

FUJIFILM**Material Number / Product Name:**

Tie Coat Part A

Associated Product Codes / Catalog Numbers:

None

1 PRODUCT AND COMPANY IDENTIFICATION**Distributed by:**

FUJIFILM Hunt Smart Surfaces, LLC
40 Boroline Road
Allendale, New Jersey 07401-0320

Emergency Telephone (24 Hrs.):

Transport-CHEMTREC inside NA: 800-424-9300
Transport-CHEMTREC outside NA: 703-527-3887
Medical-PROSAR inside NA: 877-935-7387

Non-emergency Telephone:

800-473-3854

MSDS are available at:<http://www.fujihuntusa.com/>**Intended Use:** Fouling release coating**2 HAZARDS IDENTIFICATION****Emergency Overview****Physical State:** Liquid**Color:** No data available.**Odor:** Hydrocarbon**DANGER!**

Harmful if absorbed through skin. Harmful or fatal if swallowed. Can enter lungs and cause damage.

Causes skin irritation. May cause eye irritation.

Extremely flammable liquid and vapor - vapor may cause flash fire.

Potential Health Effects**Inhalation:** May cause lung damage. In high concentrations, vapors are narcotic and may cause headache, fatigue, dizziness and nausea.**Eye Contact:** May cause eye irritation. Exposed individuals may experience eye tearing, redness, and discomfort.**Skin Contact:** Harmful if absorbed through skin. Causes skin irritation. Degreasing to skin. Repeated exposure to hydrocarbons can cause dermatitis.

Ingestion: Harmful or fatal if swallowed. Swallowing of hydrocarbons can cause lung damage.

Chronic Health Effects: Danger of adverse health effects by prolonged exposure. Organic solvents may be absorbed into the body by inhalation and ingestion and cause permanent damage to the nervous system, including the brain. May cause damage to the liver and kidneys. Contains a substance/a group of substances which may impair fertility.

Target Organ(s): | Eye | Kidney | Skin | Liver | Lung | Central nervous system. Reproductive system |

Potential Physical / Chemical Effects: Extremely flammable.

OSHA Regulatory Status: When used for its intended purpose, this material is classified as hazardous in accordance with OSHA 29CFR 1910.1200.

Environment: The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. The product contains volatile, organic compounds which have a photochemical ozone creation potential.

3 COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No. | Concentration* |
|---|------------|----------------|
| Graft copolymer of butyl acrylate, styrene and polysiloxane | None | 50 - 60% |
| †Hexanes | 110-54-3 | 15 - 30% |
| Siloxanes & silicones | 70131-67-8 | 10 - 20% |
| †Silicone fluid | 556-67-2 | 10 - 20% |

* All concentrations are 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

General: Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.

Inhalation: Move injured person into fresh air and keep person calm under observation. Get medical attention immediately.

Eye Contact: Flush thoroughly with water for at least 15 minutes. Get medical assistance.

Skin Contact: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contact areas with soap and water. Get medical attention. Use suitable lotion to moisturize skin.

Ingestion: Give one or two glasses of water if patient is alert and able to swallow. Seek immediate medical attention. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

5 FIRE-FIGHTING MEASURES

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

Unsuitable Extinguishing Media: Do not use water jet as an extinguisher, as this will spread the fire.

Special Fire Fighting Procedures: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Unusual Fire & Explosion Hazards: Vapors are heavier than air and may travel along the floor and in the bottom of containers. Vapors may be ignited by a spark, a hot surface or an ember. Solvent vapors may form explosive mixtures with air. Fire or excessive heat may result in rupture of container due to release of significant amounts of gases. During fire, gases hazardous to health may be formed.

Hazardous Combustion Products: Carbon Oxides, Formaldehyde, Hydrocarbons

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid inhalation of vapors and contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet.

Spill Cleanup Methods: Absorb spillage with non-combustible, absorbent material. Remove sources of ignition. For waste disposal, see section 13 of the MSDS.

Environmental Precautions: Avoid discharge into drains, water courses or onto the ground.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

7 HANDLING AND STORAGE

Handling: Use only in well-ventilated areas. Local exhaust is recommended. Avoid inhalation of vapors and contact with skin and eyes. Do not smoke and do not spray near an open flame or other sources of ignition. Wear protective gloves and appropriate clothing to prevent skin contact. Wash at the end of each work shift and before eating, smoking and using the toilet. Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or grounding procedures. Observe good industrial hygiene practices.

Storage: Follow rules for flammable liquids. Store in a cool and well-ventilated place. Keep away from sources of ignition - No smoking. Keep container closed when not in use.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

| Chemical Name | Source | Type | Exposure Limits | Notes |
|---------------|-----------------------|------|--------------------------------|-------|
| Hexanes | ACGIH | TWA | 50 ppm | Skin |
| Hexanes | NIOSH Guide | IDLH | 1100 ppm | |
| Hexanes | US. OSHA Table Z-1 | TWA | 500 ppm 1800 mg/m ³ | |

Engineering Controls: Use explosion-proof ventilation equipment. Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors. Provide shower

facilities near the work place.

Respiratory Protection: 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. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

Eye Protection: Wear goggles/face shield.

Hand Protection: Wear chemical-resistant gloves. Contact glove manufacturer for specific information. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Skin Protection: Apron and long sleeves are recommended.

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. Discard contaminated clothing and footwear that cannot be cleaned.

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

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| 9 | PHYSICAL AND CHEMICAL PROPERTIES |
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Color: No data available.

Odor: Hydrocarbon

Odor Threshold: No data available.

Physical State: Liquid

pH: Not applicable

Melting Point: No data available.

Freezing Point: No data available.

Boiling Point: 65°C (149°F) - 75°C (167°F) (Hexane)

Flash Point: -17°C (1°F)

Evaporation Rate: <1 (n-Butyl acetate)

Flammability (Solid): No data available.

Flammability Limit - Upper (%): No data available.

Flammability Limit - Lower (%): No data available.

Vapor Pressure: No data available.

Vapor Density (Air=1): > 1

Specific Gravity: 0.9 - 1

Solubility in Water: Insoluble in water

Solubility (Other): No data available.

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

Autoignition Temperature: No data available.

Decomposition Temperature: No data available.

Volatile Organic Compounds (VOC): 25 % w

Viscosity: 5000 cps - 8500 cps

Explosive Properties: No data available

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| 10 | STABILITY AND REACTIVITY |
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Stability: This product is stable under expected conditions of use.

Conditions to Avoid: Excessive heat. Ignition sources.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: None known.

Possibility of Hazardous Reactions: Will not occur.

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| 11 | TOXICOLOGICAL INFORMATION |
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Acute Toxicity:

| Component Chemical Name | Test Results |
|-------------------------|---|
| Siloxanes & silicones | Dermal LD50 (Rabbit): >16 ml/kg |
| Siloxanes & silicones | Oral LD50 (Rat): >64 ml/kg |
| Hexanes | Dermal LD50 (Rabbit): >2 g/kg |
| Hexanes | Inhalation LC50 (4 hour(s), Rat): 48000 ppm (v) |
| Hexanes | Oral LD50 (Rat): 25 g/kg |
| Silicone fluid | Dermal LD50 (Rabbit): 759 mg/kg |
| Silicone fluid | Oral LD50 (Rat): 1540 mg/kg |

Listed Carcinogens: None

Product Information

Other Acute: Harmful if absorbed through skin or swallowed. Harmful if swallowed - may enter lungs if swallowed or vomited. Swallowing of hydrocarbons can cause lung damage. Causes skin irritation. Defats the skin. May cause eye irritation. In high concentrations, vapors and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea.

Chronic Toxicity: Repeated exposure to hydrocarbons can cause dermatitis. May cause central nervous system depression. Contains a substance/a group of substances which may impair fertility.

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| 12 | ECOLOGICAL INFORMATION |
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Ecotoxicity: The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. The product contains a substance which has a photochemical ozone creation potential.

Mobility: The product contains organic solvents which will evaporate easily from all surfaces.

Persistence and Degradability: No data on possible environmental effects have been found.

Bioaccumulation Potential: No data available on bioaccumulation.

Other Adverse Effects: The product contains volatile, organic compounds which have a photochemical ozone creation potential.

13 DISPOSAL CONSIDERATIONS

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

Disposal Instructions: Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal. Confirm disposal procedures with environmental engineer and local regulations.

RCRA Information: D001

14 TRANSPORT INFORMATION**DOT**

UN No.: UN3295

Proper Shipping Name: Hydrocarbons, liquid, n.o.s. (Mixture)

Class: 3

Packing Group: II

Label(s): 3

TDG

UN No.: UN3295

Proper Shipping Name: Hydrocarbons, liquid, n.o.s. (Mixture)

Class: 3

Packing Group: II

IATA

UN No.: UN3295

Proper Shipping Name: Hydrocarbons, liquid, n.o.s. (Mixture)

Class: 3

Packing Group: II

Label(s): 3

IMDG

UN No.: UN3295

Proper Shipping Name: Hydrocarbons, liquid, n.o.s. (Mixture)

Class: 3

Packing Group: II

EmS No.: F-E, S-D

15 REGULATORY INFORMATION

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: B2, D2A, D2B

Mexican Dangerous Statement: This is a Mexican "dangerous" product.

Inventory Status

This product or all components are listed on the following inventory: TSCA

This product or one or more component(s) are not listed on the following inventory: DSL

US Regulations

CERCLA Hazardous Substance List (40 CFR 302.4):

| Chemical Name | RQ |
|---------------|----------|
| Hexanes | 5000 lbs |

SARA Title III

Section 302 Extremely Hazardous Substances (40 CFR 355, Appendix A): None

Section 311/312 (40 CFR 370):

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

Section 313 Toxic Release Inventory (40 CFR 372): None

| Chemical Name | CAS-No. | Concentration |
|---------------|----------|---------------|
| Hexanes | 110-54-3 | 15 - 30% |

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): None

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): None

Drug Enforcement Act: None

TSCA: No component is listed on TSCA Sections 4(a), 5(a)(2), 5(e) or 12(b).

State Regulations

Massachusetts Right-To-Know List: Hexanes

Michigan Critical Materials List (Michigan Natural Resources and Environmental Protection Act (Act. 451 of 1994)): None

Minnesota Hazardous Substances List: Hexanes

New Jersey Right-To-Know List: Hexanes

Pennsylvania Right-To-Know List: Hexanes

Rhode Island Right-To-Know List: Hexanes

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| 16 | OTHER INFORMATION |
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HAZARD RATINGS

| | Health Hazard | Fire Hazard | Instability | Special Hazard |
|-------------|---------------|-------------|-------------|----------------|
| NFPA | 2 | 3 | 0 | -- |

| | Health Hazard | Flammability | Physical Hazard | Personal Protection |
|--|---------------|--------------|-----------------|---------------------|
| | | | | |

| | | | | |
|-------------|----|---|---|---|
| HMIS | 2* | 3 | 0 | C |
|-------------|----|---|---|---|

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe *- Chronic Health Effect
Personal Protection codes: B - Safety Glasses, Gloves

Issue Date: 18-May-2007

Supersedes Date: 25-Apr-2007

Disclaimer: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.