

According to Regulation (EC) 1907/2006

Hifax CB 1170 G BLACK

Version 5.0 Revision Date 17.06.2019

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

1.1 Product identifier

Trade name: Hifax CB 1170 G BLACK

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).



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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

4.1 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.

4.2 Most important symptoms 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.



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4.3 Indication of any immediate medical attention and special treatment needed

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:

Use dry chemical, CO₂ or water spray.

Large fires:

Small fire:

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 fire may melt, decompose polymer and generate flammable vapors. Move containers from fire area if it can be done without risk. Evacuate immediately

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.



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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.



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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.

7.3 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/m ³ inhalable | US (ACGIH) 2005 | |
| Materials that can be formed when handling this product (inert or nuisance) dust | | TWA | 3 mg/m³ 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.



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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

Information on basic physical and chemical properties 9.1

Appearance: pellets

Color: black



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Odor: slight

Lower explosion limit: The minimum explosive concentration (MEC) for polymer-dust varies

according to particle size distribution.

Upper explosion limit: not applicable

Flammability (solid, gas): Polymer will burn but does not easily ignite.

Oxidizing properties: Not considered an oxidizing agent.

Autoignition temperature: >300°C

Melting point/range: $50 - 170 \,^{\circ}\text{C}$

Boiling point/range: not applicable

Vapor pressure: not applicable

Density: > 1 g/cm³

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

9.2 Other information

Other information: No additional information available.

10. Stability and reactivity

10.1 Reactivity

No known reactivity hazards.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions: Will not occur.



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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 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.



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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 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 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

12.6 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.



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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.

| 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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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.
