

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

Icema™ R 145/88

Version	Revision Date:	SDS Number:	Date of last issue: 03.12.2022
2.0	28.06.2024	100000020926	Date of first issue: 30.09.2022
	Print Date:		
	17.07.2025		

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Product name** : Icema™ R 145/88**1.2 Relevant identified uses of the substance or mixture and uses advised against**Use of the Sub-
stance/Mixture : Isocyanate based productRecommended restrictions
on use : For industrial use only.**1.3 Details of the supplier of the safety data sheet**

Company : H.B. Fuller, Isar-Rakoll, S.A.

Address : Estrada Nacional 13
PT-4486-851 Mindelo - Vila do Conde
+351 229 288 200E-mail address of person
responsible for the SDS : EU-MSDS@hbfuller.com**1.4 Emergency telephone number**Emergency telephone number : In case of poisoning:
GBK-EMTEL International
Tel.(24h): +49(0)6132/84463 (all languages)In case of transport accidents:
Tel.(24h): (001) 352 323 3500 (Infotrac - Contract ID: 90373 /
GBK)National Poisons Information Centre (NPIC): 01 809 2566 (24
hours)**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**

Skin irritation, Category 2 H315: Causes skin irritation.

Eye irritation, Category 2 H319: Causes serious eye irritation.

Respiratory sensitisation, Category 1 H334: May cause allergy or asthma symptoms or
breathing difficulties if inhaled.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

Icema™ R 145/88

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	17.07.2025		

Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Carcinogenicity, Category 2	H351: Suspected of causing cancer.
Specific target organ toxicity - single exposure, Category 3, Respiratory system	H335: May cause respiratory irritation.
Specific target organ toxicity - repeated exposure, Category 2	H373: May cause damage to organs through prolonged or repeated exposure.

2.2 Label elements**Labelling (REGULATION (EC) No 1272/2008)**

Hazard pictograms :



Signal word : Danger

Hazard statements :
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
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 : **Prevention:**
P201 Obtain special instructions before use.
P260 Do not breathe mist or vapours.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.**Response:**P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.**Hazardous components which must be listed on the label:**

Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro.-omega.-hydroxy-, polymer with 1,1'-

SAFETY DATA SHEET

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Icema™ R 145/88

Version	Revision Date:	SDS Number:	Date of last issue: 03.12.2022
2.0	28.06.2024	100000020926	Date of first issue: 30.09.2022
	Print Date:		
	17.07.2025		

methylenebis[isocyanatobenzene], isocyanate-terminated
 4,4'-methylenediphenyl diisocyanate
 4,4'-Methylenediphenyl diisocyanate, oligomeric reaction products with 2,4'-
 diisocyanatodiphenylmethane and [(methylethylene)bis(oxy)]dipropanol
 Diphenylmethanediisocyanate, polymeric

Additional Labelling

EUH204 Contains isocyanates. May produce an allergic reaction.

"As from 24 August 2023 adequate training is required before industrial or professional use."

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients
3.2 Mixtures
Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro.-omega.-hydroxy-, polymer with 1,1'- meth- ylenebis[isocyanatobenzene], isocyanate-terminated	96328-90-4	Resp. Sens. 1; H334 Skin Sens. 1; H317	>= 20 - < 30
4,4'-methylenediphenyl diisocya- nate	101-68-8 202-966-0 615-005-00-9 01-2119457014-47- 0000	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 Carc. 2; H351 STOT SE 3; H335 (Respiratory system)	>= 10 - < 20

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

Icema™ R 145/88

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		STOT RE 2; H373 <hr/> specific concentration limit Eye Irrit. 2; H319 >= 5 % STOT SE 3; H335 >= 5 % Skin Irrit. 2; H315 >= 5 % Resp. Sens. 1; H334 >= 0,1 % <hr/> Acute toxicity estimate Acute inhalation toxicity (dust/mist): 1,5 mg/l	
4,4'-Methylenediphenyl diisocyanate, oligomeric reaction products with 2,4'-diisocyanatodiphenylmethane and [(methylethylene)bis(oxy)]dipropanol	75880-28-3 500-262-0	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 Carc. 2; H351 STOT RE 2; H373	>= 1 - < 10
Diphenylmethanediisocyanate, polymeric	9016-87-9	STOT RE 2; H373 (Respiratory Tract) Carc. 2; H351 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 STOT SE 3; H335 (Respiratory system) <hr/> specific concentration limit Eye Irrit. 2; H319 >= 5 % STOT SE 3; H335 >= 5 % Skin Irrit. 2; H315 >= 5 % Resp. Sens. 1; H334 >= 0,1 %	>= 0,1 - < 1

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

Icema™ R 145/88

Version	Revision Date:	SDS Number:	Date of last issue: 03.12.2022
2.0	28.06.2024	100000020926	Date of first issue: 30.09.2022
	Print Date:		
	17.07.2025		

		Acute toxicity estimate	
		Acute inhalation toxicity (dust/mist): 1,5 mg/l	
titanium dioxide	13463-67-7 236-675-5 01-2119489379-17-0000	Carc. 2; H351	>= 0,1 - < 1

For explanation of abbreviations see section 16.

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

- General advice : Even minimal concentrations of isocyanate can lead to a reaction in sensitised people.
Symptoms that may occur include the following: irritation of the eyes, nose, throat and lungs, possibly together with a dry throat, a feeling of chest tightness and breathing difficulties.
- Immediately remove clothing if soiled by product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Show this safety data sheet to the doctor in attendance.
- If inhaled : Remove person to fresh air. If signs/symptoms continue, get medical attention.
In case of unconsciousness bring patient into stable side position for transport.
- In case of skin contact : Wash off with polyethylene glycol and afterwards with plenty of water.
Use a mild soap if available.
Treat affected skin with cotton wool or cellulose.
Call a physician if irritation develops or persists.
- In case of eye contact : Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists.
Protect unharmed eye.
- If swallowed : Do NOT induce vomiting.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

Icema™ R 145/88

Version	Revision Date:	SDS Number:	Date of last issue: 03.12.2022
2.0	28.06.2024	100000020926	Date of first issue: 30.09.2022
	Print Date:		
	17.07.2025		

If accidentally swallowed obtain immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Risks : Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
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.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : In instances of existing sensitisation towards isocyanates, a doctor should be consulted with regards to work-related contact with other sensitising substances, or substances which irritate the airway.

Treatment for exposure should be geared towards monitoring symptoms and the patient's clinical condition.
It must be ensured that the patient has sufficient ventilation and oxygen supply.

Isocyanates can cause sensitisation of the airways, or asthma-like symptoms (bronchospasms). Delayed breathing symptoms, including lung oedema, may occur.

People who have shown signs of breathlessness after considerable exposure should remain under observation for 24-48 hours.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Water spray
Alcohol-resistant foam
Dry powder
Carbon dioxide (CO₂)

Unsuitable extinguishing media : Do NOT use water jet.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

Icema™ R 145/88

Version	Revision Date:	SDS Number:	Date of last issue: 03.12.2022
2.0	28.06.2024	100000020926	Date of first issue: 30.09.2022
	Print Date:		
	17.07.2025		

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : May release toxic, irritating and/or corrosive gases. In case of fire CO, NO_x, isocyanates and traces of HCN can be formed.

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear.

Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Use personal protective equipment.
Use breathing protection against the effects of fumes/dust/aerosol.
Evacuate personnel to safe areas.
Ensure adequate ventilation.

6.2 Environmental precautions

Environmental precautions : The product should not be allowed to enter drains, water courses or the soil.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Non-sparking tools should be used.
Ensure adequate ventilation.
Send for recovery or disposal in suitable containers.

6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8., For disposal considerations see section 13.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Advice on safe handling : Take note of emission threshold.
Avoid formation of aerosol.
Do not heat the product.
Ensure that suitable extractors are available on processing machines.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

Icema™ R 145/88

Version	Revision Date:	SDS Number:	Date of last issue: 03.12.2022
2.0	28.06.2024	100000020926	Date of first issue: 30.09.2022
	Print Date:		
	17.07.2025		

Handle with care. Avoid inhalation and skin contact.
 Keep eye wash bottle available on working place.
 Avoid release to the environment.
 Keep out of reach of children.

Ensure good ventilation. This can be achieved by using a local exhaustion or general exhaust system. If these measures are insufficient to keep the vapor concentration below the work-place limit, wear an adequate respiratory protective device.

Advice on protection against fire and explosion : The product contains small quantities of organic solvents. The possibility of an ignitable vapour / air mixture forming is very slight but, under certain local conditions, this should not be overlooked. Keep away from sources of ignition - No smoking. In the event of fire and/or explosion do not breathe fumes. Keep breathing equipment ready.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage : Do not freeze. Keep tightly closed in a dry, cool and well-ventilated place. Protect against light.

Further information on storage conditions : Keep containers tightly closed in a dry, cool and well-ventilated place.

Advice on common storage : Keep away from food, drink and animal feedingstuffs.

7.3 Specific end use(s)

Specific use(s) : No further relevant information available.

SECTION 8: Exposure controls/personal protection
8.1 Control parameters
Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
barium sulfate	7727-43-7	OELV - 8 hrs (TWA) (Respirable dust)	5 mg/m ³	IE OEL
4,4'-methylenediphenyl diisocyanate	101-68-8	OELV - 8 hrs (TWA)	0,005 ppm (NCO)	IE OEL
	Further information: Chemical agents which following exposure may cause sensitisation of the respiratory tract and lead to asthma, rhinitis or extrinsic allergic alveolitis			
Diphenylme-	9016-87-9	OELV - 8 hrs	0,02 mg/m ³	IE OEL

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

Icema™ R 145/88

Version	Revision Date:	SDS Number:	Date of last issue: 03.12.2022
2.0	28.06.2024	100000020926	Date of first issue: 30.09.2022
	Print Date:		
	17.07.2025		

thanediiisocyanate, polymeric		(TWA)	(NCO)	
	Further information: Chemical agents which following exposure may cause sensitisation of the respiratory tract and lead to asthma, rhinitis or extrinsic allergic alveolitis			
		OELV - 15 min (STEL)	0,07 mg/m ³ (NCO)	IE OEL
	Further information: Chemical agents which following exposure may cause sensitisation of the respiratory tract and lead to asthma, rhinitis or extrinsic allergic alveolitis			
		OELV - 8 hrs (TWA)	0,005 ppm (NCO)	IE OEL
	Further information: Chemical agents which following exposure may cause sensitisation of the respiratory tract and lead to asthma, rhinitis or extrinsic allergic alveolitis			
		OELV - 8 hrs (TWA)	0,005 ppm (NCO)	IE OEL
	Further information: Chemical agents which following exposure may cause sensitisation of the respiratory tract and lead to asthma, rhinitis or extrinsic allergic alveolitis			
titanium dioxide	13463-67-7	OELV - 8 hrs (TWA) (Respirable dust)	4 mg/m ³	IE OEL
		OELV - 8 hrs (TWA) (inhalable dust)	10 mg/m ³	IE OEL

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
barium sulfate	Workers	Inhalation	Systemic, long-term	10 mg/m ³
	Workers	Inhalation	Local, long-term	10 mg/m ³
	Workers	Eye contact	Local effects	
4,4'-methylenediphenyl diisocyanate	Workers	Eye contact	Local effects	
	Workers	Inhalation	Local, long-term	0,05 mg/m ³
	Workers	Inhalation	Local, short-term	0,1 mg/m ³

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
barium sulfate	Soil	207,7 mg/kg
	Fresh water	115 µg/l
	Fresh water sediment	600,4 mg/kg
	Sewage treatment plant	62,2 mg/l
4,4'-methylenediphenyl diisocyanate	Soil	1 mg/kg
	Fresh water	1 mg/l

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

Icema™ R 145/88

Version	Revision Date:	SDS Number:	Date of last issue: 03.12.2022
2.0	28.06.2024	100000020926	Date of first issue: 30.09.2022
	Print Date:		
	17.07.2025		

	Marine water	0,1 mg/l
	Sewage treatment plant	1 mg/l

8.2 Exposure controls**Engineering measures**

Please take care on national and local requirements.

Use local exhaust ventilation or other engineering controls to minimize exposures.

Personal protective equipment

Eye protection : Tightly fitting safety goggles or equipment with better protection

Hand protection
Material : Nitrile rubber or equipment with better protection

Remarks : Direct contact with the product must be avoided by organizational measures.

The glove material has to be impermeable and resistant to the product/the substance/the preparation.

The exact break through time can be obtained from the protective glove producer and this has to be observed.

The gloves need to be disposed after the penetration time and replaced by new ones.

Apply skin protectant before working with gloves to avoid skin swellings and use a skin cleansing and skincare product after the work.

For the permanent contact gloves made of the following materials are suitable:

If longer exposure to the chemical preparation is necessary, a sturdy overglove against mechanical strain is recommended in combination with the Barrier 02-100 underglove from Ansell or other suppliers (penetration time: 480 min).

For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Butyl rubber (minimum thickness: 0.7 mm; penetration time: 15 min)

As protection from splashes gloves made of the following materials are suitable:

Nitril (minimum thickness 0.12 mm), Disposable gloves with

SAFETY DATA SHEET

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Icema™ R 145/88

Version	Revision Date:	SDS Number:	Date of last issue: 03.12.2022
2.0	28.06.2024	100000020926	Date of first issue: 30.09.2022
	Print Date:		
	17.07.2025		

long cuffs

After contact with the chemical preparation, take the disposable nitrile glove off immediately and put on a new disposable nitrile glove.

Skin and body protection : Protective clothing

When carrying out activities where unintentional skin contact with the isocyanate-based product may occur (e.g. during maintenance work, or when opening a barrel), wear long-sleeved protective clothing and gloves.

Respiratory protection : Use respiratory protection unless adequate risk management measures (exhaust/ ventilation) are provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
In case of brief exposure or low pollution (exceeding of TLV) use breathing filter apparatus.
In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

Filter type : For short term, use combination charcoal and particulate filter or equipment with better protection.

Protective measures : Instantly remove any soiled and impregnated garments.
Wash hands before breaks and immediately after handling the product.
Avoid contact with the eyes and skin.
Store protective clothing separately.
Keep away from food, drink and animal feedingstuffs.

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

Physical state	: liquid
Colour	: white
Odour	: characteristic
Odour Threshold	: is not determined
Melting point/freezing point	: is not determined
Boiling point/boiling range	: is not determined

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

Icema™ R 145/88

Version	Revision Date:	SDS Number:	Date of last issue: 03.12.2022
2.0	28.06.2024	100000020926	Date of first issue: 30.09.2022
	Print Date:		
	17.07.2025		

Flash point	:	200 °C
Auto-ignition temperature	:	is not determined
Decomposition temperature	:	Not applicable
pH	:	is not determined
Viscosity		
Viscosity, dynamic	:	140.000 mPa.s (20 °C)
Solubility(ies)		
Water solubility	:	partly soluble, reacts with water
Partition coefficient: n-octanol/water	:	no data available
Density	:	1,50 g/cm ³ (20 °C)
Relative vapour density	:	is not determined

9.2 Other information

Explosives	:	Product is not explosive. However, formation of explosive vapour/air mixtures is possible.
Evaporation rate	:	is not determined

SECTION 10: Stability and reactivity**10.1 Reactivity**

Container can be pressurized by carbon dioxide due to reaction with humid air and/or water.

10.2 Chemical stability

No decomposition if used according to the specifications.

10.3 Possibility of hazardous reactions

Hazardous reactions	:	Reacts with alcohols, amines, aqueous acids and alkalis. Mixture reacts with water resulting in evolution of CO ₂ . Evolution of CO ₂ in closed containers causes overpressure and produces a risk of bursting. Decomposes when moist.
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10.4 Conditions to avoid

Conditions to avoid	:	No further relevant information available.
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SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

Icema™ R 145/88

Version	Revision Date:	SDS Number:	Date of last issue: 03.12.2022
2.0	28.06.2024	100000020926	Date of first issue: 30.09.2022
	Print Date:		
	17.07.2025		

10.5 Incompatible materials

Materials to avoid : Amines
Strong acids and strong bases

10.6 Hazardous decomposition products

In case of fire hazardous decomposition products may be produced such as:
Nitrogen oxides (NO_x)
Isocyanates

Additional information: Open and release pressure carefully with pressurised containers.

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

Based on available data, the classification criteria are not met.

Product:

Acute inhalation toxicity :

Acute toxicity estimate: > 20 mg/l
Exposure time: 4 Hours
Test atmosphere: vapour
Method: Calculation method

Components:**4,4'-methylenediphenyl diisocyanate:**

Acute inhalation toxicity : Acute toxicity estimate: 1,5 mg/l
Test atmosphere: dust/mist
Method: Calculation method

Diphenylmethanediisocyanate, polymeric:

Acute inhalation toxicity : Acute toxicity estimate: 1,5 mg/l
Test atmosphere: dust/mist
Method: Calculation method

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

Icema™ R 145/88

Version	Revision Date:	SDS Number:	Date of last issue: 03.12.2022
2.0	28.06.2024	100000020926	Date of first issue: 30.09.2022
	Print Date:		
	17.07.2025		

Respiratory or skin sensitisation**Skin sensitisation**

May cause an allergic skin reaction.

Respiratory sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Suspected of causing cancer.

Components:**titanium dioxide:**

Carcinogenicity - Assessment : Not classifiable as a human carcinogen

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT - single exposure

May cause respiratory irritation.

STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity

Based on available data, the classification criteria are not met.

11.2 Information on other hazards**Endocrine disrupting properties****Product:**

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information**12.1 Toxicity**

No data available

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

Icema™ R 145/88

Version	Revision Date:	SDS Number:	Date of last issue: 03.12.2022
2.0	28.06.2024	100000020926	Date of first issue: 30.09.2022
	Print Date:		
	17.07.2025		

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil**Product:**

Mobility : Medium: Soil
Remarks: Do not allow product to reach ground water, water bodies or sewage system.

12.5 Results of PBT and vPvB assessment**Product:**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties**Product:**

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

No data available

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

Product : Do not dispose of with domestic refuse.
Do not dispose of waste into sewer.
Hand over to disposers of hazardous waste.
The generation of waste should be avoided or minimized wherever possible.
Incinerate under controlled conditions in accordance with all local and national laws and regulations.
Disposal must be made according to official regulations.

These EU waste code numbers are recommendations for waste accruing through the use of adhesives and sealants.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

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	Print Date:		
	17.07.2025		

Any waste produced from organic solvents or other dangerous substances (according GHS) listed under section 3 of this safety datasheet is itself classified as dangerous (*).

Waste accruing during application:

08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances
08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09

Waste accruing during cleaning:

08 04 11* adhesive and sealant sludges containing organic solvents or other dangerous substances
08 04 12 adhesive and sealant sludges other than those mentioned in 08 04 11

Waste packaging:

15 01 01 paper and cardboard packaging
15 01 02 plastic packaging
15 01 04 metallic packaging
15 01 10* packaging containing residues of or contaminated by dangerous substances.

Contaminated packaging : Disposal must be made according to official regulations.

SECTION 14: Transport information**14.1 UN number or ID number**

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

 Icema™ R 145/88

Version	Revision Date:	SDS Number:	Date of last issue: 03.12.2022
2.0	28.06.2024	100000020926	Date of first issue: 30.09.2022
	Print Date:		
	17.07.2025		

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Conditions of restriction for the following entries should be considered: Number on list 74, 3 o-(p-isocyanatobenzyl)phenyl isocyanate (Number on list 74) 4,4'-methylenediphenyl diisocyanate (Number on list 74) Diphenylmethanediisocyanate, polymeric (Number on list 74)
REACH - Candidate List of Substances of Very High Concern for Authorisation (SVHC, Article 59)	:	Compliant
Regulation (EC) 2024/590 on substances that deplete the ozone layer	:	Compliant
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	:	Compliant
RoHS: 2011/65/EU, Restriction of Hazardous Substances	:	Compliant
Council Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors	:	Neither banned nor restricted
Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	:	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	:	Compliant
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	:	Not applicable

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

Icema™ R 145/88

Version	Revision Date:	SDS Number:	Date of last issue: 03.12.2022
2.0	28.06.2024	100000020926	Date of first issue: 30.09.2022
	Print Date:		
	17.07.2025		

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)
Not applicable

Other regulations:

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

The components of this product are reported in the following inventories:

TCSI : On the inventory, or in compliance with the inventory

TSCA : All substances listed as active on the TSCA inventory

AIIC : On the inventory, or in compliance with the inventory

DSL : All components of this product are on the Canadian DSL

ENCS : On the inventory, or in compliance with the inventory

ISHL : On the inventory, or in compliance with the inventory

KECI : On the inventory, or in compliance with the inventory

PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

REACH : On the inventory, or in compliance with the inventory

TECI : On the inventory, or in compliance with the inventory

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

Icema™ R 145/88

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SECTION 16: Other information**Full text of H-Statements**

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.
H373	:	May cause damage to organs through prolonged or repeated exposure if inhaled.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Carc.	:	Carcinogenicity
Eye Irrit.	:	Eye irritation
Resp. Sens.	:	Respiratory sensitisation
Skin Irrit.	:	Skin irritation
Skin Sens.	:	Skin sensitisation
STOT RE	:	Specific target organ toxicity - repeated exposure
STOT SE	:	Specific target organ toxicity - single exposure
IE OEL	:	Ireland. List of Chemical Agents and Carcinogens with Occupational Exposure Limit Values - Code of Practice, Schedule 1 and 2
IE OEL / OELV - 8 hrs (TWA)	:	Occupational exposure limit value (8-hour reference period)
IE OEL / OELV - 15 min (STEL)	:	Occupational exposure limit value (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization;

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

Icema™ R 145/88

Version	Revision Date:	SDS Number:	Date of last issue: 03.12.2022
2.0	28.06.2024	100000020926	Date of first issue: 30.09.2022
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	17.07.2025		

KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Other information : This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

Modified data compared to the previous version

The following sections have been updated:

- Section 1
- Section 2
- Section 3
- Section 4
- Section 5
- Section 6
- Section 7
- Section 8
- Section 9
- Section 10
- Section 11
- Section 12
- Section 15
- Section 16

Contact Point : Prepared by: Global Regulatory Department
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Classification of the mixture:

Skin Irrit. 2	H315
Eye Irrit. 2	H319
Resp. Sens. 1	H334

Classification procedure:

Calculation method
Calculation method
Calculation method

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

Icema™ R 145/88

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Skin Sens. 1	H317	Calculation method
Carc. 2	H351	Calculation method
STOT SE 3	H335	Calculation method
STOT RE 2	H373	Calculation method

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.

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