with water, and see a physician for removal of adhering material and treatment of burn.

Ingestion: No adverse effects due to ingestion are expected.

Note to Physician: Treat symptomatically.

5 FIRE-FIGHTING MEASURES

Extinguishing Media: Extinguish with foam, carbon dioxide, dry powder or water fog.

Unsuitable Extinguishing Media: None.

Special Fire Fighting Procedures: Use fire-extinguishing media appropriate for surrounding materials.

Unusual Fire & Explosion Hazards: Will burn if involved in a fire. During fire, gases hazardous to health may be formed.

Hazardous Combustion Products: Aldehydes, Carbon Oxides, Hydrocarbons, Nitrogen Oxides,

Smoke, Sulfur Oxides

Protective Measures: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Flammability Class: NFPA Rating Fire = 0. Materials that will not burn.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions: Used as intended, this product is not expected to generate potentially hazardous quantities of dust. Avoid generation and spreading of dust. Avoid inhalation of dust and contact with skin and eyes. Wear suitable protective clothing and gloves. See Section 8 of the MSDS for Personal Protective Equipment.

Spill Cleanup Methods: If dust is generated during processing: Collect dust using a vacuum cleaner equipped with HEPA filter. Collect in containers and seal securely. For waste disposal, see section 13 of the MSDS.

Environmental Precautions: No specific precautions.

Notification Procedures: None.

7 HANDLING AND STORAGE

Handling: Used as intended, this product is not expected to generate potentially hazardous quantities of dust. Avoid contact with molten material. Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Observe good industrial hygiene practices. Keep the workplace clean.

Storage: Store in a cool, dry place. Store away from incompatible materials.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

Chemical Name	Source	Type	Exposure Limits	Notes
Carbon black (Inhalable fraction.)	US. ACGIH TLV	TWA	3 mg/m ³	
Carbon black	US. NIOSH Guide	IDLH	1750 mg/m ³	
Carbon black	US. OSHA Z-1 PEL	TWA	3.5 mg/m ³	
Titanium dioxide	US. ACGIH TLV	TWA	10 mg/m ³	
Titanium dioxide	US. NIOSH Guide	IDLH	5000 mg/m ³	
Titanium dioxide (Total dust.)	US. OSHA Z-1 PEL	TWA	15 mg/m ³	

Consult Canadian Provincial Regulations and/or Mexican Regulations on exposure limits, if applicable.

Engineering Controls: Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of dust.

Respiratory Protection: During dust-raising work or inhalation of hot/molten material: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program

should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Seek advice from supervisor on the company's respiratory protection standards.

Eye Protection: Wear dust-resistant safety goggles where there is danger of eye contact.

Hand Protection: When material is heated, wear gloves to protect against thermal burns. Suitable gloves can be recommended by the glove supplier.

Skin Protection: Wear appropriate clothing to prevent repeated or prolonged skin contact. Thermally protective, chemical resistant apron and long sleeves are recommended when volume of hot material is significant.

Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental Exposure Controls: Environmental manager must be informed of all major spillages.

9	PHYSICAL AND CHEMICAL PROPERTIES
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Color: Various

Odor: Odorless

Odor Threshold: Not applicable.

Physical State: Solid, Nonwoven

pH: Not applicable

Melting Point: No data available.

Freezing Point: Not applicable.

Boiling Point: Not applicable.

Flash Point: Not applicable.

Evaporation Rate: No data available.

Flammability Limit - Upper (%): Not applicable.

Flammability Limit - Lower (%): Not applicable.

Vapor Pressure: Not applicable.

Vapor Density (Air=1): Not applicable.

Specific Gravity: Not applicable.

Solubility in Water: Not applicable.

Solubility (Other): No data available.

Partition Coefficient (n-Octanol/water): No data available.

Autoignition Temperature: Not applicable.

Decomposition Temperature: No data available.

Volatile Organic Compounds (VOC): <1.5 ppm_m

Viscosity: Not applicable.

10	STABILITY AND REACTIVITY
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Stability: Material is stable under normal conditions.

Conditions to Avoid: Avoid dust formation.

Incompatible Materials: Strong oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition Products:

At Elevated Temperatures:	Aldehydes, Carbon Oxides, Hydrocarbons, Nitrogen Oxides, Smoke, Sulfur Oxides
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Possibility of Hazardous Reactions: Will not occur.

11	TOXICOLOGICAL INFORMATION
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Specified Substance(s)**Acute Toxicity:**

Test Results: No test data available for the ingredients.

Listed Carcinogens: Carbon black has caused cancer in experimental animals. Inhalation of airborne titanium dioxide dust may cause cancer.

Chemical Name	IARC	NTP	OSHA	ACGIH
Titanium dioxide	2B	Not Listed	Not Listed	A4
Carbon black	2B	Not Listed	Not Listed	A4

IARC: 1 = Carcinogenic to Humans; 2A = Probably Carcinogenic to Humans; 2B = Possibly Carcinogenic to Humans; 3 = Not classifiable as to carcinogenicity to humans; 4 = Probably not carcinogenic to humans; Not listed = Not evaluated by IARC.

ACGIH: A1 = Confirmed Human Carcinogen; A2 = Suspected Human Carcinogen; A3 = Confirmed Animal Carcinogen; A4 = Not classifiable as a human carcinogen; A5 = Not suspected to be a human carcinogen; Not listed = Not evaluated by ACGIH.

Product Information**Acute Toxicity:**

Test Results: No test data available for the product.

Other Acute: Dust released from the material can enter the body by inhalation or ingestion. High concentrations of dust may irritate throat and respiratory system and cause coughing. May cause damage to mucous membranes in nose, throat, lungs and bronchial system. Dust may irritate the eyes. Dust may irritate skin.

Chronic Toxicity: Repeated exposure to high concentrations of dust may adversely affect the lungs.

12	ECOLOGICAL INFORMATION
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Ecotoxicity: The product is not expected to be hazardous to the environment.

Mobility: Not relevant, due to the form of the product.

Persistence and Degradability: No data available.

Bioaccumulation Potential: No data available.

Other Adverse Effects: None known.

13	DISPOSAL CONSIDERATIONS
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General Information: Dispose of waste and residues in accordance with local authority requirements.

Disposal Methods: Disposal recommendations are based on material as supplied. Disposal of product packaging must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

Container: Dispose product packaging in accordance with local authority requirements taking into account characteristics of the packaging material.

14	TRANSPORT INFORMATION
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DOT Not regulated.

TDG Not regulated.

IATA Not regulated.

IMDG Not regulated.

15	REGULATORY INFORMATION
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Canadian Controlled Products Regulations: This product has been classified according to the hazard criteria of the Canadian Controlled Products Regulations, Section 33, and the MSDS contains all required information.

WHMIS Classification: This is not a WHMIS controlled product.

Mexican Dangerous Statement: Under some use conditions, this material may be considered to be hazardous in accordance with Mexican regulations.

Inventory Status

This product or all components are listed or exempt from listing on the following inventory: KECI, PICCS, NZIoC, TSCA, EINECS, DSL, AICS, IECSC

US Regulations

CERCLA Hazardous Substance List (40 CFR 302.4): Not regulated.

SARA Title III

Section 302 Extremely Hazardous Substances (40 CFR 355, Appendix A): Not regulated.

Section 311/312 (40 CFR 370):

Acute (Immediate) Chronic (Delayed) Fire Reactive Pressure Generating

Section 313 Toxic Release Inventory (40 CFR 372): Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
Not regulated.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): Not regulated.

Drug Enforcement Act: Not regulated.

TSCA**TSCA Section 4(a) Final Test Rules & Testing Consent Orders:** Not regulated.**TSCA Section 5(a)(2) Final Significant New Use Rules (SNURs) (40CFR 721, Subpt. E):** Not regulated.**TSCA Section 5(e) PMN-Substance Consent Orders:** Not regulated.**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D):** Not regulated.**State Regulations****California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):** Carbon black**Massachusetts Right-To-Know List:** Carbon black; Titanium dioxide**Michigan Critical Materials List (Michigan Natural Resources and Environmental Protection Act (Act. 451 of 1994)):** Not regulated.**Minnesota Hazardous Substances List:** Carbon black; Titanium dioxide**New Jersey Right-To-Know List:** Carbon black; Titanium dioxide**Pennsylvania Right-To-Know List:** Carbon black; Titanium dioxide**Rhode Island Right-To-Know List:** Carbon black; Titanium dioxide**16 OTHER INFORMATION****HAZARD RATINGS**

	Health Hazard	Fire Hazard	Instability	Special Hazard
NFPA	1	0	0	0

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

NFPA Label colored diamond code: Blue - Health; Red - Flammability; Yellow - Instability; White - Special Hazards

	Health Hazard	Flammability	Physical Hazard	Personal Protection
HMIS	0	0	0	B

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Personal Protection codes: B - Safety Glasses, Gloves

HMIS Label colored bar code: Blue - Health; Red - Flammability; Orange - Physical Hazards; White - Special

Issued by: Federal-Mogul Corporation**Issue Date:** 16-Feb-2012**Supercedes Date:****SDS No.:** 3105S_NA**Disclaimer:** The information provided on this data sheet was abstracted from supplier material safety data sheets and standard references in occupational health and toxicology. Federal-Mogul makes no representation or warranty with respect to the information obtained from such references. The

information is however, as of the date provided, true and accurate to the best of Federal-Mogul's knowledge, and should be used to make an independent determination of the methods to safeguard workers and the environment.