

Issuing Date 18-Dec-2020

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Revision Number 4.1

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

### 1.1. Product identifier

**Product Code(s)** IDEALIS500, IDEALIS500WS, IDEALIS509, IDEALISMG, UTEC3040, UTEC3040WS, UTEC3041, UTEC4040, UTEC4041, UTEC5040, UTEC5041, UTEC5041F, UTEC5540, UTEC5541, UTEC5541F, UTEC5542F, UTEC6540, UTEC6540G, UTEC6540WS, UTEC6541, UTEC7542F, UTECMG, UTECOV, VARUTEC

**Product Name** Ultra High Molecular Weight Polyethylene

**Synonyms** Polyethylene homopolymer

**Pure substance/mixture** Mixture

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

**Recommended use** Polymer preparations and compounds

**Uses advised against** No information available

### 1.3. Details of the supplier of the safety data sheet

#### Supplier

Braskem Netherlands BV  
Weena 238-240, 9th Floor Tower C  
NL - 3012NJ- Rotterdam, Netherlands  
Telephone: +31 10 798 5002

#### For further information, please contact

**E-mail address** polymer.compliance-europe@braskem.com

### 1.4. Emergency telephone number

**Emergency telephone** CHEMTREC International: +1 703-741-5970

**Emergency telephone - §45 - (EC)1272/2008**

**Europe** 112

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Regulation (EC) No 1272/2008

This substance is classified as not hazardous according to regulation (EC) 1272/2008 [CLP].

### 2.2. Label elements

#### Hazard statements

Not classified.

**Unknown acute toxicity**

100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).

**Additional information**

The synthetic polymer microparticles supplied is subject to conditions laid down by entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council.

**2.3. Other hazards**

Special danger of slipping by leaking/spilling product. Electrostatic charges may be generated during handling. If small particles are generated during processing or handling, this product may form combustible dust concentrations in air.

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors.

**SECTION 3: Composition/information on ingredients****3.1 Substances**

Not applicable

**3.2 Mixtures**

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Polyethylene homopolymer 9002-88-4	98-100	No data available	618-339-3	[C]	-	-	-

*Classification according to Regulation (EC) No. 1272/2008 [CLP] - Notes*

[C] - Components with occupational exposure limits and/or biological occupational exposure limits requiring monitoring

**Full text of H- and EUH-phrases: see section 16**

**Acute Toxicity Estimate**

**If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATE<sub>mix</sub>) for classifying a mixture based on its components**

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Polyethylene homopolymer 9002-88-4	4004	-	-	-	-

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59).

This product contains one or more synthetic polymer microparticles as defined by entry 78 of Annex XVII to Regulation (EC) No. 1907/2006.

Chemical name	CAS No.	Weight-%	Synthetic polymer microparticles
Polyethylene homopolymer	9002-88-4	98-100	X

**SECTION 4: First aid measures****4.1. Description of first aid measures**

Inhalation	Remove to fresh air.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids.
Skin contact	Wash skin with soap and water.
Ingestion	Clean mouth with water and afterwards drink plenty of water.

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

Symptoms	Product dust may be irritating to eyes, skin and respiratory system.
Effects of Exposure	No information available.

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

Note to doctors	Treat symptomatically.
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**SECTION 5: Firefighting measures****5.1. Extinguishing media**

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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Unsuitable extinguishing media	No information available.
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**5.2. Special hazards arising from the substance or mixture**

Specific hazards arising from the chemical	Avoid generation of dust. Fine dust dispersed in air may ignite.
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**5.3. Advice for firefighters**

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions	Ensure adequate ventilation. Avoid generation of dust. Avoid contact with eyes. Use personal protective equipment as required. Do not breathe dust. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Take precautionary measures against static discharges.
Other information	Refer to protective measures listed in Sections 7 and 8.
For emergency responders	Use personal protection recommended in Section 8.

**6.2. Environmental precautions**

Environmental precautions	Do not allow into any sewer, on the ground or into any body of water. Prevent product from
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entering drains. See Section 12 for additional Ecological Information.

### **6.3. Methods and material for containment and cleaning up**

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so. Prevent dust cloud. Ventilate the area.
<b>Methods for cleaning up</b>	May be a slipping hazard when spilled. Take up with inert, damp, non-combustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal. Pick up and transfer to properly labelled containers.
<b>Prevention of secondary hazards</b>	Clean contaminated objects and areas thoroughly observing environmental regulations.

### **6.4. Reference to other sections**

<b>Reference to other sections</b>	See section 8 for more information See section 13 for more information
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## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

<b>Advice on safe handling</b>	Handle in accordance with good industrial hygiene and safety practice. Airborne dusts are potentially explosive. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Handling and processing operations should be conducted in accordance with 'best practices' (e.g. NFPA-654). Obtain special instructions before use. Keep container closed when not in use. Minimise dust generation and accumulation. Ensure adequate ventilation. Avoid generation of dust. Do not breathe dust. Avoid contact with eyes. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use spark-proof tools and explosion-proof equipment. Take precautionary measures against static discharges. May be a slipping hazard when spilled. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Dust could be formed as a result of granule degradation by impact or by abrasion during handling, grinding, or conveying operations.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice. Wash hands and face before breaks and immediately after handling the product. Do not breathe dust.

### **7.2. Conditions for safe storage, including any incompatibilities**

<b>Storage Conditions</b>	Store in a well-ventilated place. Minimise dust generation and accumulation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Proper grounding procedures to avoid static electricity should be followed.
<b>Storage class (TRGS 510)</b>	LGK 11.

### **7.3. Specific end use(s)**

<b>Specific use(s)</b>	Polymer preparations and compounds.
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## **SECTION 8: Exposure controls/personal protection**

### **8.1. Control parameters**

#### **Exposure Limits**

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Polyethylene homopolymer	-	-	-	TWA: 10.0 mg/m <sup>3</sup>	-

9002-88-4					
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Polyethylene homopolymer 9002-88-4	-	TWA: 5 mg/m <sup>3</sup>	-	-	-
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Polyethylene homopolymer 9002-88-4	-	-	-	TWA: 5 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>

**Biological occupational exposure limits**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

**Derived No Effect Level (DNEL) - Workers** No information available

**Derived No Effect Level (DNEL) - General Public** No information available.

**Predicted No Effect Concentration (PNEC)** No information available.

**8.2. Exposure controls****Engineering controls**

Showers  
Eyewash stations  
Ventilation systems.

**Personal protective equipment****Eye/face protection**

Wear safety glasses with side shields (or goggles). Eye protection must conform to standard EN 166.

**Hand protection**

Impervious gloves. Gloves must conform to standard EN 374.

**Skin and body protection**

Impervious clothing. (EN ISO 6529).

**Respiratory protection**

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material (EN 137).

**General hygiene considerations**

Handle in accordance with good industrial hygiene and safety practice. Wash hands and face before breaks and immediately after handling the product. Do not breathe dust.

**Environmental exposure controls** No information available.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Appearance	White to off-white. Powder.
Physical state	Solid
Colour	White to off-white
Odour	No information available
Odour threshold	No information available

**Property****Values****Remarks • Method**

Melting point / freezing point 130 - 140 °C

No data available

Initial boiling point and boiling

No data available

range		
Flammability		No data available
Flammability Limit in Air		The minimum explosive concentration (MEC) for polymer dust varies according to particle size distribution
Upper flammability or explosive limits		No data available
Lower flammability or explosive limits		No data available
Flash point		No data available
Autoignition temperature	362 °C	No data available
Decomposition temperature		No data available
pH		No data available
pH (as aqueous solution)		None known
Kinematic viscosity		No data available
Dynamic viscosity		No data available
Water solubility	Insoluble in water	No data available
Solubility(ies)		No data available
Partition coefficient		No data available
Vapour pressure		No data available
Relative density	0.92 - 0.935 g/cm <sup>3</sup>	No data available
Bulk density		No data available
Liquid Density		No data available
Relative vapour density		No data available
Particle characteristics		
Particle Size		No data available
Particle Size Distribution		No data available

## 9.2. Other information

### 9.2.1. Information with regards to physical hazard classes

Not applicable

### 9.2.2. Other safety characteristics

No information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reactivity None under normal use conditions.

### 10.2. Chemical stability

Stability Stable under normal conditions.

### Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

### 10.4. Conditions to avoid

**Conditions to avoid** Heat, flames and sparks. Incompatible materials. Dust formation.

#### **10.5. Incompatible materials**

**Incompatible materials** Fluorine. Strong acids. Strong oxidising agents. Chlorinated compounds. Aromatic solvents.

#### **10.6. Hazardous decomposition products**

**Hazardous decomposition products** Decomposition products depend on temperature, exposure to air, and the presence of other substances. Processing may release irritating fumes, olefinic and paraffinic compounds, carbon monoxide, and carbon dioxide. Potential thermal decomposition products include trace aldehydes (including formaldehyde), alcohols, organic acids, and hydrocarbons.

### **SECTION 11: Toxicological information**

#### **11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

##### **Information on likely routes of exposure**

###### **Product Information**

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<b>Inhalation</b>	Specific test data for the substance or mixture is not available. Inhalation of dust in high concentration may cause mechanical irritation of respiratory system.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Dust contact with the eyes can lead to mechanical irritation.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. Contact with dust can cause mechanical irritation or drying of the skin.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available.

##### **Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** Product dust may be irritating to eyes, skin and respiratory system.

##### **Acute toxicity**

###### **Numerical measures of toxicity**

###### **Unknown acute toxicity**

100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).

###### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Polyethylene homopolymer	> 4000 mg/kg ( Rat )	-	-

##### **Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.
<b>Respiratory or skin sensitisation</b>	Based on available data, the classification criteria are not met.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.

<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
<b>STOT - single exposure</b>	Based on available data, the classification criteria are not met.
<b>STOT - repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.

## **11.2. Information on other hazards**

### **11.2.1. Endocrine disrupting properties**

**Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors.

### **11.2.2. Other information**

**Other adverse effects** No information available.

## **SECTION 12: Ecological information**

### **12.1. Toxicity**

**Ecotoxicity** The environmental impact of this product has not been fully investigated. Material in pellet or bead form may mechanically cause adverse effects if ingested by waterfowl or aquatic life. Avoid release to the environment.

### **12.2. Persistence and degradability**

**Persistence and degradability** No information available.

### **12.3. Bioaccumulative potential**

**Bioaccumulation** No information available.

### **12.4. Mobility in soil**

**Mobility in soil** No information available.

### **12.5. Results of PBT and vPvB assessment**

**PBT and vPvB assessment** The product does not contain any substance(s) classified as PBT or vPvB.

### **12.6. Endocrine disrupting properties**

**Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors.

### **12.7. Other adverse effects**

**Other adverse effects** No information available.

**PMT or vPvM properties** Based on available data, the classification criteria are not met.



**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

<b>Waste from residues/unused products</b>	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Should not be released into the environment.
<b>Contaminated packaging</b>	Do not dispose of with household waste. Do not flush to sewer. Do not allow to enter into surface water or drains. Do not reuse empty containers.
<b>Waste codes / waste designations according to EWC / AVV</b>	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

**SECTION 14: Transport information**

<b>IMDG</b>	Not regulated
<b>14.1 UN number or ID number</b>	Not regulated
<b>14.2 UN proper shipping name</b>	Not regulated
<b>14.3 Transport hazard class(es)</b>	Not regulated
<b>14.4 Packing group</b>	Not applicable
<b>14.5 Environmental hazards</b>	Not applicable
<b>14.6 Special Precautions for Users</b>	
<b>Special Provisions</b>	None
<b>14.7 Maritime transport in bulk according to IMO instruments</b>	No information available

<b>RID</b>	Not regulated
<b>14.1 UN number</b>	Not regulated
<b>14.2 UN proper shipping name</b>	Not regulated
<b>14.3 Transport hazard class(es)</b>	Not regulated
<b>14.4 Packing group</b>	Not applicable
<b>14.5 Environmental hazards</b>	Not applicable
<b>14.6 Special Precautions for Users</b>	
<b>Special Provisions</b>	None

<b>ADR</b>	Not regulated
<b>14.1 UN number or ID number</b>	Not regulated
<b>14.2 UN proper shipping name</b>	Not regulated
<b>14.3 Transport hazard class(es)</b>	Not regulated
<b>14.4 Packing group</b>	Not applicable
<b>14.5 Environmental hazards</b>	Not applicable
<b>14.6 Special Precautions for Users</b>	
<b>Special Provisions</b>	None

<b>IATA</b>	Not regulated
<b>14.1 UN number or ID number</b>	Not regulated
<b>14.2 UN proper shipping name</b>	Not regulated
<b>14.3 Transport hazard class(es)</b>	Not regulated
<b>14.4 Packing group</b>	Not applicable
<b>14.5 Environmental hazards</b>	Not applicable
<b>14.6 Special Precautions for Users</b>	
<b>Special Provisions</b>	None
<b>Note:</b>	None

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**National regulations****France****Occupational Illnesses (R-463-3, France)**

Chemical name	French RG number
Polyethylene homopolymer 9002-88-4	RG 66

**Germany**

**Water hazard class (WGK)** non-hazardous to water (nwg)

**Netherlands****Water contaminating class (Netherlands)**

Chemical name	Netherlands - List of Carcinogens	Netherlands - List of Mutagens	Netherlands - List of Reproductive Toxins
Polyethylene homopolymer	-	-	-

**European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

**Authorisations and/or restrictions on use:**

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV).

This product contains one or more substance(s) subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

**Persistent Organic Pollutants**

Not applicable

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009**

Not applicable

**Ordinance on the Incentive Tax on Volatile Organic Compounds (OVOC) SR 814.018**

Not applicable

**WPO (GSchV) SR 814.201; WPA (GSchG) SR 814.20**

Not applicable

**International Inventories**

Contact supplier for inventory compliance status

**15.2. Chemical safety assessment****Chemical Safety Report**

No information available

**SECTION 16: Other information****Key or legend to abbreviations and acronyms used in the safety data sheet****Legend**

ATE: Acute Toxicity Estimate

SVHC: Substances of Very High Concern for Authorisation:

PBT: Persistent, Bioaccumulative, and Toxic (PBT) Chemicals

vPvB: Very Persistent and very Bioaccumulative (vPvB) Chemicals

### Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
SCBA	Self-contained breathing apparatus		

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)  
 European Chemicals Agency (ECHA) (ECHA\_API)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AELG(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 Japan GHS Classification  
 Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme  
 Organisation for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

**Issuing Date** 18-Dec-2020

**Revision Date** 02-Jun-2025

**This safety data sheet complies with the requirements of Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No. 1907/2006**

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**