

According to Regulation (EC) 1907/2006

Hifax CA 1168 A 3001 S1

Version 1.0

Revision Date 21.07.2022

1. Identification of the substance and of the company/undertaking

1.1 Product identifier

| Trade name: | <i>Hifax</i> CA 1168 A 3001 S1 |
|-----------------|--------------------------------|
| Synonyms: | Polyolefin, compounded polymer |
| Substance name: | Compounded polyolefin |

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

| Identified uses: | Manufacture of plastic articles by injection moulding, extrusion or other conversion process |
|------------------|--|
| Prohibited uses: | FDA Class III medical devices; European Class III medical devices; Health Canada Class IV medical devices; Applications involving permanent implantation into the body; Life-sustaining medical applications |

1.3 Details of supplier of the safety data sheet

| | Company: | Kunststoffwerk Voerde Hueck & Schade GmbH & Co. KG Jacobstraße 13 – 17 58256 Ennepetal Deutschland |
|-----|----------------------|---|
| | Registration number: | NA |
| | Telephone: | +49 (0)2333 8300-0 |
| | E-mail-address: | info@kw-voerde.de |
| 1.4 | Emergency telephone: | +49 (0)2333 8300-160 |

2. Hazards information

2.1 Classification of the substance or mixture (Regulation (EC) Nr. 1272/2008)

Not a hazardous substance or mixture according to regulation (EC) No. 1272/2008.

2.2 Label elements

Not a hazardous substance or mixture according to regulation (EC) No. 1272/2008.

2.3 Other hazards

If small particles are generated during further processing, handling or by other means, may form combustible dust concentration in air. This substance/mixture contains no components considered to be either persistent, bio-accumulative and toxic (PBT) or very persistent and very bio-accumulative (vPvB).



According to Regulation (EC) 1907/2006

Hifax CA 1168 A 3001 S1

Revision Date 21.07.2022

3. Composition/information on ingredients

3.2 Mixtures

Ingredients

| Chemical Name | CAS-No. EG-No. | Classification (Regulation (EC) 1272/2008) | Weight % |
|---|-------------------|--|---------------|
| Proprietary blend of polyolefinic polymers | Mixture | Not classified | 80.0 - 100.0% |

Contains: Additives, stabilizers and fillers.

4. First aid measures

4.2

4.1 Description of first aid measures

| General advice: | Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. |
|--------------------------|---|
| If inhaled: | Remove person to fresh air. If signs/symptoms continue, get medical attention. In case of excessive inhalation of fumes that may be generated during heating of this material, move the person to fresh air. Obtain medical attention. Keep person warm, if necessary give Cardio-Pulmonary Resuscitation (CPR). |
| In case of skin contact: | If molten material contacts the skin, immediately flush with large amounts of water to cool the affected tissue and polymer. Do not attempt to peel polymer from skin as this will remove the skin. Obtain immediate emergency medical attention if burn is deep or extensive. |
| In case of eye contact: | Flush eyes thoroughly with water for several minutes and seek medical attention if discomfort persists. In case of eye contact with molten polymer continuously flush eye(s) with cool running water for at least 15 minutes. Beyond flushing, DO NOT attempt to remove the material adherent to the eye(s). Immediately seek medical attention. |
| If swallowed: | Adverse health effects due to ingestion are not anticipated. |
| Most important sympton | ms and effects, both acute and delayed |

| Symptoms: | Inhalation of process fumes and vapors may cause soreness in the nose and throat and coughing. |
|-----------|--|
| Hazards: | Dust contact with the eyes can lead to mechanical irritation. Molten polymer |

may cause thermal burns.



According to Regulation (EC) 1907/2006

Hifax CA 1168 A 3001 S1

Version 1.0

Revision Date 21.07.2022

| | Treatment: | Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. |
|-----|--|--|
| 5. | Fire-fighting measures | |
| 5.1 | Extinguishing media | |
| | Suitable extinguishing media: | Small fire: Use dry chemical, CO ₂ or water spray. |
| | | Large fires: Use water hose nozzels from a safe location. |
| | Unsuitable extinguishing media: | none known |
| 5.2 | Special hazards arising | from the substance or mixture |
| | Specific hazards during fire fighting: | Keep away from heat and sources of ignition. In case of fire hazardous decomposition products may be produced such as carbon monoxide, carbon dioxide, unburned hydrocarbons (smoke). |
| 5.3 | Advice for firefighters | |
| | Special protective equipment for firefighters: | Wear approved positive pressure self-contained breathing apparatus and firefighter protective clothing. |
| | Further information: | Combustible particulate solid, will decompose under fire conditions. Calorific value: 8000 – 11000 kcal/kg. Fight fire from safe distance with hose lines or monitor nozzles. Heat from fir may melt, decompose polymer and generate flammable vapors. Move containers from fire area if it can be done without risk. Evacuate immediated in the event of opening of storage container pressure relief devices or discoloration of container. Always stay away from tanks engulfed in fire. Do not attempt to get on top of storage containers involved in fire. Cool storage containers with large amount of water even after the fire is out. |



According to Regulation (EC) 1907/2006

Hifax CA 1168 A 3001 S1

Version 1.0

Revision Date 21.07.2022

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precaution: Equip responders with proper protection. Polymer particles create dangerous slipping hazard on any hard smooth surface. Equip emergency responders with proper personal protective equipment (PPE). Avoid generating dust. Avoid dispersal of dust in the air (i.e. cleaning dust surfaces with compressed air). Potential combustible dust hazard.

6.2 Environmental precautions

Environmental precautions: Do not flush into surface water or sanitary sewer system.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up: On land, sweep/shovel into suitable disposal containers or vacuum using equipment, which avoids ignition risk. On water, material is insoluble; collect and contain as any solid. All recovered material should be packaged, labeled transported and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Reclaim where possible.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: Material is in a pellet form. If converted to small particles during further processing, handling, or by other means, may form combustible dust concentrations in air. Avoid dust accumulation in enclosed space. Avoid generating dust; fine dust suspended in air and in the presence of an ignition source is a potential dust explosion hazard. Static discharge (spark), or other ignition sources, in high dust environments may ignite the dust and result in a dust explosion. Electrostatic charge may build during conveying or handling. Equipment handling polymer should be conductive and grounded (earthed) and bonded. All electrical equipment should be conform to applicable electric codes and regulatory requirements for areas handling combustible dusts. After handling, always wash hands thoroughly with soap and water. When bringing the material to processing temperatures vapors may develop may condense in the exhaust ventilation.

See section 10.

Fire-fighting class: Polymer will burn but does not easily ignite.



According to Regulation (EC) 1907/2006

Hifax CA 1168 A 3001 S1

Version 1.0

7.3

Revision Date 21.07.2022

7.2 Conditions for safe storage, including any incompatibilities

| Requirements for storage areas and containers: | Store in a dry location. Use good housekeeping practices during storage, transferring and handling. Process enclosures and adequate ventilation should be used to avoid excessive dust accumulation. Store away from excessive heat and away from strong oxidizing agents. Keep container closed to prevent contamination. Take measures to prevent the build up of electrostatic charge. |
|--|---|
| Specific end use(s) | See section 1.2. |

8. Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

Occupational exposure limits

| Ingredient | CAS-No. | Туре | Limit value | Basis Revision Date | Additional Information |
|---|---------|------|-----------------------------------|------------------------|---------------------------|
| Materials that can be formed when handling this product (inert or nuisance) dust | | TWA | 10 mg/m³ inhalable | US (ACGIH) 2005 | |
| Materials that can be formed when handling this product (inert or nuisance) dust | | TWA | 3 mg/m ³ respirable | US (ACGIH) 2005 | |
| Materials that can be formed when handling this product (inert or nuisance) dust | | TWA | 10 mg/m³ respirable | TRGS 900 (DE) | |
| Materials that can be formed when handling this product (inert or nuisance) dust | | TWA | 1,25 mg/m³ inhalable | TRGS 900 (DE) | |

Consult local authorities for acceptable exposure limits.



According to Regulation (EC) 1907/2006

Hifax CA 1168 A 3001 S1

Version 1.0

Revision Date 21.07.2022

8.2 Exposure controls

Engineering measures

Follow the recommendation in international standard NFPA 654 (as amended and adopted) for equipment used to handle this product. Engineering controls, i.e. enclosed systems, should be used whenever feasible to maintain exposures below acceptable criteria. When such controls are not feasible, or sufficient to achieve full conformance, other engineering controls such as local exhaust ventilation should be used. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e. there is no leakage from the equipment).

Personal protective equipment

| Respiratory protection: | Use process enclosures, local exhaust ventilation or other engineering controls to keep air-borne levels below recommended exposure limits. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Use appropriate respiratory protection where atmosphere exceeds recommended limits. Where workers could be exposed to dust concentrations above the exposure limit they must use appropriate certified respirators. | |
|---------------------------------|--|--|
| Hand protection: | Wear gloves that provide thermal protection where there is a potential for contact with heated material. | |
| Eye and face protection: | Dust service goggles should be worn to prevent mechanical injury or other irritation to eyes due to airborne particles, which may result from handling this product. | |
| Skin and body protection: | Wear suitable protective clothing. | |
| Hygiene measures: | Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use and the hazards that may be encountered during use. Use good hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Take off contaminated clothes and wash before reuse. | |
| Environmental exposure controls | | |

General advice: See section 6.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: pellets

Color: white



According to Regulation (EC) 1907/2006

Hifax CA 1168 A 3001 S1

Version 1.0

Revision Date 21.07.2022

| Odor: | slight | |
|--|----------|--|
| Lower explosion limit: | | nimum explosive concentration (MEC) for polymer-dust varies ing to particle size distribution. |
| Upper explosion limit: | not app | licable |
| Flammability (solid, gas) | : Polyme | er will burn but does not easily ignite. |
| Oxidizing properties: | Not cor | nsidered an oxidizing agent. |
| Autoignition temperature | : | >300°C |
| Melting point/range: | | 50 – 170 °C |
| Boiling point/range: | | not applicable |
| Vapor pressure: | | not applicable |
| Density: | | < 1 g/cm ³ |
| Water solubility: | | insoluble |
| Partition co-efficient: n-octanol/water | | no data available |
| Viscosity, dynamic: | | not applicable |
| Relative vapor density: | | not applicable |
| Evaporation rate: | | not applicable |
| Explosive properties: | | no data available |
| Other information | | |
| Other information: | | No additional information available. |
| | | |

10. Stability and reactivity

10.1 Reactivity

9.2

No known reactivity hazards.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions: Will not occur.



According to Regulation (EC) 1907/2006

Hifax CA 1168 A 3001 S1

Version 1.0

Revision Date 21.07.2022

| 10.4 | Conditions to avoid | |
|------|------------------------------------|---|
| | Conditions to avoid: | Avoid contact with strong oxidizers, excessive heat, sparks or open flame. |
| 10.5 | Incompatible materials | |
| | Materials to avoid: | Material may be softened by some hydrocarbones. |
| 10.6 | 6 Hazardous decomposition products | |
| | Hazardous decomposition products: | Not expected to decompose under normal conditions. |
| | Thermal decomposition: | Note: Carbon monoxide, olefinic and paraffinic compounds, trace amounts of organic acids, ketones aldehydes and alcohols may be formed. |

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

| Acute oral toxicity: | not classified |
|--|--|
| Acute inhalation toxicity: | not classified |
| Acute dermal toxicity: | not classified |
| Skin corrosion/irritation: | Not a skin irritant. |
| Serious eye damage / eye irritation: | Not an eye irritant. Mechanical irritation is possible. |
| Respiratory or skin sensitization: | not classified |
| Chronic toxicity | |
| Carcinogenicity: | not classified |
| Germ cell mutagenicity: | not classified |
| Reproductive toxicity | |
| Effects on fertility: | not classified |
| Effects on or via lactation Effects on Development: | not classified |

Target organ systemic toxicant- single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.



According to Regulation (EC) 1907/2006

Hifax CA 1168 A 3001 S1

| Versi | on 1.0 | Revision Date 21.07.2022 | | | |
|-------|---|--|--|--|--|
| | Target organ systemic toxicant – repeated exposure | | | | |
| | | The substance or mixture is not classified as specific target organ toxicant, repeated exposure. | | | |
| | Aspiration hazard: | not applicable | | | |
| 12. | Ecological information | | | | |
| 12.1 | Toxicity Ecotoxicology assessment | | | | |
| | | | | | |
| | Acute aquatic toxicity: | not classified | | | |
| | Chronic aquatic toxicity: | not classified | | | |
| 12.2 | .2 Persistence and degradability | | | | |
| | Biodegradability: | Not expected to be biodegradable. | | | |
| 12.3 | Bioaccumulative potential | | | | |
| | Bioaccumulation: | This material is not expected to bioaccumulate. | | | |
| 12.4 | Mobility in soil | | | | |
| | Additional advice Environmental fate and pathways: | This material is not volatile and insoluble in water. | | | |
| 12.5 | 2.5 Results of PBT and vPvB assessment | | | | |
| | This substance/mixture contains no components considered to be either persistent, bioaccumu and toxic (PBT) or very persistent and very bioaccumulative (vPvB). | | | | |
| 12.6 | 5 Other adverse effects | | | | |
| | Additional ecological information: | Ecotoxicity is expected to be minimal based on the low water solubility of polymers. No data available on this product. However, birds, fish and other wildlife may eat pellets which may obstruct their intestinal tracts. | | | |
| 13. | Disposal considerations | | | | |
| 13.1 | Waste treatment methods | | | | |
| | Product: | All recovered material should be packaged, labeled, transported and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Reclaim where possible. Recycle where possible. | | | |



According to Regulation (EC) 1907/2006

Hifax CA 1168 A 3001 S1

Version 1.0

Revision Date 21.07.2022

14. Transport information

Not regulated for transport.

15. Regulatory information

15.1 Saftey, health and environmental regulations specific for the substance or mixture

Water contaminating class: nwg not water endangering (Germany)

REACh Status

If the product has been purchased from Kunststoffwerk Voerde Hueck & Schade GmbH & Co. KG we confirm that all substances in this preparation have been pre-registered or, where required under REACh, registered.

Other international regulations

Global Inventory Status

The ingredients of this product are compliant with the following chemical inventory requirements or exemptions.

| Γ | Country/Region | Inventory | Status Description |
|---|--------------------------|-----------|--------------------|
| | United States of America | TSCA | Compliant |

15.2 Chemical safety assessment

No information available.

16. Other information

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According to Regulation (EC) 1907/2006

Hifax CA 1168 A 3001 S1

Version 1.0

Revision Date 21.07.2022

Canada Class IV Medical Devices; European Class III Medical Devices; (ii) applications involving permanent implantation into the body; (iii) life-sustaining medical applications; and (iv) lead, asbestos or MTBE related applications. All references to U.S. FDA, Health Canada, and European Union regulations include another country's equivalent regulatory classification.
