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## Safety data sheet

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

#### 1.1. Product identifier

Product name PUR 134 Parte B  
Chemical name and synonym PUR 134 Parte B

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

Intended use Resina da casting a base poliuretanica.

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

Name Prospero s.r.l.  
Full address via Emidio Villa 17  
District and Country 42124 Zona Ind.le Mancasale (RE)  
Italy  
Tel. 0522 506161  
Fax 0522 920553

e-mail address of the competent person

responsible for the Safety Data Sheet a.tirelli@immgroup.it  
Product distribution by Alberto Tirelli

#### 1.4. Emergency telephone number

For urgent inquiries refer to +39 3487374228

### SECTION 2. Hazards identification.

#### 2.1. Classification of the substance or mixture.


The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Acute toxicity, category 3	H331	Toxic if inhaled.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Respiratory sensitization, category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.

#### 2.2. Label elements.

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

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Signal words:

Danger

Hazard statements:

**H331** Toxic if inhaled.  
**H319** Causes serious eye irritation.  
**H315** Causes skin irritation.  
**H335** May cause respiratory irritation.  
**H334** May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
**H317** May cause an allergic skin reaction.

Precautionary statements:

**P264** Wash . . . thoroughly after handling.  
**P284** [In case of inadequate ventilation] wear respiratory protection.  
**P304+P340** IF INHALED: remove person to fresh air and keep comfortable for breathing.  
**P311** Call a POISON CENTER / doctor / . . .  
**P403+P233** Store in a well-ventilated place. Keep container tightly closed.

**Contains:** Dicioesilmetan-4,4'-diisocianato

### 2.3. Other hazards.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

## SECTION 3. Composition/information on ingredients.

### 3.1. Substances.

Information not relevant.


### 3.2. Mixtures.

Contains:

Identification.	Conc. %.	Classification 1272/2008 (CLP).
<b>Dicioesilmetan-4,4'-diisocianato</b>		
CAS. 5124-30-1	50 - 100	Acute Tox. 3 H331, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Resp. Sens. 1 H334, Skin Sens. 1 H317, Note 2
EC. 225-863-2		
INDEX. 615-009-00-0		

Note: Upper limit is not included into the range.

The full wording of hazard (H) phrases is given in section 16 of the sheet.

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## SECTION 4. First aid measures.

### 4.1. Description of first aid measures.

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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

For symptoms and effects caused by the contained substances, see chap. 11.

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

Information not available.

## SECTION 5. Firefighting measures.

### 5.1. Extinguishing media.

#### SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

#### UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

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

#### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

### 5.3. Advice for firefighters.


#### GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

## SECTION 6. Accidental release measures.

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

Use breathing equipment if fumes or powders are released into the air. These indications apply for both processing staff and those involved in emergency procedures.

#### 6.2. Environmental precautions.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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

Confine using earth or inert material. Collect as much material as possible and eliminate the rest using jets of water. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

#### 6.4. Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

### SECTION 7. Handling and storage.

#### 7.1. Precautions for safe handling.

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use.

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

Keep the product in clearly labelled containers. Keep containers away from any incompatible materials, see section 10 for details.

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

Information not available.


### SECTION 8. Exposure controls/personal protection.

#### 8.1. Control parameters.

##### Dicicloesilmetan-4,4'-diisocianato

##### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers.				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation.					0,6 mg/m3	VND	0,3 mg/m3	VND

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Legend:

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

## 8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

### HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

### SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

### EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

### RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type B filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.


### ENVIRONMENTAL EXPOSURE CONTROLS.

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

## SECTION 9. Physical and chemical properties.

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

Appearance	liquid
Colour	transparent
Odour	odourless
Odour threshold.	Not available.
pH.	Not available.
Melting point / freezing point.	25 °C.
Initial boiling point.	168 °C.
Boiling range.	Not available.
Flash point.	Not available.
Evaporation Rate	Not available.
Flammability of solids and gases	Not available.
Lower inflammability limit.	Not available.
Upper inflammability limit.	Not available.
Lower explosive limit.	Not available.

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Upper explosive limit.	Not available.
Vapour pressure.	0.002 Pa
Vapour density	Not available.
Relative density.	1,070 Kg/l
Solubility	Not available.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature.	Not available.
Decomposition temperature.	Not available.
Viscosity	400 mPas
Explosive properties	Not available.
Oxidising properties	Not available.

## 9.2. Other information.

VOC (Directive 2010/75/EC) :	0
VOC (volatile carbon) :	0

## SECTION 10. Stability and reactivity.

### 10.1. Reactivity.

There are no particular risks of reaction with other substances in normal conditions of use.

### 10.2. Chemical stability.

The product is stable in normal conditions of use and storage.

### 10.3. Possibility of hazardous reactions.

No hazardous reactions are foreseeable in normal conditions of use and storage.

### 10.4. Conditions to avoid.

None in particular. However the usual precautions used for chemical products should be respected.


### 10.5. Incompatible materials.

Information not available.

### 10.6. Hazardous decomposition products.

Information not available.

## SECTION 11. Toxicological information.

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### 11.1. Information on toxicological effects.

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

Acute effects: this product is toxic and causes poisoning by inhalation. Poisoning by inhalation may give rise to a series of symptoms, which may include: stinging and irritated eyes, mouth, throat; cough, respiratory disorders, dizziness, headache, nausea and sickness. In the most serious cases, inhalation of this product may cause larynx and bronchial tube edema, chemical pneumonia and pulmonary edema, reduction or increase of heart-beat, copious salivation, blood sputum, loss of consciousness, behavioral disorders (depression or euphoria).

Acute effects: stinging eyes. Symptoms may include: rubescence, edema, pain and lachrymation. Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

Acute effects: contact with skin may cause: irritation, erythema, edema, dryness and chapped skin. Ingestion may cause health disorders, including stomach pain and sting, nausea and sickness.

Acute effects: inhalation of this product may irritate the lower and upper respiratory tract and cause cough and respiratory disorders; at higher concentrations it can also cause pulmonary edema. Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

Inhalation of this product causes sensitization, which may then give rise to a series of inflammatory episodes, most of all characterized by obstruction and affecting the respiratory system. Sometimes, sensitization phenomena arise together with evident rhinitis and asthma. Damages to the respiratory system depend on the inhaled quantity, on the product concentration in the working environment and on the exposure time.

Upon contact with skin, this product causes sensitization (dermatitis). Dermatitis derives from skin irritation on the areas which repeatedly come into contact with the sensitizing agent. Cutaneous lesions may include: erythemas, edemas, papules, vesicles, pustules, scurries, ulcerations and exudative phenomena, whose intensity varies according to illness seriousness and affected areas. Erythemas, edemas and exudative phenomena prevail during the acute phase. Scurry skin, dryness, ulcerations and skin thickening prevail during the chronic phase.

Dicicloesilmetan-4,4'-diisocianato

LD50 (Oral).18200 mg/kg ratto, maschio/femmina

LD50 (Dermal).> 7000 mg/kg ratto, maschio/femmina

LC50 (Inhalation).0,382 mg/l/4h ratto, maschio/femmina

## SECTION 12. Ecological information.

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

### 12.1. Toxicity.

Dicicloesilmetan-4,4'-

diisocianato

EC50 - for Crustacea.

> 8,3 mg/l/48h

EC50 - for Algae / Aquatic

> 5 mg/l/72h

Plants.

LC10 for Fish.

> 8,1 mg/l/96h

EC10 for Algae / Aquatic

1,2 mg/l/72h

Plants.


### 12.2. Persistence and degradability.

Information not available.

### 12.3. Bioaccumulative potential.

Information not available.

### 12.4. Mobility in soil.

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Information not available.

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

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

#### 12.6. Other adverse effects.

Information not available.

### SECTION 13. Disposal considerations.

#### 13.1. Waste treatment methods.

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

### SECTION 14. Transport information.

#### 14.1. UN number.

ADR / RID:	ADR EXEMPT
IMDG:	IMDG CODE EXEMPT
IATA:	3334

#### 14.2. UN proper shipping name.


ADR / RID:	ADR EXEMPT
IMDG:	IMDG CODE EXEMPT
IATA:	AVIATION REGULATED LIQUID, N.O.S.

#### 14.3. Transport hazard class(es).

ADR / RID:	ADR EXEMPT	
IMDG:	IMDG CODE EXEMPT	
IATA:	Class: 9	Label: 9



#### 14.4. Packing group.

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ADR / RID: ADR EXEMPT  
IMDG: IMDG CODE  
EXEMPT  
IATA: III

#### 14.5. Environmental hazards.

ADR / RID: ADR EXEMPT  
IMDG: NO

#### 14.6. Special precautions for user.

ADR / RID:	HIN - Kemler: -	Limited Quantities: -	Tunnel restriction code: -
	Special Provision: -		
IMDG:	EMS: -	Limited Quantities: -	
IATA:	Cargo:	Maximum quantity: 450 L	Packaging instructions: 964
	Pass.:	Maximum quantity: 450 L	Packaging instructions: 964
	Special Instructions:	A27	

#### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code.

Information not relevant.

### SECTION 15. Regulatory information.

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

Seveso category. 2

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

Product.  
Point. 3

Substances in Candidate List (Art. 59 REACH).


None.

Substances subject to authorisation (Annex XIV REACH).

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.

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Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

## 15.2. Chemical safety assessment.

No chemical safety assessment has been processed for the mixture and the substances it contains.


## SECTION 16. Other information.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Acute Tox. 3</b>	Acute toxicity, category 3
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Resp. Sens. 1</b>	Respiratory sensitization, category 1
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>H331</b>	Toxic if inhaled.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H334</b>	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
<b>H317</b>	May cause an allergic skin reaction.

### LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation

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- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

#### GENERAL BIBLIOGRAPHY

1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
2. Regulation (EU) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website

#### Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

#### Changes to previous review:

The following sections were modified:

08 / 09 / 11 / 12.