Bulldog Micro Fibers #2020 Silicone Thickening Agent and Strength Enhancer SDS Revision Date: 03/16/2016





1. PRODUCT AND COMPANY IDENTIFICATION

1.1. Product identifier

Product Identity

Bulldog Micro Fibers #2020 Silicone Thickening Agent and Strength Enhancer

Alternate Names

Bulldog Micro Fibers #2020 Silicone Thickening Agent and Strength Enhancer

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended useSee Technical Data SheetApplication MethodSee Technical Data Sheet

1.3. Details of the supplier of the safety data sheet

Company Name Palmer Asphalt Company

196 West 5th St., P.O. Box 58

Emergency Telephone No. Bayonne, NJ 07002 (201) 339-0855

8:00a.m. - 5:00p.m. EST

After Hours CHEMTREC:

(800) - 424-9300 (Domestic – No. America)

2. HAZARDS IDENTIFICATION

- This product does not meet the hazard criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200) or of the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS). While the provision of this SDS is optional, it contains valuable information about the safe handling and proper use of this product and should be retained.
- The hazard classification of the chemical (e.g., flammable liquid, category): Not applicable
- Signal word: Not applicable
- Hazard statement(s): Not applicable
- Pictograms (the pictograms or hazard symbols may be presented as graphical reproductions of the symbols in black and white or be a description of the name of the symbol (e.g., skull and crossbones, flame): **Not applicable**
- Precautionary statement(s): Not applicable
- Description of any hazards not otherwise classified: None known

For a mixture that contains an ingredient(s) with unknown toxicity, a statement describing how much (percentage) of the mixture consists of ingredient(s) with unknown acute toxicity. Please note that this is a total percentage of the mixture and not tied to the individual ingredient(s): **Not applicable**

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical name | CAS # | Common Names & Synonyms |
|---------------|-----------|-------------------------|
| Polyethylene | 9002-88-4 | Ethene, homopolymer |

Impurities and stabilizing additives which are classified and which contribute to the classification of the chemical: None

The chemical name and concentration (i.e., exact percentage) of all ingredients which are classified as health hazards and are present above their cut-off/concentration limits or present a health risk below the cut-off/concentration limits: **None**

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4. FIRST AID MEASURES

Necessary first-aid instructions by relevant routes of exposure

Inhalation: In the case of respiratory irritation, move to fresh air; consult a physician if symptoms persist.

Skin contact: In the case of skin irritation, wash off with soap and water; consult a physician if symptoms persist.

Eye contact: Remove contact lenses if present, and flush eyes with water to remove particles; consult a physician if symptoms persist.

Ingestion: Consult a physician if symptoms develop.

 Description of the most important symptoms or effects, and any symptoms that are acute or delayed Inhalation: May cause respiratory irritation.

Skin contact: Not expected to be an irritant, but may cause skin irritation in some individuals.

Eye contact: May cause eye irritation.

Ingestion: Unknown

Recommendations for immediate medical care and special treatment needed, when necessary: Not applicable

5. FIRE FIGHTING MEASURES

- Recommendations of suitable extinguishing equipment, and information about extinguishing equipment that is not
 appropriate for a particular situation: Foam, fog, dry chemicals, CO2, sand; water mist to cool exposed
 surfaces.
- Advice on specific hazards that develop from the chemical during the fire, such as any hazardous combustion products created when the chemical burns: May include, but are not limited to, CO and CO2.
 Recommendations on special protective equipment or precautions for firefighters:
 Firefighters should wear full protective clothing. Due to potential decomposition of the polymer, firefighters should be equipped with positive pressure self-contained breathing apparatus (SCBA) when fighting all indoor fires and any significant outdoor fires, and should fight fire from an upwind position.

6. ACCIDENTAL RELEASE MEASURES

- Use of personal precautions (such as removal of ignition sources or providing sufficient ventilation) and protective equipment to prevent the contamination of skin, eyes, and clothing: A dust mask and goggles are recommended to prevent possible irritation from airborne fibers. Cleansing the skin after handling is advisable.
- Emergency procedures, including instructions for evacuations, consulting experts when needed, and appropriate protective clothing: **Not applicable**
- Methods and materials used for containment (e.g., covering the drains and capping procedures): **Not applicable** Cleanup procedures (e.g., appropriate techniques for neutralization, decontamination, cleaning or vacuuming; adsorbent materials; and/or equipment required for containment/clean up): **Vacuum or sweep up and place in a standard disposal container. Avoid the use of air jets if possible, to prevent fibers from becoming airborne.**

7. HANDLING AND STORAGE

Precautions for safe handling, including recommendations for handling incompatible chemicals, minimizing the release of the chemical into the environment, and providing advice on general hygiene practices (e.g., eating, drinking, and smoking in work areas is prohibited): No special handling has been shown to be necessary, but cleansing the skin after use is advisable. Maintain good housekeeping methods to control dust accumulations. Avoid the use of air jets if possible, to prevent fibers from becoming airborne. Recommendations on the conditions for safe storage, including any incompatibilities. Provide advice on specific storage requirements (e.g., ventilation requirements): Avoid overstacking to prevent collapse or shifting of the packages.

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8. EXPOSURE CONTROLS\PERSONAL PROTECTION

OSHA Permissible Exposure Limits (PELs), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available:

Fiber dust should be considered a nuisance dust, i.e. particulates (not otherwise classified):

ACGIH Threshold Limit Value: 10 mg/m3 total dust; 3 mg/m3 respirable Dust OSHA Permissible Exposure Limit: 15 mg/m3 total dust; 5 mg/m3 respirable dust

- Appropriate engineering controls (e.g., use local exhaust ventilation, or use only in an enclosed system): Local exhaust ventilation may be used to reduce exposure to airborne fibers or fiber dust. Processing involving the use of elevated temperatures should only be carried out in areas with adequate ventilation.
- Recommendations for personal protective measures to prevent illness or injury from exposure to chemicals, such as personal protective equipment (PPE) (e.g., appropriate types of eye, face, skin or respiratory protection needed based on hazards and potential exposure): A dust mask and goggles are recommended to prevent possible irritation from airborne fibers.

Any special requirements for PPE, protective clothing or respirators (e.g., type of glove material, such as PVC or nitrile rubber gloves; and breakthrough time of the glove material): Not specified.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.): White, fluffy fibers

Odor: No significant odor Odor threshold: Not available

pH: Not available

Melting point: 125-135°C/257-275°F

Initial boiling point and boiling range: Not applicable

Flash point: >200°C/ >392°F Evaporation rate: Not applicable

Flammability (solid, gas): Non-flammable

Upper/lower flammability or explosive limits: Not applicable

Vapor pressure: Not applicable Vapor density: Not applicable Relative density: 0.96q/cm³

Solubility(ies): Not soluble in water

Partition coefficient: n-octanol/water: Not available

Auto-ignition temperature: Not available Decomposition temperature: Not available

Viscosity: Not applicable

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10. STABILITY AND REACTIVITY

Reactivity

• Description of the specific test data for the chemical(s). This data can be for a class or family of the chemical if such data adequately represent the anticipated hazard of the chemical(s), where available: **Not available**

Chemical stability

- Indication of whether the chemical is stable or unstable under normal ambient temperature and conditions while in storage and being handled: Stable
- Description of any stabilizers that may be needed to maintain chemical stability: Not applicable
- Indication of any safety issues that may arise should the product change in physical appearance: None known

Other

- Indication of the possibility of hazardous reactions, including a statement whether the chemical will react or
 polymerize, which could release excess pressure or heat, or create other hazardous conditions. Also, a
 description of the conditions under which hazardous reactions may occur: None known
- List of all conditions that should be avoided (e.g., static discharge, shock, vibrations, or environmental conditions that may lead to hazardous conditions): **None known**
- List of all classes of incompatible materials (e.g., classes of chemicals or specific substances) with which the
 chemical could react to produce a hazardous situation: Strong oxidizers
 List of any known or anticipated hazardous decomposition products that could be produced because of use, storage, or
 heating: Carbon oxides, organic acids.

11. TOXICOLOGICAL INFORMATION

- Information on the likely routes of exposure. The SDS should indicate if the information is unknown.
- Inhalation: Possible inhalation of airborne fibers or fiber dust.

Ingestion: Unlikely to occur.

Skin absorption: Not known to occur.

Eye contact: Possible contact with airborne fibers or fiber dust.

Description of the delayed, immediate, or chronic effects from short- and long-term exposure: **Delayed or immediate** effects may include respiratory irritation, skin irritation, or eye irritation. No chronic effects from short-term exposure are known to occur. Effects from long-term exposure are unknown.

The numerical measures of toxicity:

Acute Toxicity: Oral Rat

LD >3g/kg

Oral Mouse LDL0 5g/kg

 Description of the symptoms. This description includes the symptoms associated with exposure to the chemical including symptoms from the lowest to the most severe exposure.

Inhalation: Symptoms of respiratory irritation may include coughing, sneezing, or itching of the nasal passages.

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Ingestion: Ingestion of large amounts of fibers may cause gastrointestinal blockage, which can cause stomach distress.

Skin contact: Symptoms of skin irritation may include itching or redness of the skin.

Eye contact: Symptoms of eye irritation may include itching, watering, or redness of the eyes.

Indication of whether the chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest editions) or found to be a potential carcinogen by OSHA.

NTP: Not listed.

IARC: 3 - Not classifiable as to its carcinogenicity to humans.

OSHA: Not regulated.

According to the hypothesis of Stanton-Pott, it is reported that there is a possibility of causing cancer when ultra-fine fibers below $0.25\mu m$ in diameter and below $8\mu m$ in length are absorbed into the lung. When observed with the electronic microscope, the diameter of these fibers was above $1\mu m$, and the average length was over $100\mu m$; therefore the values were higher than those provided by this hypothesis.

12. ECOLOGICAL INFORMATION

- Data from toxicity tests performed on aquatic and/or terrestrial organisms, where available (e.g., acute or chronic aquatic toxicity data for fish, algae, crustaceans, and other plants; toxicity data on birds, bees, plants): Not available
- Whether there is a potential for the chemical to persist and degrade in the environment either through biodegradation or other processes, such as oxidation or hydrolysis: Unknown. This material is generally considered to be essentially non-biodegradable.
- Results of tests of bioaccumulation potential, making reference to the octanol-water partition coefficient (Kow) and the bioconcentration factor (BCF), where available: Not available
- The potential for a substance to move from the soil to the groundwater (indicate results from adsorption studies or leaching studies): Unlikely

Other adverse effects (e.g., environmental fate, ozone layer depletion potential, photochemical ozone creation potential, endocrine disrupting potential, and/or global warming potential): **Unknown**

13. DISPOSAL CONSIDERATIONS

- Description of appropriate disposal containers to use: Standard disposal containers are acceptable.
- Recommendations of appropriate disposal methods to employ: Dispose of in accordance with governmental regulations for non-hazardous solid waste.
- Description of the physical and chemical properties that may affect disposal activities: None known
- Language discouraging sewage disposal: Disposable via septic or sewage systems is not recommended.
- Any special precautions for landfills or incineration activities: None known

Recycling of corrugated or paper packaging is encouraged where possible. Other packaging may be disposed of with product.

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14. TRANSPORT INFORMATION

- UN number (i.e., four-figure identification number of the substance): None
- UN proper shipping name: Not applicable
- Transport hazard class(es): Not applicable
 Packing group number, if applicable, based on the degree of hazard: Not applicable
- Environmental hazards (e.g., identify if it is a marine pollutant according to the International Maritime Dangerous Goods Code (IMDG Code)): None known
- Guidance on transport in bulk (according to Annex II of MARPOL 73/78 and the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code (IBC Code)): Not applicable
- Any special precautions which an employee should be aware of or needs to comply with, in connection with transport or conveyance either within or outside their premises (indicate when information is not available):

Commodity: Polyethylene Pulp
 HTS Code Number: 3901.20
 NMFC Item Number: 68310 Sub 6

15. REGULATORY INFORMATION

- Any national and/or regional regulatory information of the chemical or mixtures (including any OSHA, Department of Transportation, Environmental Protection Agency, or Consumer Product Safety Commission regulations)
- Canada DSL/NDSL: Included on the Canadian Domestic Substance List.
- Canada WHMIS: Not a controlled product.
- UN: Does not appear on the Dangerous Goods List.
- United States EPA: Not regulated.
 Unites States OSHA: Not hazardous.

16. OTHER INFORMATION

MANUFACTURER DISCLAIMER: Palmer Asphalt Company warrants only that its products meet the specifications stated in the sales contract. Typical properties, where stated, are to be considered as representative of current production and should not be treated as specifications. While all the information presented in this document is believed to be reliable and to represent the best available data on these products, NO GUARANTY, WARRANTY, OR REPRESENTATION IS MADE, INTENDED, OR IMPLIED AS TO THE CORRECTNESS OR SUFFICENCY OF ANY INFORMATION, OR AS TO THE MERCHANTABILITY OR SUITABILITY OR FITNESS OF ANY CHEMICAL COMPOUNDS OR OTHER PRODUCTS OR THE USE THEREOF ARE NOT SUBJECT TO A CLAIM BY A THIRD PARTY FOR INFRINGMENT OF ANY PATENT OR OTHER INTELLECTUAL PROPERTY RIGHT. THE USER SHOULD CONDUCT SUFFICIENT INVESTIGATION TO ESTABLISH THE SUITABILITY OF ANY PRODUCT FOR ITS INTENDED USE - Liability of Palmer Asphalt Company for all claims, whether arising out of breach of warranty, negligence, strict liability, or otherwise, is limited to the purchase price of the material. Products may be toxic and require special precautions in handling. For all products listed, the user should obtain detailed information on toxicity, together with proper shipping, handling, and storage procedures, and comply with all applicable safety and environmental standards. Toxicity and risk characteristics of chemical compounds and other products may differ when used with other materials or in a manufacturing or other process. Those risk characteristics should be determined by the user and made known to handlers, processors, and end users. End of SDS