

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

1.1. Product identifier

Trade name	:HIPLEX [®] HHM 5202; HIPLEX [®] HHM 5502; HIPLEX [®] HHM 50100; HIPLEX [®] TR-130; HIPLEX [®] TR-144; OFF GRADE granulate and powder: HIPLEX [®] 00041OFF; HIPLEX [®] 00042OFF; HIPLEX [®] 00043OFF; HIPLEX [®] 00044OFF; HIPLEX [®] 00045OFF; HIPLEX [®] 00047OFF; HIPLEX [®] 00048OFF
Chemical family	:Polymer
Chemical name	:Ethylene – 1-Hexene Copolymer
CAS no	:25213-02-9
Formula	:(C ₂ H ₄) _n
Synonyms	:High Density Polyethylene / HDPE / PE-HD / 1-Hexene, polymer with ethylene
Product group	:Trade product

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

1.2.1. Relevant identified uses

Main use category	: Industrial/Professional use
Use of the substance/mixture	: HIPLEX [®] HHM 5202 / HIPLEX [®] HHM 5502: Blow moulding of small and medium size containers; HIPLEX [®] HHM 50100: Blow moulding of medium and large size containers; HIPLEX [®] TR-130 / HIPLEX [®] TR-144: Tubular films extrusion;

1.2.2. Uses advised against

No additional information available.

1.3. Details of the supplier of the safety data sheet

1.3.1. Manufacturer/Supplier

HIP-Petrohemija a.d. Pancevo
Spoljnostarcevacka 82
26000 Pancevo
Republic of Serbia
Website: www.hip-petrohemija.com

Customer service

Tel: + 381 (0) 13 307 000
Fax: + 381 (0) 13 310 207
E-mail (person responsible for the SDS):
ivana.kosovic@hip-petrohemija.rs

1.3.2. Only Representative

REACH Law Ltd.
Polaris Business Park
Vänrikinkuja 3 / 02600 Espoo
Finland
E-mail: SDS@reachlaw.fi
Website: www.reachlaw.fi

1.4. Emergency telephone number

Poisoning Control Centre	: + 381 (0) 11 266 11 22 (00-24h) + 381 (0) 11 266 27 55 (00-24h) + 381 (0) 11 360 84 40 (00-24h)
HIP-Petrohemija (available during office hours: Monday to Friday)	: + 381 (0) 13 30 74 40 (08-16h)

See SECTION 16. for the list of telephone numbers of poison centers in the European Economic Area

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Substance does not meet the criteria for classification in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]

Substance does not meet the criteria for labelling in accordance with Regulation (EC) No 1272/2008.

2.3. Other hazards

PBT/vPvB : Substance does not meet the criteria for PBT or vPvB in accordance with REGULATION (EC) No 1907/2006, Annex XIII.

Other information : No additional information available.

SECTION 3: Composition/information on ingredients

3.1. Substance

Substance name	Product identifier	%(w/w)	Classification according to Regulation (EC) No 1272/2008 [CLP]
Ethylene – 1-Hexene Copolymer	(CAS no) 25213-02-9	99,7 – 99,9	Not classified
Additives*	Mixtures	0,1 - 0,3	Not classified

* Slip agent and antioxidants

Note: Contains no other components or impurities which will influence the classification of the product.

EU Inventory: Additives listed on European Inventory of Existing Chemical Substances (EINECS). The product is a polymer, following the European regulation, registration on the EINECS inventory is not required.

3.2. Mixture

Not applicable.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

:This material is not harmful to human health or to aquatic life in the form it is placed on the market. Spilled product may cause dangerous slipping hazard. Under fire conditions product will readily burn and emit a heavy, irritating smoke. Accumulated fine dust may form combustible air-dust mixture and cause mechanical irritation of skin, eyes and respiratory system. Contact with molten material may cause serious thermal burns. Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid.

First-aid measures after inhalation

:Move affected individual to non-contaminated air. If breathing is difficult, qualified personnel may give oxygen or assisted ventilation. Seek immediate medical attention if the individual is not breathing, is unconscious or if any other symptoms persist. Inhalations of smoke following a fire may result in delayed pulmonary edema.

First-aid measures after skin contact

:In case of contact with molten material, immediately flush skin with plenty of cold water. Do not remove solidified product from the skin. Obtain immediate emergency medical attention if burn is deep or extensive.

First-aid measures after eye contact

:Remove contact lenses, if any. Immediately flush eyes with plenty of water for at least 15 minutes, while holding eyelids open. Seek medical attention if symptoms develop or persist.

First-aid measures after ingestion	: Ingestion is not considered a potential route of exposure - material is not expected to be absorbed from the gastrointestinal tract. DO NOT INDUCE VOMITING.
Advice for a doctor	: Provide oxygen. Treat burns or allergic reactions conventionally after decontamination.

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

Inhalation of dust may irritate the respiratory tract which may cause coughing and sensation of shortness of breath. Prolonged inhalation of high doses of decomposition products may give headache or dizziness. Additional symptoms and effects are described in *section 11, Toxicological information*.

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

In case of any unwanted reaction or inconvenience, call Poison Control Centre or a doctor and seek medical attention - show the safety data sheet if possible. See *subsection 1.4, Emergency telephone number*.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: LARGE FIRE: Use water spray or fog to control fire fumes. SMALL FIRE: Dry chemical. Foam or carbon dioxide.
Unsuitable extinguishing media	: DO NOT use direct water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Polymer will burn but does not easily ignite. Keep container closed. Prevent dust accumulations and dust clouds.
Explosion hazard	: Dust may form explosive dust-air mixture.
Hazardous combustion products	: Carbon monoxide, olefinic and paraffinic compounds, traces amounts of organic acids, ketones, aldehydes and alcohols may be formed.

5.3. Advice for firefighters

Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus. Clothing for fire-fighters (including helmets, protective boots and gloves) will provide a basic level of protection. See <i>section 6, Accidental release measures</i> .
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation.
For emergency personnel	: Wear appropriate personal protective equipment (PPE) and clothing during cleanup. Individuals without appropriate protective equipment should be excluded from area of spill until cleanup has been completed.

6.2. Environmental precautions

Prevent waste from contaminating the surrounding environment. In case of accidental spillage of the product, prevent product entering the canalization system, as it may cause mechanical blockage. Prevent entry into underground and confined spaces, water intakes and waterways. Discard any product, residue, disposable container or liner in an environmentally acceptable manner, in full compliance with federal, state and local regulations.

6.3. Methods and material for containment and cleaning up

For containment	: Stop leak, isolate and contain spill.
Methods for cleaning up	: Vacuum or sweep up spill immediately to prevent slipping accidents, potentially causing falls and serious injury. Use appropriate non-sparking tools to put the spilled solid in an appropriate disposal or recovery container. Reuse or recycle if possible.

6.4. Reference to other sections

See *section 7, Handling and storage*. See *subsection 8.2, Exposure controls*. See *section 13, Disposal considerations*.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

:Keep away from heat, sparks, flame or any ignition source. During processing and thermal treatment of the product, small amounts of volatile hydrocarbons may be released. Provide adequate ventilation. Avoid inhalation of dust and decomposition fumes. Dust from the product gives a potential risk for dust explosion. All equipment should be grounded.

Hygiene measures

:Wear appropriate personal protective equipment. Avoid prolonged exposure. Avoid inhalation. Avoid contact with the skin, eyes and clothing. Wash hands and exposed parts of body thoroughly with soap and water after work. Take off contaminated clothing. Do not wear contaminated clothing, shoes or protective equipment before entering eating area.

7.2. Conditions for safe storage, including any incompatibilities

Store in dry, well-ventilated area at ambient temperature and at atmospheric pressure in original packaging (plastic or cardboard boxes) or in silo made of appropriate material (aluminium, stainless steel). Do not store near highly flammable materials. Keep container dry. Store away from excessive heat and away from strong oxidizing agents. Keep container closed to prevent contamination. Prolonged storage preferably out of the sun or other sources of radiation.

7.3. Specific end use(s)

Used in different type of industry. See subsection 7.1, Precautions for safe handling.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure control parameters

: Respirable and inhalable particles, total dust*

ACGIH

TWA: 3 mg/m³ (Respirable particles);

TWA: 10 mg/m³ (Inhalable particles)

OSHA

TWA: 5 mg/m³ (Respirable particles);

TWA: 15 mg/m³ (Total dust)

*Product is pellets, not a dust or finely divided particle

DNEL (Derived No Effect Levels)

:No data available.

PNEC (Predicted No Effect Concentration)

:No data available.

8.2. Exposure controls

Appropriate engineering controls

:Engineering methods to reduce hazardous exposure are preferred controls. Method includes mechanical ventilation (dilution and local exhaust) process or personal enclosure, remote and automatic operation, control of process conditions, leak detection and repair system, and other process modification. Ensure all exhaust ventilation systems are discharged to outdoors, away from air intakes and ignition sources. Supply sufficient replacement air to make up for air removed by exhaust system.

Personal protective equipment

:Wear recommended personal protective equipment (PPE). Ensure adequate ventilation. Avoid all unnecessary exposure.

Hand protection

:Use chemical resistant gloves appropriate to conditions of use. Wear heat protective gloves and clothing if 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. Chemical goggles or safety glasses are required as minimum requirements. Wear full-face shield during thermal processing if contact with molten material is likely.

Skin and body protection

:Wear suitable protective clothing, such as long sleeves or a lab coat.

Respiratory protection

:Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits. In case of insufficient ventilation, where atmosphere exceeds recommended limits, wear suitable

Environmental exposure controls	respiratory equipment. :Environmental exposure controls should be in accordance with applicable regional, national, and local laws and regulations. Contain spills. Prevent releases. Observe national regulations on emissions. Ensure all national/local regulations are observed.
Other information	:Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state	:Solid
Form	:Granulate/ powder
Colour	:Translucent to white
Odour	:Faint, mild hydrocarbon odour.
Odour threshold	:Not applicable.
PH	:Not applicable.
Melting point	:>140°C
Boiling point	:Not applicable.
Flash point	:Not applicable.
Flammability	:Not classified. Polymer will burn but does not easily ignite.
Flammability range	
Flammability limit- lower	:Not applicable.
Flammability limit - upper	:Not applicable.

Auto-ignition temperature

:>350°C

Relative density (Water=1)

:0,949 – 0,953 (at 15°C)

Solubility in water

:Insoluble in water.

Vapour pressure

:Not applicable.

Evaporation rate

:Not applicable.

Partition coefficient (n-octanol/water)

:Specific data not available.

Viscosity, kinematic

:No data available.

Viscosity, dynamic

:No data available.

Explosive properties

:Not applicable.

Oxidising properties

:Not applicable.

9.2. Other information

Additional information

:No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport. See further information in subsections below.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Hazardous polymerization will not occur. See section 7, *Handling and storage*.

10.4. Conditions to avoid

Keep away from heat, sparks, open flames. Avoid contact with with strong oxidizing agents. Organic solvents, ether, gasoline, lubricating oils, chlorinated hydrocarbons and aromatic hydrocarbons may react with and degrade material. See section 7, *Handling and storage*.

10.5. Incompatible materials

Strong oxidizing agents, acids, halogens. See section 7, *Handling and storage*.

10.6. Hazardous decomposition products

Dependent on process conditions (temperature, pressure, time, O₂) and may emit various bloomers, waxes and oxygenated hydrocarbons as well as carbon dioxide, carbon monoxide and small amounts of other organic vapours (e.g. aldehydes, acrolein). Inhalation of these decomposition products may be hazardous.

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Incomplete combustion may form carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). *See section 5.2, Special hazards arising from the substance or mixture.*

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	:Not classified. Based on available data, the classification criteria are not met.
Skin corrosion/irritation	:Not classified. Based on available data, the classification criteria are not met. pH: Not applicable.
Serious eye damage/irritation	:Not classified. Based on available data, the classification criteria are not met. pH: Not applicable.
Respiratory or skin sensitisation	:Not classified. Based on available data, the classification criteria are not met.
Germ cell mutagenicity	:Not classified. Based on available data, the classification criteria are not met.
Carcinogenicity	: Not classified. Based on available data, the classification criteria are not met.
Reproductive toxicity	:Not classified. Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure)	:Not classified. Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)	:Not classified. Based on available data, the classification criteria are not met.
Aspiration hazard	:Not classified. Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general :The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

12.2. Persistence and degradability

Long-term sunlight exposure may damage the product surface. No significant biodegradation is expected.

12.3. Bioaccumulative potential

Non-bioaccumulative.

12.4. Mobility in soil

The product is inert.

12.5. Results of PBT and vPvB assessment

The product does not meet the PBT and vPvB classification criteria.

12.6. Other adverse effects

Effect on ozone layer :Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).

Effect on the global warming : No known effects from this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations :If discarded after use, this polymer does not meet the definitions of hazardous waste. Preferred disposal method for polymer in order of preference is: clean and reuse if possible, recover and resale through plastic recyclers or resin brokers, incinerate with waste heat recovery and landfill. Reuse, recycling, storing, transportation and disposal must be in accordance with applicable national and local regulations. DO NOT ATTEMPT TO DISPOSE OF BY UNCONTROLLED INCINERATION. OPEN BURNING PLASTICS AT LANDFILLS IS NOT ACCEPTABLE.

Additional information :Collect and dispose of waste product at an authorised disposal facility. Dispose of contaminated materials in accordance with current regulations.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN/ RID:

14.1. UN number

UN-No. : None

14.2. UN proper shipping name

Proper Shipping Name : POLYETHYLENE, NOT REGULATED

14.3. Transport hazard class(es)

Transport hazard class(es) : Not controlled under ADR / IMDG / IATA / ADN/ RID

Danger labels : None

14.4. Packing group

Packing group : Not applicable.

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available.

14.6. Special precautions for user

Special precautions for user : No data available.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

Note: The product is not classified as a dangerous good under transport regulation. Further information about transport system may be obtained from the sales authorized representative or customers service. Transportation companies are responsible to follow all current laws, regulations and instructions which refer to this product transport.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU-Regulations

- REGULATION (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
- REGULATION (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.
- COMMISSION REGULATION (EU) No 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

According to REACH Regulation (EC) No 1907/2006:

HIPLEX is not on the REACH Candidate List - Substances of very high concern.

HIPLEX is not on the REACH Annex XIV List - List of substances subject to authorisation.

**15.2. Chemical safety assessment**

A chemical safety assessment does not need to be carried out for this product.

SECTION 16: Other information**Indication of changes**

: Revised safety data sheet according to Regulation (EC) No 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No 2015/830.

Data sources

: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

ECHA Guidance on the compilation of safety data sheets (Version 3.1 - November 2015).

ECHA Guidance for identification and naming of substances under REACH and CLP (Version 2.1 - May 2017).

Training advice

: THE PRODUCT IS RESTRICTED TO PROFESSIONAL USAGE ONLY and must be handled in accordance with good industrial hygiene and safety procedures. Ensure that all relevant regulations are followed.

Abbreviations and acronyms

SDS	: Safety Data Sheet
UN	: United Nations
EU	: European Union
EC	: European Community
EEC	: European Economic Community
CAS No	: Chemical Abstract Service number
EC No (EINECS)	: European Inventory of Existing Commercial Chemical Substances (European Chemical number: EINECS, ELINCS or NLP)
ELINCS	: European List of Notified Chemical Substances
NLP	: No-Longer Polymer
CLP	: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
ECHA	: European Chemicals Agency
REACH	: Registration, Evaluation, Authorisation and Restriction of Chemicals
PBT	: Persisten, Bioaccumulative and Toxic substance/mixture
vPvB	: Very Persisten and very Bioaccumulative substance/mixture
NOEC	: No observed effect concentration
DNEL	: Derived No Effect Level
PNEC	: Predicted No Effect Concentration
TWA	: Time Weighted Averages
OSHA	: Occupational Safety and Health Administration
ACGIH	: American Conference of Governmental Industrial Hygienists
TWA	: Time Weighted Averages
ADR	: European Agreement concerning the International Carriage of Dangerous Goods by Road
RID	: European Agreement concerning the International Rule for Transport of Dangerous Goods by Rail
ADN	: European Agreement concerning the International Carriage of Dangerous Goods by inland Waterways
IMDG	: International Maritime Dangerous Goods
IATA	: International Air Transport Association
MARPOL	: International Convention for the Prevention of Marine Pollution from Ships
IBC	: International Bulk Chemical Code



LIST OF TELEPHONE NUMBERS OF POISON CENTRES IN THE EUROPEAN ECONOMIC AREA	
AUSTRIA (Vienna Wien)	+43 1 40 400 2222
BELGIUM (Brussels Bruxelles)	+32 70 245 245
BULGARIA (Sofia)	+359 2 9154 409 / +359 887 435 325
CZECH REPUBLIC (Prague Praha)	+42 2 2491 9293 or +42 2 2491 5402
CROATIA (Zagreb)	+385 12 348 342
DENMARK (Copenhagen)	+45 35 31 54 04
FINLAND (Helsinki)	+358 9 471 977
FRANCE (Paris)	+33 1 40 05 48 48
GERMANY (Berlin)	+49 30 450 653565
GREECE (Athens Athinai)	+30 10 779 3777
HUNGARY (Budapest)	+36 80 20 11 99
ICELAND (Reykjavik)	+354 525 111, +354 543 2222
IRELAND (Dublin)	+353 1 8379964
ITALY (Rome)	+39 06 305 4343
LATVIA (Riga)	+371 704 2468
LITHUANIA (Vilnius)	+370 2 36 20 52, +370 2 36 20 92
NETHERLANDS (Bilthoven)	+31 30 274 88 88
NORWAY (Oslo)	+47 22 591300
POLAND (Gdansk)	+48 58 301 65 16 or +48 58 349 2831
PORTUGAL (Lisbon Lisboa)	808 250 143 (for use only in Portugal), +351 21 330 3284
ROMANIA (Bucharest)	+40 21 230 8000;
SLOVAKIA (Bratislava)	+421 2 54 77 4 166
SLOVENIA (Ljubljana)	+ 386 41 650 500
SPAIN (Barcelona)	+34 93 227 98 33 or +34 93 227 54 00 bleep 190
SWEDEN (Stockholm)	+46 8 33 12 31 (International) 112 (National)
UNITED KINGDOM (London)	0870 243 2241

The information and recommendations provided in this document are based on our current knowledge, information and experience at the date of its publication, and their purpose is to present prevention and safety measures in relation to this product. The information given is designed only as a guidance for safe handling, use, processing, storage, transport and disposal. All given information refer only to the product in the form it is supplied. It is the user's responsibility to satisfy itself that the product is suitable for the intended use.

Users are obliged to have their activities harmonized with national, regional and local regulations, which are subject to modifications, and may differ depending on location/state. Users are responsible for handling, storage and manipulation in accordance with effective laws and regulations as required to provide health and safety at work and environmental protection. Since the use of this information and the conditions of use are not within the control of HIP Petrohemija, it is the user's obligation to determine the conditions of safe use of the product.

This version supersedes and replaces all previous versions.