SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

|  |  |  |
| --- | --- | --- |
| Product name | : | Hi-Gear Silicone Spray |
| Product code | : | HG5501, HG5501S |

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

|  |  |  |
| --- | --- | --- |
| Use of the substance/mixture | : | Silicone spray. |

1.3. Details of the supplier of the safety data sheet

Hi-Gear Products, Inc.
14 Brent Drive
Hudson, MA 01749
T (978) 562-8522

1.4. Emergency telephone number

|  |  |  |
| --- | --- | --- |
| Emergency number | : | (CHEMTREC (800) 424-9300CHEMTREC International +1 (703) 527-3887 24 hr |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

|  |  |
| --- | --- |
| Flammable Aerosol 1 |   |
| Gases Under Pressure - Liquefied gas |   |
| Skin irritation 2 |   |
| Eye irritation 2A |   |
| Reproductive toxicity 2 (developmental) |   |
| Specific target organ toxicity - Single exposure 3 |   |
| Specific target organ toxicity - Repeated exposure 2 |   |
| Aspiration hazard 1 |   |
|  |  |

2.2. Label elements

GHS-US labelling

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Hazard pictograms (GHS-US) | : | GHS02 | GHS04 | GHS07 | GHS08 |  |  |
| Signal word (GHS-US) | : | Danger |
| Hazard statements (GHS-US) | : | Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. Suspected of damaging the unborn child. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways. |
| Precautionary statements (GHS-US) | : | Keep away from heat/sparks/open flames/hot surfaces. -No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Wash hands thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Do not breathe gas/mist/vapors/spray. If exposed or concerned: Get medical advice/attention. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. Protect from sunlight. Do not expose to temperatures exceeding 50 ºC/122 ºF. Store in a well-ventilated place. Store locked up. Dispose of contents and container in accordance with all local, regional, national and international regulations. |

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

|  |
| --- |
| F612: 47 percent of the mixture consists of ingredient(s) of unknown acute toxicity. F628: 45 percent of the mixture consists of ingredient(s) of unknown acute toxicity.  |

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

| **Name** | **Product identifier** | **%** | **GHS-US classification** |
| --- | --- | --- | --- |
| Heptane, branched, cyclic and linear | (CAS No) 426260-76-6 | 40 - 70 | Flam. Liq. 2Skin Irrit. 2STOT SE 3Asp. Tox. 1 |
| n-Heptane | (CAS No) 142-82-5 | 10 - 30 | Flam. Liq. 2Skin Irrit. 2STOT SE 3Asp. Tox. 1 |
| Propane | (CAS No) 74-98-6 | 10 - 30 | Flam. Gas 1Liquefied gas |
| Butane | (CAS No) 106-97-8 | 7 - 13 | Flam. Gas 1Liquefied gas |
| Isopropyl alcohol | (CAS No) 67-63-0 | 7 - 13 | Flam. Liq. 2Eye Irrit. 2ASTOT SE 3 |
| Toluene | (CAS No) 108-88-3 | 1 - 5 | Flam. Liq. 2Skin Irrit. 2Repr. 2 (developmental)STOT SE 3STOT RE 2Asp. Tox. 1 |
| Ethylbenzene | (CAS No) 100-41-4 | < 0.1 | Flam. Liq. 2Acute Tox. 4 (Inhalation)Skin Irrit. 2Carc. 2Asp. Tox. 1 |
| Benzene | (CAS No) 71-43-2 | < 0.1 | Flam. Liq. 2Acute Tox. 4 (Oral)Skin Irrit. 2Eye Irrit. 2AMuta. 1BCarc. 1ASTOT RE 1Asp. Tox. 1 |

\* The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4: First aid measures

4.1. Description of first aid measures

|  |  |  |
| --- | --- | --- |
| First-aid measures after inhalation | : | If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical advice/attention if you feel unwell. |
| First-aid measures after skin contact | : | In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists. |
| First-aid measures after eye contact | : | In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists, get medical attention. |
| First-aid measures after ingestion | : | Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention. |

4.2. Most important symptoms and effects, both acute and delayed

|  |  |  |
| --- | --- | --- |
| Symptoms/injuries after inhalation | : | May cause drowsiness, dizziness and central nervous system depression. May cause respiratory tract irritation. Intentional misuse of product by inhalation can result in asphyxiation or death. |
| Symptoms/injuries after skin contact | : | Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. |
| Symptoms/injuries after eye contact | : | Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. |
| Symptoms/injuries after ingestion | : | May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting. |

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

|  |  |  |
| --- | --- | --- |
| Suitable extinguishing media | : | Powder, water spray, foam, carbon dioxide. |
| Unsuitable extinguishing media | : | Do not use a heavy water stream. |

5.2. Special hazards arising from the substance or mixture

|  |  |  |
| --- | --- | --- |
| Fire hazard | : | Extremely flammable aerosol. Products of combustion may include, and are not limited to: oxides of carbon. |
| Explosion hazard | : | Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. |

5.3. Advice for firefighters

|  |  |  |
| --- | --- | --- |
| Protection during firefighting | : | Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back. Use water spray to keep fire-exposed containers cool. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

|  |  |  |
| --- | --- | --- |
| General measures | : | Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition. |

6.2. Methods and material for containment and cleaning up

|  |  |  |
| --- | --- | --- |
| For containment | : | Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE). |
| Methods for cleaning up | : | Scoop up material and place in a disposal container. Provide ventilation. |

6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

|  |  |  |
| --- | --- | --- |
| Precautions for safe handling | : | Keep away from sources of ignition. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/mist/vapors/spray. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. |
| Hygiene measures | : | Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking. |

7.2. Conditions for safe storage, including any incompatibilities

|  |  |  |
| --- | --- | --- |
| Storage conditions | : | Keep locked up and out of reach of children. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store away from direct sunlight or other heat sources. Store in a well-ventilated place. |

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| **Heptane, branched, cyclic and linear (426260-76-6)** |
| --- |
| USA ACGIH | ACGIH TWA  | Not applicable.  |
| USA OSHA | OSHA PEL (TWA)  | Not applicable.  |

| **n-Heptane (142-82-5)** |
| --- |
| USA ACGIH | ACGIH TWA (ppm) | 400 ppm |
| USA ACGIH | ACGIH STEL (ppm) | 500 ppm |
| USA OSHA | OSHA PEL (TWA) (mg/m³) | 2000 mg/m³ |
| USA OSHA | OSHA PEL (TWA) (ppm) | 500 ppm |

| **Propane (74-98-6)** |
| --- |
| USA ACGIH | ACGIH TWA (ppm) | 1000 ppm |
| USA OSHA | OSHA PEL (TWA) (mg/m³) | 1800 mg/m³ |
| USA OSHA | OSHA PEL (TWA) (ppm) | 1000 ppm |

| **Butane (106-97-8)** |
| --- |
| USA ACGIH | ACGIH STEL (ppm) | 1000 ppm |

| **Isopropyl alcohol (67-63-0)** |
| --- |
| USA ACGIH | ACGIH TWA (ppm) | 200 ppm |
| USA ACGIH | ACGIH STEL (ppm) | 400 ppm |
| USA OSHA | OSHA PEL (TWA) (mg/m³) | 980 mg/m³ |
| USA OSHA | OSHA PEL (TWA) (ppm) | 400 ppm |

| **Toluene (108-88-3)** |
| --- |
| USA ACGIH | ACGIH TWA (ppm) | 20 ppm |
| USA OSHA | OSHA PEL (TWA) (ppm) | 200 ppm |
| USA OSHA | OSHA PEL (Ceiling) (ppm) | 300 ppm |

| **Ethylbenzene (100-41-4)** |
| --- |
| USA ACGIH | ACGIH TWA (ppm) | 20 ppm |
| USA OSHA | OSHA PEL (TWA) (mg/m³) | 435 mg/m³ |
| USA OSHA | OSHA PEL (TWA) (ppm) | 100 ppm |

| **Benzene (71-43-2)** |
| --- |
| USA ACGIH | ACGIH TWA (ppm) | 0.5 ppm |
| USA ACGIH | ACGIH STEL (ppm) | 2.5 ppm |
| USA OSHA | OSHA PEL (TWA) (ppm) | 1 ppm |
| USA OSHA | OSHA PEL (STEL) (ppm) | 5 ppm  |
| USA OSHA | OSHA PEL (Ceiling) (ppm) | 25 ppm |

8.2. Exposure controls

|  |  |  |
| --- | --- | --- |
| Appropriate engineering controls | : | Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. |
| Personal protective equipment | : | Avoid all unnecessary exposure. |
| Hand protection | : | Wear chemically resistant protective gloves. |
| Eye protection | : | Wear eye protection. |
| Skin and body protection | : | Wear suitable protective clothing. |
| Respiratory protection | : | A NIOSH approved respirator is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. |
| Environmental exposure controls | : | Maintain levels below Community environmental protection thresholds. |
| Other information | : | Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

|  |  |  |
| --- | --- | --- |
| Physical state | : | Gas/Pressurized Liquid.  |
| Appearance | : | Clear. |
| Colour | : | Colorless.  |
| Odour | : | Cherry.  |
| Odour threshold | : | No data available  |
| pH | : | No data available  |
| Relative evaporation rate (butylacetate=1) | : | No data available  |
| Melting point | : | No data available  |
| Freezing point | : | No data available  |
| Boiling point | : | No data available  |
| Flash point | : | No data available  |
| Auto-ignition temperature | : | No data available  |
| Decomposition temperature | : | No data available  |
| Flammability (solid, gas) | : | Flammable.  |
| Vapour pressure | : | No data available  |
| Relative vapour density at 20 °C | : | No data available  |
| Relative density | : | 0.752 - 0.760  |
| Solubility | : | No data available  |
| Log Pow | : | No data available  |
| Log Kow | : | No data available  |
| Viscosity, kinematic | : | No data available  |
| Viscosity, dynamic | : | No data available  |
| Explosive properties | : | No data available  |
| Oxidising properties | : | No data available  |
| Explosive limits | : | No data available  |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under normal storage conditions. Extremely flammable aerosol. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Heat. Incompatible materials. Sources of ignition.

10.5. Incompatible materials

Acids. Amines. Bases. Oxidizers. Reducing agents.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

|  |  |  |
| --- | --- | --- |
| Acute toxicity | : | Not classified |

|  |
| --- |
| LD50 oral rat | > 2000 mg/kg |
| LD50 dermal rabbit | > 2000 mg/kg |
| LC50 inhalation rat | > 5 mg/l/4h |

| **n-Heptane (142-82-5)** |
| --- |
| LD50 dermal rabbit | 3000 mg/kg |
| LC50 inhalation rat | 103 g/m³/4h |

| **Propane (74-98-6)** |
| --- |
| LC50 inhalation rat | 658 mg/l/4h |

| **Butane (106-97-8)** |
| --- |
| LC50 inhalation rat | 658 mg/l/4h |

| **Isopropyl alcohol (67-63-0)** |
| --- |
| LD50 oral rat | 4396 mg/kg |
| LD50 dermal rat | 12800 mg/kg |
| LD50 dermal rabbit | 12870 mg/kg |
| LC50 inhalation rat | 72.6 mg/l/4h |

| **Toluene (108-88-3)** |
| --- |
| LD50 oral rat | > 5000 mg/kg |
| LD50 dermal rat | 12124 mg/kg |
| LD50 dermal rabbit | 8390 mg/kg |
| LC50 inhalation rat  | 28.1 mg/l/4h |

| **Ethylbenzene (100-41-4)** |
| --- |
| LD50 oral rat | 3500 mg/kg |
| LD50 dermal rabbit | 15354 mg/kg |
| LC50 inhalation rat | 17.2 mg/l/4h |

| **Benzene (71-43-2)** |
| --- |
| LD50 oral rat | 930 mg/kg |
| LD50 dermal rabbit | > 9.4 mL/kg |
| LC50 inhalation rat  | 13050 - 14380 ppm/4h |

|  |  |  |
| --- | --- | --- |
| Skin corrosion/irritation | : | Causes skin irritation. |
| Serious eye damage/irritation | : | Causes serious eye irritation. |
| Respiratory or skin sensitisation | : | Based on available data, the classification criteria are not met. |
| Germ cell mutagenicity | : | Based on available data, the classification criteria are not met. |
| Carcinogenicity | : | Based on available data, the classification criteria are not met. |

| **Isopropyl alcohol (67-63-0)** |
| --- |
| IARC group | 3 - Not classifiable |

| **Toluene (108-88-3)** |
| --- |
| IARC group | 3 - Not classifiable |

| **Ethylbenzene (100-41-4)** |
| --- |
| IARC group | 2B - Possibly carcinogenic to humans |
| National Toxicity Program (NTP) Status | 1 - Evidence of Carcinogenicity |

| **Benzene (71-43-2)** |
| --- |
| IARC group | 1 - Carcinogenic to humans |
| National Toxicity Program (NTP) Status | 1 - Evidence of Carcinogenicity, 2 - Known Human Carcinogens |
|  | In OSHA Specifically Regulated Carcinogen list |

|  |  |  |
| --- | --- | --- |
| Reproductive toxicity | : | Suspected of damaging the unborn child. |
| Specific target organ toxicity (single exposure) | : | May cause drowsiness or dizziness.  |
| Specific target organ toxicity (repeated exposure) | : | May cause damage to organs through prolonged or repeated exposure. |
| Aspiration hazard | : | May be fatal if swallowed and enters airways. |
|  |  |  |
| Symptoms/injuries after inhalation | : | May cause drowsiness, dizziness and central nervous system depression. May cause respiratory tract irritation. Intentional misuse of product by inhalation can result in asphyxiation or death. |
| Symptoms/injuries after skin contact | : | Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. |
| Symptoms/injuries after eye contact | : | Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. |
| Symptoms/injuries after ingestion | : | May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting. |

SECTION 12: Ecological information

12.1. Toxicity

|  |  |  |
| --- | --- | --- |
| Ecology - general | : | May cause long-term adverse effects in the aquatic environment. |

12.2. Persistence and degradability

|  |
| --- |
| Persistence and degradability | Not established. |

12.3. Bioaccumulative potential

|  |
| --- |
| Bioaccumulative potential | Not established. |

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

|  |  |  |
| --- | --- | --- |
| Effect on ozone layer | : | No additional information available  |

|  |  |  |
| --- | --- | --- |
| Effect on the global warming | : | No known ecological damage caused by this product. |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

|  |  |  |
| --- | --- | --- |
| Waste disposal recommendations | : | This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible. |
| Additional information | : | Flammable vapours may accumulate in the container. Do not incinerate closed containers. |

SECTION 14: Transport information

In accordance with DOT

14.1. UN number

|  |  |  |
| --- | --- | --- |
| UN-No. | : | UN1950 |

14.2. UN proper shipping name

|  |  |  |
| --- | --- | --- |
| Proper Shipping Name | : | Aerosols flammable |
| Department of Transportation Hazard Classes | : | 2.1 |
| Hazard labels  | : |  |

14.3. Additional information

|  |  |  |
| --- | --- | --- |
| Other information | : | No supplementary information available. |

|  |  |  |
| --- | --- | --- |
| Special transport precautions | : | Do not handle until all safety precautions have been read and understood. |

SECTION 15: Regulatory information

15.1. US Federal regulations

|  |
| --- |
| All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory. |

| **n-Heptane (142-82-5)** |
| --- |
| EPA TSCA Regulatory Flag | T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA. |

| **Isopropyl alcohol (67-63-0)** |
| --- |
| Listed on United States SARA Section 313 |
| EPA TSCA Regulatory Flag | T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA. |
| SARA Section 313 - Emission Reporting | 1.0 %  |

| **Toluene (108-88-3)** |
| --- |
| Listed on United States SARA Section 313 |
| SARA Section 313 - Emission Reporting | 1.0 % |

| **Ethylbenzene (100-41-4)** |
| --- |
| Listed on United States SARA Section 313 |
| SARA Section 313 - Emission Reporting | 0.1 % |

| **Benzene (71-43-2)** |
| --- |
| Listed on United States SARA Section 313 |
| SARA Section 313 - Emission Reporting | 0.1 % |

15.3. US State regulations

| **F628; F612** |
| --- |
| State or local regulations  | This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. |

SECTION 16: Other information

|  |  |  |
| --- | --- | --- |
| Indication of changes | : | None. |
| Date of issue | : | 09/03/2014 |
| Other information | : | None. |

|  |  |  |  |
| --- | --- | --- | --- |
| NFPA health hazard | : | 2  |  |
| NFPA fire hazard | : | 4  |
| NFPA reactivity | : | 0  |

*Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user’s responsibility to satisfy oneself as to the suitability and completeness of this information for the user’s own particular use.*