

## Hranipur 45

Issue date: 9/11/2014

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Revision date: 8/1/2025

Supersedes version of: 12/11/2021

Version: 5.1

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

## 1.1. Product identifier

Product form : Mixture  
Trade name : Hranipur 45  
UFI : K113-10A2-Q009-5RMS

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

## Relevant identified uses

Main use category : Industrial use, Professional use  
Use of the substance/mixture : Industrial uses: Uses of substances as such or in preparations at industrial sites  
Formulation [mixing] of preparations and/or re-packaging (excluding alloys)  
Function or use category : Adhesives, sealants, Polymer preparations and compounds

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

## Distributor

Hranipex Czech Republic k.s.  
J. Rýznerové 97, Komorovice  
CZ 396 01 Humpolec  
Czech Republic  
T +420 565 501 211

[cz-hranipex@hranipex.com](mailto:cz-hranipex@hranipex.com), [www.hranipex.cz](http://www.hranipex.cz)

E-mail address of competent person responsible for the SDS :  
[sds@regartis.com](mailto:sds@regartis.com)

## Supplier

Hranipex Ltd.  
Unit 2 Radial Park, Birmingham Business Park  
Birmingham, B37 7YN  
United Kingdom  
T +44 121 767 9180, F 0121 782 6250  
[uk-hranipex@hranipex.com](mailto:uk-hranipex@hranipex.com), [www.hranipex.co.uk](http://www.hranipex.co.uk)

## 1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Cardiff Centre) University Hospital Llandough	Penlan Road CF64 2XX	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Edinburgh Centre) Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA	0344 892 0111	Only for healthcare professionals
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre	16/17 Framlington Place Newcastle-upon-Tyne NE2 4AB	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	Only for healthcare professionals

## SECTION 2: Hazards identification

## 2.1. Classification of the substance or mixture

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

Acute toxicity (inhalation:dust,mist) Category 4 H332  
Skin corrosion/irritation, Category 2 H315  
Serious eye damage/eye irritation, Category 2 H319  
Respiratory sensitisation, Category 1 H334

# Hranipur 45

Issue date: 9/11/2014

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Revision date: 8/1/2025

Supersedes version of: 12/11/2021

Version: 5.1

Skin sensitisation, Category 1	H317
Carcinogenicity, Category 2	H351
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335
Specific target organ toxicity – Repeated exposure, Category 2	H373

Full text of H- and EUH-statements: see section 16

## Adverse physicochemical, human health and environmental effects

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

## 2.2. Label elements

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

Hazard pictograms (CLP)



GHS07

GHS08

Signal word (CLP)

: Danger

Contains

: Diphenylmethanediisocyanate, isomers and homologues

Hazard statements (CLP)

: H315 - Causes skin irritation.  
 H317 - May cause an allergic skin reaction.  
 H319 - Causes serious eye irritation.  
 H332 - Harmful if inhaled.  
 H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H335 - May cause respiratory irritation.  
 H351 - Suspected of causing cancer.  
 H373 - May cause damage to organs through prolonged or repeated exposure.  
 Precautionary statements (CLP) : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P280 - Wear protective gloves, protective clothing, eye protection, face protection.  
 P302+P352 - IF ON SKIN: Wash with plenty of water.  
 P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P312 - Call a POISON CENTER, a doctor if you feel unwell.  
 EUH-statements : EUH204 - Contains isocyanates. May produce an allergic reaction.  
 Extra phrases : As from 24 August 2023 adequate training is required before industrial or professional use.

## 2.3. Other hazards

Other hazards which do not result in classification : Persons suffering from asthma or eczema and persons who have chronic lung diseases, skin or respiratory allergies to isocyanates should not work with the material. Danger of serious damage to health by exposure through inhalation.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

### Component

Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Diphenylmethanediisocyanate, isomers and homologues (9016-87-9), Propylene carbonate (108-32-7)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Diphenylmethanediisocyanate, isomers and homologues (9016-87-9), Propylene carbonate (108-32-7)

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

# Hranipur 45

Issue date: 9/11/2014

 according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
 Revision date: 8/1/2025

Supersedes version of: 12/11/2021

Version: 5.1

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Diphenylmethanediisocyanate, isomers and homologues	CAS-No.: 9016-87-9 EC-No.: 618-498-9	30 – 60	Acute Tox. 4 (Inhalation), H332 (ATE=11 mg/l/4h) Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373
Propylene carbonate	CAS-No.: 108-32-7 EC-No.: 203-572-1 EC Index-No.: 607-194-00-1 REACH-no: 01-2119537232-48-0002	≤ 5	Eye Irrit. 2, H319

Full text of H- and EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: In all cases of doubt, or when symptoms persist, seek medical attention. If unconscious place in recovery position and seek medical advice. If possible, show the doctor this safety data sheet. Failing this, show the doctor the packaging or label.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration as needed. Never give anything by mouth to an unconscious person. Call a physician immediately.
First-aid measures after skin contact	: Take off immediately all contaminated clothing. Rinse and then wash skin thoroughly with water and soap. If skin irritation or rash occurs : Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth thoroughly with water. Call a physician immediately.
Self protection of the first-aiders	: First aid workers will be equipped with suitable personal protective equipment. Remove exposed person from the area contaminated with dust or gas, keep person at rest in a warm area, even in the absence of symptoms. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

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

Symptoms/effects after inhalation	: Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: May cause irritation to the digestive tract.
Chronic symptoms	: May cause damage to organs through prolonged or repeated exposure.

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

Symptoms of poisoning may not appear for several hours. Keep under medical supervision for at least 48 hours. Treat symptomatically.

# Hranipur 45

Issue date: 9/11/2014

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Revision date: 8/1/2025

Supersedes version of: 12/11/2021

Version: 5.1

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : Carbon dioxide. Dry powder. Water spray. For large fire: Alcohol resistant foam. Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : Strong water jet.

### 5.2. Special hazards arising from the substance or mixture

- Reactivity in case of fire : At high temperature may liberate toxic gases.
- Hazardous decomposition products in case of fire : Carbon oxides (CO and CO<sub>2</sub>). Nitrogen oxides. Hydrocarbons. Hydrogen cyanide. Do not breathe fumes from fires or vapours from decomposition.

### 5.3. Advice for firefighters

- Firefighting instructions : Evacuate area. Move containers away from the fire area if this can be done without risk. Cool down the containers/equipment exposed to heat with a water spray. Ensure that there is no direct contact between the water and the product. Do not breathe fumes from fires or vapours from decomposition.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Use self-contained breathing apparatus and chemically protective clothing. Chemical resistant safety shoes. Protective helmet. Gloves. For further information refer to section 8: "Exposure controls/personal protection".
- Other information : Reacts with water, generates gases or heat.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Absorb spillage to prevent material damage. Ventilate spillage area. Stop leaks if it can be done without personal risk. Notify authorities if product enters sewers or public waters.

#### For non-emergency personnel

- Protective equipment : Wear recommended personal protective equipment.
- Emergency procedures : Prevent unauthorised access. Ventilate the area thoroughly. Do not breathe vapour. Avoid contact with skin, eyes and clothing. Do not touch or walk on the spilled product.

#### For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. Wear recommended personal protective equipment. See Sections 8 and 13.
- Emergency procedures : Ensure adequate ventilation. Evacuate unnecessary personnel.

### 6.2. Environmental precautions

Avoid release to the environment. Do not allow the mixture to enter into sewer, water system (underground water, surface water) or soil. If the product contaminates rivers and lakes or drains, inform respective authorities.

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

- Methods for cleaning up : Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect all waste in suitable and labelled containers and dispose according to local legislation. Ensure adequate ventilation.

### 6.4. Reference to other sections

See section 7: Handling and Storage. Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Additional hazards when processed : Exothermic reaction with water.

# Hranipur 45

Issue date: 9/11/2014

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Revision date: 8/1/2025

Supersedes version of: 12/11/2021

Version: 5.1

Precautions for safe handling	: Obtain special instructions before use. Use only outdoors or in a well-ventilated area. Do not breathe vapours. Avoid contact with skin, eyes and clothing. Do not handle until all safety precautions have been read and understood. Keep container closed when not in use. Keep container tightly closed to prevent moisture pick-up. Avoid aerosolbuilding.
Hygiene measures	: Take off immediately all contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Always wash hands and face immediately after handling this product, and once again before leaving the workplace.

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

Technical measures	: Store and use with adequate ventilation.
Storage conditions	: Store in dry, well-ventilated area. Store in original container. Protect from moisture. Keep container tightly closed. Store locked up.
Incompatible products	: Strong acids, strong bases and strong oxidants. alcohols. amines. water.
Storage temperature	: 15 – 30 °C

## 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Recommended monitoring procedures

Monitoring methods	
Monitoring methods	Workplace exposure - General requirements for the performance of procedures for the measurement of chemical agents.

#### DNEL and PNEC

Propylene carbonate (108-32-7)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	50 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	176 mg/m³
Long-term - local effects, inhalation	20 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	43.5 mg/m³
Long-term - systemic effects, dermal	25 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.9 mg/l
PNEC aqua (marine water)	0.09 mg/l
PNEC aqua (intermittent, freshwater)	9 mg/l
PNEC (Soil)	
PNEC soil	0.81 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	7400 mg/l

# Hranipur 45

Issue date: 9/11/2014

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Revision date: 8/1/2025

Supersedes version of: 12/11/2021

Version: 5.1

## 8.2. Exposure controls

### Appropriate engineering controls

#### Appropriate engineering controls:

Carry out operations in the open/under local exhaust/ventilation or with respiratory protection. Apply technical measures to comply with the occupational exposure limits. Persons suffering from asthma or eczema and persons who have chronic lung diseases, skin or respiratory allergies to isocyanates should not work with the material.

### Personal protection equipment

#### Personal protective equipment:

Avoid all unnecessary exposure. Wear proper protective equipment.

#### Personal protective equipment symbol(s):



### Eye and face protection

#### Eye protection:

Safety glasses, tightly fitting safety goggles

### Skin protection

#### Skin and body protection:

Wear suitable coveralls to prevent exposure to the skin. According to the conditions of use, protective gloves, apron, boots, head and face protection must be worn

#### Hand protection:

Wear protective gloves. Chemical resistant gloves (according to European standard ISO 374-1 or equivalent). Follow the glove manufacturer's specific recommendations when selecting the appropriate thickness, material, and permeability. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

### Respiratory protection

#### Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Short term exposure: approved organic vapour respirator. Prolonged and/or repeated handling: Appropriate self-contained breathing apparatus may be required

### Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment. Comply with applicable regulations.

#### Other information:

People who have chronic respiratory disorders should not work with isocyanate-based products. Handle in accordance with good industrial hygiene and safety procedures. Avoid contact with skin and eyes. Immediately remove contaminated clothing or footwear. Always wash hands after handling the product.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Brown
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not applicable
Explosive properties	: Not explosive.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not available
Auto-ignition temperature	: Not self-igniting
Decomposition temperature	: Not available

# Hranipur 45

Issue date: 9/11/2014

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Revision date: 8/1/2025

Supersedes version of: 12/11/2021

Version: 5.1

pH	: Not available
Viscosity, kinematic	: 2500 – 5454.545 mm <sup>2</sup> /s
Viscosity, dynamic	: 3000 – 6000 mPa·s
Solubility	: Water: Not miscible or difficult to mix.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1.1 – 1.2 g/cm <sup>3</sup> (20°C)
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

## 9.2. Other information

### Other safety characteristics

VOC content : 0 %

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Exothermic reaction on contact with : materials containing active hydroxyl groups. Reacts on contact with water releasing carbon dioxide (CO<sub>2</sub>).

### 10.2. Chemical stability

Stable under normal conditions of use.

### 10.3. Possibility of hazardous reactions

Reacts violently with water. Reacts with : Amines. alcohols. Acids.

### 10.4. Conditions to avoid

Avoid contact with water. (humid air). Do not expose to heat. Protect from sunlight.

### 10.5. Incompatible materials

Strong oxidizing agents. acids. alkalis. alcohols. amines. water.

### 10.6. Hazardous decomposition products

No hazardous decomposition products known at room temperature. Hazardous decomposition products in case of fire: Carbon oxides (CO, CO<sub>2</sub>). Nitrogen oxides. Hydrocarbons. Hydrogen cyanide.

## SECTION 11: Toxicological information

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

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Harmful if inhaled.

#### Hranipur 45

ATE CLP (dust,mist)	20 mg/l/4h
---------------------	------------

#### Diphenylmethanediisocyanate, isomers and homologues (9016-87-9)

LD50 oral rat	> 10000 mg/kg (OECD 401)
LD50 dermal rabbit	> 9400 mg/kg (OECD 402)
LC50 Inhalation - Rat (Dust/Mist)	11 mg/l/4h (ATE)

#### Propylene carbonate (108-32-7)

LD50 oral rat	29000 mg/kg
---------------	-------------

# Hranipur 45

Issue date: 9/11/2014

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Revision date: 8/1/2025

Supersedes version of: 12/11/2021

Version: 5.1

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Suspected of causing cancer.
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: May cause respiratory irritation.

## Diphenylmethanediisocyanate, isomers and homologues (9016-87-9)

STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.

## Diphenylmethanediisocyanate, isomers and homologues (9016-87-9)

STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

## Hranipur 45

Viscosity, kinematic	2500 – 5454.545 mm <sup>2</sup> /s
----------------------	------------------------------------

## 11.2. Information on other hazards

### Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties	: The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %
------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## SECTION 12: Ecological information

### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	: Not classified (Based on available data, the classification criteria are not met)

## Diphenylmethanediisocyanate, isomers and homologues (9016-87-9)

LC50 - Fish [1]	> 1000 mg/l (OECD 203)
EC50 - Crustacea [1]	> 1000 mg/l (OECD 202)
EC50 - Other aquatic organisms [1]	> 100 mg/l Bacteria/100mL
EC50 72h - Algae [1]	> 1640 mg/l (OECD 201)
NOEC chronic crustacea	> 10 mg/l (OECD 211)
NOEC chronic algae	1640 mg/l (OECD 201)

## Propylene carbonate (108-32-7)

LC50 - Fish [1]	5300 mg/l
EC50 - Crustacea [1]	> 500 mg/l

## 12.2. Persistence and degradability

### Hranipur 45

Persistence and degradability	No additional information available.
-------------------------------	--------------------------------------



# Hranipur 45

Issue date: 9/11/2014

 according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
 Revision date: 8/1/2025

Supersedes version of: 12/11/2021

Version: 5.1

## Diphenylmethanediisocyanate, isomers and homologues (9016-87-9)

Persistence and degradability	Not readily biodegradable.
Biodegradation	0 % sediment

## Propylene carbonate (108-32-7)

Persistence and degradability	Readily biodegradable.
Biodegradation	> 90 % sediment

### 12.3. Bioaccumulative potential

#### Hranipur 45

Bioaccumulative potential	No additional information available.
---------------------------	--------------------------------------

## Diphenylmethanediisocyanate, isomers and homologues (9016-87-9)

Bioconcentration factor (BCF REACH)	200
Partition coefficient n-octanol/water (Log Pow)	8.56 sediment

### 12.4. Mobility in soil

#### Hranipur 45

Ecology - soil	No additional information available.
----------------	--------------------------------------

### 12.5. Results of PBT and vPvB assessment

#### Hranipur 45

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

#### Component

Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	Diphenylmethanediisocyanate, isomers and homologues (9016-87-9), Propylene carbonate (108-32-7)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	Diphenylmethanediisocyanate, isomers and homologues (9016-87-9), Propylene carbonate (108-32-7)

### 12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

### 12.7. Other adverse effects

#### Hranipur 45

Other information	Avoid release to the environment.
-------------------	-----------------------------------

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.  
 Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
 Sewage disposal recommendations : Avoid (direct) release (of undiluted product) to the environment/sewage system.

# Hranipur 45

Issue date: 9/11/2014

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Revision date: 8/1/2025

Supersedes version of: 12/11/2021

Version: 5.1

Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecological waste information	: Avoid release to the environment.
European List of Waste (LoW, EC 2000/532)	: 08 05 01* - waste isocyanates 15 01 10* - packaging containing residues of or contaminated by dangerous substances
HP Code	: HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration. HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure. HP7 - "Carcinogenic:" waste which induces cancer or increases its incidence HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye. HP13 - "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs.

## SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
Not regulated for transport				
<b>14.2. UN proper shipping name</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.3. Transport hazard class(es)</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.4. Packing group</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.5. Environmental hazards</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Not regulated

#### Transport by sea

Not regulated

#### Air transport

Not regulated

#### Inland waterway transport

Not regulated

#### Rail transport

Not regulated

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

Hranipur 45

Issue date: 9/11/2014

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Revision date: 8/1/2025  
Supersedes version of: 12/11/2021

Version: 5.1

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)

Reference code	Applicable on	Entry title or description
3(b)	Hranipur 45 ; Diphenylmethanediisocya nate, isomers and homologues ; Propylene carbonate	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

VOC Directive (2004/42)

VOC content : 0 %

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

National regulations

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)  
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 (CLP)

United Kingdom

British National Regulations : Regulation (EC) No 1013/2006 of the European Parliament and of the Council on shipments of waste, in the valid wording.  
Directive 2008/98/EC of the European Parliament and of the Council on waste and repealing certain Directives, in the valid wording.  
UK Waste Regulations.  
UK REACH.  
GB CLP.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

# Hranipur 45

Issue date: 9/11/2014

 according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
 Revision date: 8/1/2025

Supersedes version of: 12/11/2021

Version: 5.1

## SECTION 16: Other information

### Indication of changes

Section	Changed item	Comments
2.1	Adverse physicochemical, human health and environmental effects	<b>Added</b>
2.2	Extra phrases	<b>Added</b>
4	Self protection of the first-aider	<b>Added</b>
4.1	First-aid measures after skin contact	<b>Modified</b>
4.1	First-aid measures after inhalation	<b>Modified</b>
4.1	First-aid measures general	<b>Modified</b>
4.3	Other medical advice or treatment	<b>Modified</b>
5.1	Suitable extinguishing media	<b>Modified</b>
5.2	Hazardous decomposition products in case of fire	<b>Modified</b>
6.1	General measures	<b>Modified</b>
6.1	Emergency procedures	<b>Added</b>
6.1	Protective equipment	<b>Modified</b>
6.2	Environmental precautions	<b>Modified</b>
6.3	Methods for cleaning up	<b>Modified</b>
6.3	Other information	<b>Removed</b>
6.4	Reference to other sections (8, 13)	<b>Modified</b>
8.2	Appropriate engineering controls	<b>Modified</b>
8.2	Environmental exposure controls	<b>Added</b>
8.2	Respiratory protection	<b>Modified</b>
8.2	Hand protection	<b>Modified</b>
8.2	Skin and body protection	<b>Modified</b>
10.6	Hazardous decomposition products	<b>Modified</b>
15.1	British National Regulations	<b>Added</b>

### Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ATE	Acute Toxicity Estimate
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
SDS	Safety Data Sheet
DNEL	Derived-No Effect Level

# Hranipur 45

Issue date: 9/11/2014

 according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
 Revision date: 8/1/2025

Supersedes version of: 12/11/2021

Version: 5.1

## Abbreviations and acronyms:

PNEC	Predicted No-Effect Concentration
LD50	Median lethal dose
LC50	Median lethal concentration
EC50	Median effective concentration
PBT	Persistent Bioaccumulative Toxic
vPvB	Very Persistent and Very Bioaccumulative
STP	Sewage treatment plant

Data sources : ECHA Guidance on the compilation of safety data sheets  
ECHA C&L Inventory database. Supplier's safety documents.

Training advice : Provide SDS to employees. Follow general rules on handling chemical substances and/or mixtures. Safety training for chemicals handling.

## Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
EUH204	Contains isocyanates. May produce an allergic reaction.

## Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Acute Tox. 4 (Inhalation:dust,mist)	H332	Calculation method
Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
Resp. Sens. 1	H334	Calculation method
Skin Sens. 1	H317	Calculation method
Carc. 2	H351	Calculation method
STOT SE 3	H335	Calculation method
STOT RE 2	H373	Calculation method

## Hranipur 45

Issue date: 9/11/2014

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Revision date: 8/1/2025

Supersedes version of: 12/11/2021

Version: 5.1

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.