# **KO-7 Blue MSDS**

Medium Blue Stripping Foam

**Composition / Information on Ingredients** 

| <b>Ingredient Name:</b> | 2.0 SEN Polyurethane Fome | CAS / RTECS Numbers:  | N/A |
|-------------------------|---------------------------|-----------------------|-----|
| OSHA – PEL SHR.:        | N/A                       | STEL:                 | N/A |
| Ceiling:                | N/A                       | ACGIH = TLV 8hr. TWA: | N/A |
| STEL:                   | N/A                       | Ceiling:              | N/A |

#### **Hazards Information**

**Emergency Overview:** Keep away from excessive heat and flame.

Store at ambient temperatures

No TLV established.

Hazardous depolymerization is not likely to occur.

#### Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s)) OSHA PEL ACGIH TLV

The foam material contains a proprietary flame retardant composition consisting of one or more components which, in their undiluted form, may exhibit properties of skin and / or eye irritation as these properties are defined and determined in accordance with 29 CFR 1910.1200, Appendix A and Appendix B.

#### **Routes of entry**

| Skin:                   | N/A | Carcinogenity Rating:      | ND  |
|-------------------------|-----|----------------------------|-----|
| Inhalation:             | N/A | Target Organs:             | N/A |
| Ingestion:              | N/A | Eye Contact Rating:        | N/A |
| Ingestion Rating:       | N/A | Skin Sensitization Rating: | N/A |
| Skin Absorption Rating: | N/A | Skin Contact Rating:       | N/A |
| Inhalation Rating:      | N/A | Corrosiveness Rating:      | N/A |

# Signs and Symptoms

**Medical Conditions** 

Aggravated by Exposure: N/A

#### **First Aid Measures**

| Eyes: | N/A | Inhalation: | N/A |
|-------|-----|-------------|-----|
| Skin: | N/A | Ingestion:  | N/A |

# **Fire Fighting Procedures**

| Flash Point:                              | Temperature over 500 degrees F                 |
|---|--|
| Flash Point Method:                       | ASTM – D - 1929                                |
| <b>Melting Point:</b>                     | 460 – 490 degrees F                            |
| <b>Upper &amp; Lower Explosive Limit:</b> |  |
| Autoignition Temperature:                 | Self – Ignition temperature over 500 degrees F |

| Fire & Explosion Hazards:   | Combustion of foam can produce hazardous gasses. Such as carbon monoxide, oxides of nitrogen, hydrogen halide, oxides of phosphorous, traces of isocyanates and hydrogen cyanide. |
|-----------------------------|---|
| <b>Extinguishing Media:</b> | All Fire Extinguishing media permitted i.e. (water, carbon dioxide)   |
| Fire Fighting Instructions: | Use of SCBA recommended. Heavy dense smoke is generated during burning.   |

#### **Accidental Release Measures**

#### **Spill or Release Procedures**

**Handling and Storage:** Handle as normal dust spill, sweep and dispose of properly

Fire & explosion hazards: N/A

**Extinguishing Media:** See Above **Fire Fighting Instructions:** See Above

**Exposure Controls / Personal Protection** 

| <b>Engineering Controls:</b>   | N/A | Other Protection: | N/A |
|--------------------------------|-----|-------------------|-----|
| <b>Respiratory Protection:</b> | N/A | Eye Protection:   | N/A |
| <b>Skin Protection:</b>        | N/A |                   |     |

**Physical and Chemical Properties** 

| <b>Appnce. / Physical State:</b> | Blue Foam           | Viscosity:               | N/A |
|----------------------------------|---------------------|--------------------------|-----|
| Odor:                            | N/A                 | Ph:                      | N/A |
| <b>Boiling Point:</b>            | N/A                 | Specific Gravity:        | ND  |
| <b>Solubility:</b>               | Negligible          | Bulk Density:            | ND  |
| Melting / Freezing Point:        | 460 – 490 degrees F | <b>Evaporation Rate:</b> | N/A |
| Vapor Pressure:                  | N/A                 | Vapor Density:           | N/A |

# **Stability and Ractivity**

Incompatibilities:

**Hazardous Decomposition Products:** Combustions by products CO, CO2, Nitrogen Oxides, Sulfur

Oxides, Flammable Hydrocarbons

Hazardous Polymerization: Hazardous Deploymerization is not likely to occur

**Toxicological Information** 

|                         | 9   |                              |     |
|-------------------------|-----|------------------------------|-----|
| Oral Toxicity:          | N/A | Hzds Decomposition Products: | N/A |
| <b>Dermal Toxicity:</b> | N/A | Hazardous Polymerization:    | N/A |
| Inhalation Toxicity:    | N/A | Special Target Organ Effect: | N/A |
| Corrosiveness:          | N/A | Dermal Sensitization:        | N/A |
| Dermal Irritation:      | N/A | Ocular Irritation:           | N/A |

#### **Health Hazards (Acute & Chronic)**

Foam material is essentially non-toxic and non-allergenic in normal usage. It is recommended that oral ingestion of the material be avoided. Foam material is not known to be carcinogenic.

### **Ecological Information**

**Ecological Information:** N/A **Dermal Toxicity:** N/A

# **Disposal Consideration**

Waste Disposal Methods: Landfill, commercial incineration

**Transporation Information:** 

**D.O.T.:** 

Proper Shipping Name:FoamHazard ClassN/AUN NumberN/A

Packing Group: Corrugated Carton / Plastic Bundles

**Reportable Quantity:** N/A

**Other Precautions:** Foam material is combustible and should be stored and handled away

from open flames or adnormally high temperatures. Local Exhaust required if foam material is processed under melting or flaming

conditions.

**Note:** Information herein is based on laboratory test data which is believed to be reliable. However Kodiak Corporation, has no control over the end application of these materials. Therefore, we cannot guarantee that the same results as described herein will be obtained

**Note:** It is recommended that each user conduct his / her own tests to determine adaptability of these materials to his / her particular application.



# **KO-7 White MSDS**

Medium Soft White Stripping Foam

**Composition / Information on Ingredients** 

| Ingredient Name: | N/A | CAS / RTECS Numbers:  | N/A |
|------------------|-----|-----------------------|-----|
| OSHA – PEL SHR.: | N/A | STEL:                 | N/A |
| Ceiling:         | N/A | ACGIH = TLV 8hr. TWA: | N/A |
| STEL:            | N/A | Ceiling:              | N/A |

#### **Hazards Information**

Keep away from excessive heat and flame. **Emergency Overview:** 

Store at ambient temperatures

No TLV established.

Hazardous depolymerization is not likely to occur.

Health Hazards:

Coarse Dust can cause mechanical irritation of lungs and eyes. Airborne dust is evaluated as a nuisance dust. If ignited of am may decompose and emit toxic gases and respiratory irritants.

#### **Emergency First Aid**

Remove to fresh air; contact physician if respiratory discomfort persists. Procedures: Inhalation:

> Avoid rubbing, flush eyes thoroughly with water for 15 minutes. Eves:

Skin: Not Necessary

Ingestion: N/A

Hazardous Ingredients/Identity Information
CAS# 9009-54-5 % by weight = 100% OSHEA PEL/ACGIG TLV = Non established

KO-7 White polyurethane foam is a fully cross-linked reaction product of polyhydroxy polyol, toluene disocyanate, catalysts, surfactants, pigmens and water. Polyurethane foam product is a polymeric material consisting of repeating units of carbon, hydrogen, oxygen and nitrogen.

# **Routes of Entry**

| Skin:                    | N/A       | Carcinogenity Rating:        | ND        |
|--------------------------|-----------|------------------------------|-----------|
| Inhalation:              | Foam Dust | Target Organs:               | N/A       |
| Ingestion:               | N/A       | Eye Contact:                 | Foam Dust |
| <b>Ingestion Rating:</b> | N/A       | Skin Sensitization Rating:   | N/A       |
| Skin Absorption Rating:  | N/A       | Skin Contact Rating:         | N/A       |
| Inhalation Rating:       | N/A       | <b>Corrosiveness Rating:</b> | N/A       |

# Signs and Symptoms

**Medical Conditions** 

**Aggravated by Exposure:** N/A

#### First Aid Measures

| Eyes: | N/A | Inhalation: | N/A |
|-------|-----|-------------|-----|
| Skin: | N/A | Ingestion:  | N/A |

# **Fire Fighting Procedures**

| Flash Point:                              | Temperature over 500 degrees F  |  |
|---|---|--|
| Flash Point Method:                       | ASTM – D - 1929   |  |
| Melting Point:                            | 460 – 490 degrees F   |  |
| <b>Upper &amp; Lower Explosive Limit:</b> |   |  |
| Autoignition Temperature:                 | Self – Ignition temperature over 500 degrees F  |  |
| Fire & Explosion Hazards:                 | If ignited, foam can produce rapid flame spread, intense heat, dense black smoke and toxic gasses. Material can melt into a burning liquid that can drip and flow. Accumulated polyurethane dust can be readily ignited an presents a fire risk. High concentrations of dust in the air can explode if exposed to a flame, spark or other ignition sources. |  |
| Extinguishing Media:                      | All Fire Extinguishing media permitted i.e. (water, carbon dioxide)   |  |
| Fire Fighting Instructions:               | Use of SCBA recommended. Heavy dense smoke is generated during burning.   |  |

#### **Accidental Release Measures**

**Spill or Release Procedures** 

Handling and Storage: Handle as normal dust spill, sweep and dispose of properly

Fire & explosion hazards: N/A

**Extinguishing Media:** See Above **Fire Fighting Instructions:** See Above

# **Exposure Controls / Personal Protection**

| <b>Engineering Controls:</b> | N/A | Other Protection: | N/A |
|------------------------------|-----|-------------------|-----|
| Respiratory Protection:      | N/A | Eye Protection:   | N/A |
| Skin Protection:             | N/A | 0                 |     |

**Physical and Chemical Properties** 

| Appnce. / Physical State:        | Uniform cellular solid      | Viscosity:                   | N/A              |
|----------------------------------|-----------------------------|------------------------------|------------------|
| Odor:                            | slight characteristic order | ght characteristic order Ph: |                  |
| <b>Boiling Point:</b>            | N/A                         | Specific Gravity:            | ND               |
| <b>Solubility:</b>               | Insoluble                   | <b>Bulk Density:</b>         | 0.5 - 40 lbs/cft |
| <b>Melting / Freezing Point:</b> | 450 – 500 degrees F         | <b>Evaporation Rate:</b>     | N/A              |
| Vapor Pressure:                  | N/A                         | Vapor Density:               | N/A              |

### **Stability and Ractivity**

**Incompatibilities:** ND

**Hazardous Decomposition Products:** Combustion by products CO, CO2, Nitrogen Oxides, Sulfur

Oxides, Flammable Hydrocarbons

**Hazardous Polymerization:** Hazardous Deploymerization is not likely to occur

### **Toxicological Information**

| Oral Toxicity:          | N/A | Hzds Decomposition Products: | N/A |
|-------------------------|-----|------------------------------|-----|
| <b>Dermal Toxicity:</b> | N/A | Hazardous Polymerization:    | N/A |

| Inhalation Toxicity: | N/A | Special Target Organ Effect: | N/A |
|----------------------|-----|------------------------------|-----|
| Corrosiveness:       | N/A | <b>Dermal Sensitization:</b> | N/A |
| Dermal Irritation:   | N/A | Ocular Irritation:           | N/A |

#### **Health Hazards (Acute & Chronic)**

Foam material is essentially non-toxic and non-allergenic in normal usage. It is recommended that oral ingestion of the material be avoided. Foam material is not known to be carcinogenic.

**Ecological Information** 

**Ecological Information:** N/A **Dermal Toxicity:** N/A

**Disposal Consideration** 

Waste Disposal Methods: Federal, state and local authorities should be contacted before attempting

any form of disposal.

**Transporation Information:** 

**D.O.T.:** 

Proper Shipping Name: Foam
Hazard Class N/A
UN Number N/A

Packing Group: Corrugated Carton / Plastic Bundles

**Reportable Quantity:** N/A

**Other Precautions:** Foam material is combustible and should be stored and handled away

from open flames or abnormally high temperatures. Local Exhaust required if foam material is processed under melting or flaming

conditions.

Precautions for Safe Handling and Use

Safe Handling and Storage: Warehousing of product should be stored under a fusible sprinkler system with a

minimum of six feet clearance between stacks of foam and the sprinkler heads. Do not store foam near any ignition sources such as exposed electrical or gas heating elements, open flames and exposed lights. Do not smoke in foam storage

areas

Do not allow foam scrap and cuttings to accumulate and maintain clear aisles with

adequate access to all storage areas and exits.

**Other Precautions:** Notify local fire companies of presence of large quantities of foam.

**Control Measures** 

**Ventilation:** Local exhaust ventilation is recommended fro those processing procedures that

may generate foam dust and decomposistion products. Examples of these processes include sawing, grinding, buffing and flame lamination, hot wire

cutting, heat sealing and hot stamping.

**Respirator Protection:** Should be selected based on identity and concentration of air contaminant. Only

NOISH-approved respirators for protection against the air contaminant of concern

should be used

**Eye Protection:** Recommended for those processing operations that may generate dust.

#### **Special Information**

Flexible polyurethane foam, like all organic materials, will burn if exposed to a sufficient heat source. The ignition temperature of polyurethane foam will vary depending on the product chemical formulation, but all polyurethane foams are combustible and can create a fire risk. Flexible polyurethane foams, once ignited, may degrade and melt to a combustible liquid, which may add to the fire involvement.

Terms such as "fire retardant", "slow burning" and "flame resistant" describe certain flammability properties and should not be regarded as denoting fire safety under all conditions. Small-scale fire tests are not intended reflect hazards presented by these or any other material under real fire conditions.

Thermal decomposition products from polyurethane foams can be toxic and present a risk to humans who are exposed. This is true for all organic materials. Fire risks in varying degrees are common to all fires: heat, carbon monoxide, other toxicants, oxygen depletion and smoke. In fires involving polyurethane foam, particularly flexible foams, large quantities of dense smoke can be generated quickly.

Personnel involved in fire fighting should wear self-contained breathing apparatus and be ware of the exposure to toxic and potentially lethal gases. Standard fire-fighting equipment generally employed by authorized firemen is mandatory.

## **Users Responsibility**

An MSDS such as this cannot be expected to cover all possible individual situations. The user has the responsibility to provide a safe workplace. All aspects of an individual operation should be examined to determine if, or where precautions – in addition to those described herein – are required. Any health hazard information contained herein should be passed on to your employees.

**Note:** Information herein is based on laboratory test data which is believed to be reliable. However Kodiak Corporation, has no control over the end application of these materials. Therefore, we cannot guarantee that the same results as described herein will be obtained

**Note:** It is recommended that each user conduct his / her own tests to determine adaptability of these materials to his / her particular application.