## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

| | | |
|---|---|---|
| Product name | : | Hifax TYC 762P YGYA BLK |
| CAS Number: | | Mixture |
| Chemical Name | : | Compounded polyolefin |
| Synonyms | : | Polyolefin, Compounded polymer |
| Identified uses | : | Manufacture of plastic articles by injection molding, extrusion or other conversion process. |
| Prohibited uses | : | Aeronautical parts; Train transportation parts; Air bag unit housings; Seat belt systems and mechanisms; Brake systems and mechanisms; Pedals ( brake , gas , clutch); Steering systems and mechanisms; Medical applications use |
| Company | : | Equistar Chemicals, LP<br>LyondellBasell Tower, Suite 300<br>1221 McKinney St.<br>P.O. Box 2583<br>Houston Texas 77252-2583 |
| Telephone | : | Customer Service 888 777-0232<br>Product Safety 800 700-0946 |
| Emergency telephone | : | CANUTEC 613 996-6666<br>LYONDELL 800-245-4532 |
| E-mail address | | product.safety@lyb.com |

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS).

### Label elements

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS).

### Other hazards

If small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air.

## 3. Composition/information on ingredients

### Mixtures

### Ingredients

| Chemical Name | CAS-No. | Weight % |
|---|---|---|

| | | |
|---|---|---|
| Proprietary blend of polyolefinic polymers | Mixture | 50.0 - 80.0 % |

Contains: Additives, stabilizers and fillers

## SECTION 4. FIRST AID MEASURES

### First aid procedures

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.

### Notes to physician

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.

Treatment : Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

## SECTION 5. FIRE-FIGHTING MEASURES

### Flammable properties

| | | |
|---|---|---|
| Autoignition temperature | : | > 572 °F (300 °C) |
| Lower explosion limit | : | The minimum explosive concentration (MEC) for polymer dust varies according to particle size distribution. |
| Upper explosion limit | : | Not applicable. |

### Fire fighting

| | | |
|---|---|---|
| Suitable extinguishing media | : | SMALL FIRE:<br>Use dry chemical, CO2, or water spray.<br><br>LARGE FIRES:<br>Use water spray hose nozzles from a safe location. |
| Unsuitable extinguishing media | : | None known. |
| Further information | : | Combustible particulate solid, will decompose under fire conditions.<br>Calorific Value: 8000 - 11000 kcal/kg<br>Fight fire from safe distance with hose lines or monitor nozzles.<br>Heat from fire may melt, decompose polymer, and generate flammable vapors.<br>Move containers from fire area if it can be done without risk.<br>Evacuate immediately in the event of opening of storage container pressure relief devices or discoloration of container.<br>Always stay away from tanks engulfed in fire.<br>Do not attempt to get on top of storage containers involved in fire.<br>Cool storage containers with large volumes of water even after fire is out. |

### Protective equipment and precautions for firefighters

| | | |
|---|---|---|
| Specific hazards during fire fighting | : | Keep away from heat and sources of ignition.<br>In case of fire hazardous decomposition products may be produced such as:<br>Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). |
| Special protective equipment for fire-fighters | : | Wear approved positive pressure self-contained breathing apparatus and firefighter protective clothing. |

## SECTION 6. ACCIDENTAL RELEASE MEASURES

| | | |
|---|---|---|
| Personal precautions | : | Equip responders with proper protection.<br>Creates dangerous slipping hazard on any hard smooth surface.<br>Equip emergency responders with proper personal protective equipment (PPE)<br>Avoid generating dust.<br>Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).<br>Potential combustible dust hazard.<br>Polymer particles create slipping hazard on hard smooth surfaces. |
| Environmental precautions | : | Do not flush into surface water or sanitary sewer system. |
| Methods for containment / Methods for cleaning up | : | On land, sweep/shovel into suitable disposal containers or vacuum using equipment which avoids ignition risk.<br>On water, material is insoluble; collect and contain as any solid.<br>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. |

## SECTION 7. HANDLING AND STORAGE

### Handling

| | | |
|---|---|---|
| Advice on safe handling | : | Material is in a pellet form.<br>If converted to small particles during further processing, handling, or by other means, may form combustible dust concentrations in air.<br>Avoid dust accumulation in enclosed space.<br>Use dust collection systems designed per NFPA 654 to avoid dust accumulation.<br>Avoid generating dust; fine dust suspended in air and in the presence of an ignition source is a potential dust explosion hazard.<br>Static discharge (spark), or other ignition sources, in high dust environments may ignite the dust and result in a dust explosion<br>Electrostatic charge may build during conveying or handling.<br>Equipment handling polymer should be conductive and grounded (earthed) and bonded.<br>Metal containers involved in the transfer of this material should be grounded and bonded.<br>All electrical equipment should conform to applicable electric codes and regulatory requirements for areas handling combustible dusts.<br>After handling, always wash hands thoroughly with soap and water.<br>When bringing the material to processing temperatures vapors |

may develop may condense in the exhaust ventilation. See section 10.
Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

**Storage**

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.

## 8. Exposure controls/personal protection

### Control parameters

#### Ingredients with workplace control parameters

#### Occupational Exposure Limits

| Ingredients | CAS-No. | Type | Limit Value | Basis Revision Date | Additional Information |
|---|---|---|---|---|---|
| Materials that can be formed when handling this product: Non-specified (inert or nuisance) dust | | TWA | 10 mg/m3 inhalable | US (ACGIH) 2005 | |
| Materials that can be formed when handling this product: Non-specified (inert or nuisance) dust | | TWA | 3 mg/m3 respirable | US (ACGIH) 2005 | |
| Materials that can be formed when handling this product: Non-specified (inert or nuisance) dust | | TWA | 15 mg/m3 total dust | US (OSHA) 2005 | |
| Materials that can be formed when handling this product: Non-specified (inert or nuisance) dust | | TWA | 5 mg/m3 respirable | US (OSHA) 2005 | |

Consult local authorities for acceptable exposure limits.

**Exposure controls**

**Engineering measures**

Follow the recommendations in 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.
Equipment and vessels handling combustible dust from this material should be designed to either prevent dust explosions (inerting) or safely vent dust explosions per NFPA 654
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 airborne levels below recommended exposure limits.<br>When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.<br>Use appropriate respiratory protection where atmosphere exceeds recommended limits.<br>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 and/or potential hazards that may be encountered during use.<br>Use good personal hygiene practices.<br>Wash hands before eating, drinking, smoking, or using toilet facilities.<br>Take off contaminated clothing and wash before reuse. |

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

| | | |
|---|---|---|
| Physical state | : | Pellets. |
| Color | : | Black |
| Odor | : | Slight. |

### Safety data

| | | |
|---|---|---|
| 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 | : | > 572 °F (300 °C) |
| Decomposition temperature | : | not determined |
| pH | : | Not applicable. |
| Melting point/range | : | 122 - 338 °F (50 - 170 °C) |
| Boiling point/boiling range | : | Not applicable. |
| Vapor pressure | : | Not applicable. |
| Density | : | > 1 g/cm3 |
| Water solubility | : | Insoluble. |
| Partition coefficient: n-octanol/water | : | No Data Available. |
| Viscosity, dynamic | : | Not applicable. |
| Relative vapor density | : | Not applicable. |
| Evaporation rate | : | Not applicable. |
| Explosive properties | : | No Data Available. |
| Remarks - Other information | : | No additional information available. |

## SECTION 10. STABILITY AND REACTIVITY

| | | |
|---|---|---|
| Reactivity | : | No known reactivity hazards. |
| Chemical stability | : | Stable under normal conditions. |
| Conditions to avoid | : | Avoid contact with strong oxidizers, excessive heat, sparks or open flame. |
| Materials to avoid | : | Material may be softened by some hydrocarbons. |
| Hazardous decomposition products | : | Not expected to decompose under normal conditions. |
| Thermal decomposition | : | Carbon monoxide, olefinic and paraffinic compounds, trace amounts of organic acids, ketones, aldehydes and alcohols may be formed. |
| Hazardous reactions | : | Will not occur. |

## SECTION 11. TOXICOLOGICAL INFORMATION

**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.<br>Mechanical irritation is possible. |
| **Respiratory or skin sensitization** | : | Not classified |

**Chronic toxicity**

| Component Name | NTP | IARC | OSHA |
|---|---|---|---|
| Carbon Black | | 2B | |
| Titanium Dioxide | | 2B | |

| | | |
|---|---|---|
| Carcinogenicity | : | Not classified<br>Contains component(s) listed by IARC as possibly carcinogenic to humans.<br>This material is encapsulated in a thermoplastic resin with |

limited release under normal conditions of use, transportation, and storage.

Germ cell mutagenicity : Not classified

**Reproductive toxicity**

Effects on fertility / Effects on or via lactation : Not classified

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.

**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

**Ecotoxicology Assessment**

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

**Persistence and degradability**

**Biodegradability** : Not expected to be biodegradable.

**Bioaccumulative potential**

**Bioaccumulation** : This material is not expected to bioaccumulate.

**Mobility in soil**

**Additional advice Environmental fate and pathways** : This material is not volatile and insoluble in water.

**Results of PBT and vPvB assessment**

Not applicable.

**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.

## SECTION 13. DISPOSAL CONSIDERATIONS

Further information : 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 if possible.

## SECTION 14. TRANSPORT INFORMATION

Not regulated for transport

## SECTION 15. REGULATORY INFORMATION

**Other international regulations**

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

*Additional Explanatory Status Statements follow the table, as necessary.

| Country/Region | Inventory | Status Description |
|---|---|---|
| Australia | AICS | Compliant |
| Canada | DSL | Compliant |
| China | IECSC | Compliant |
| Europe | REACH | See REACH Compliance Statement |
| Japan | ENCS | Compliant |
| Korea | KECI | Compliant |
| New Zealand | NZIoC | Compliant |
| Philippines | PICCS | Compliant |
| United States of America | TSCA | Compliant |
| Taiwan | TCSCA | Not Determined |

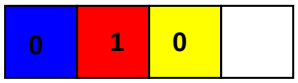
*REACh status*
*If the product has been purchased from any company of the LyondellBasell group of companies registered in the European Union, we confirm that all substances in this preparation have been pre-registered or, where required under REACh, registered, and that we have the intention to proceed with their registration in accordance with the deadlines set forth in REACh. (Regulation (EU) No. 1907/2006)*

Contact product.safety@lyb.com for additional global inventory information.

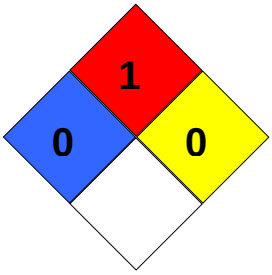
## SECTION 16. OTHER INFORMATION

**Further information**

**HMIS Classification** : Health Hazard: 0
Flammability: 1
Physical hazards: 0




**NFPA Classification** : Health Hazard: 0
Fire Hazard: 1
Instability: 0




**Other Information**
HMIS rating scale (0 = minimal hazard; 4 = severe hazard)
NFPA rating scale (0 = minimal hazard; 4 = severe hazard)

**Material safety datasheet sections which have been updated:**
Updated format ; First Edition April 15 2015

**Disclaimer**

This document is generated for the purpose of distributing health, safety, and environmental data.
Information is correct to the best of our knowledge at the date of the SDS publication.
It is not a specification sheet nor should any displayed data be construed as a specification.
Before using a product sold by a company of the LyondellBasell family of companies, users should make their own independent determination that the product is suitable for the intended use and can be used safely and legally. SELLER MAKES NO WARRANTY; EXPRESS OR IMPLIED (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY WARRANTY) OTHER THAN AS SEPARATELY AGREED TO BY THE PARTIES IN A CONTRACT.
This product(s) may not be used in:
(i) any U.S. FDA Class I, Health Canada Class I, and/or European Union Class I medical devices, without prior notification to Seller for each specific product and application; or (ii) the manufacture of any of the following, without prior written approval by Seller for each specific product and application: U.S. FDA Class II Medical Devices; Health Canada Class II or Class III Medical Devices; European Union Class II Medical Devices; film, overwrap and/or product packaging that is considered a part or component of one of the aforementioned medical devices; packaging in direct contact with a pharmaceutical active ingredient and/or dosage form that is intended for inhalation, injection, intravenous, nasal, ophthalmic (eye), digestive, or

**Disclaimer**

topical (skin) administration; tobacco related products and applications, electronic cigarettes and similar devices, and pressure pipe or fittings that are considered a part or component of a nuclear reactor. Additionally, the product(s) may not be used in: (i) U.S. FDA Class III Medical Devices; Health 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.

Adflex, Adstif, Adsyl, Akoafloor, Akoalit, Alastian, Alathon, Aquathene, Avant, Catalloy, Clyrell, Dexflex, Flexathene, Hifax, Histif, Hostacom, Hostalen, Indure, Integrate, Koattro, Lucalen, Luflexen, Lupolen, Metocene, Microthene, Moplen, Nexprene, Petrothene, Plexar, Pristene, Pro-Fax, Purell, Sequel, Softell, Starflex, Ultrathene, and Valtec are trademarks owned or used by the LyondellBasell family of companies.

Language Translations

The information presented in this document has been translated from English by a vendor LyondellBasell believes to be reliable. LyondellBasell and its vendor have made a good-faith effort to verify the accuracy of the translation, but assume no liability or other responsibility for any errors that may have occurred. Please refer to our web site (www.lyondellbasell.com) for the original document written in English.