

# Safety Data Sheet

## according to Regulation (EC) No. 1907/2006 (REACH)



**Trade name :** SYNTECH POLIUREA SPRAY N - COMP. A  
**Revision date :** 17.10.2018  
**Print date :** 17.10.2018

**Version :** 1.0.0

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

#### 1.1 Product identifier

SYNTECH POLIUREA SPRAY N - COMP. A

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

Preparation for building and construction: 100% pure polyurea for waterproofing in general not drivable.

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

##### Supplier (manufacturer/importer/only representative/downstream user/distributor)

AZICHEM Srl

**Street :** Via G. Gentile16/A

**Postal code/city :** 46044 Goito (MN)

**Telephone :** +390376604185/604365

**Telefax :** +39 0376 604398

**Information contact :** info@azichem.com

#### 1.4 Emergency telephone number

Centro Antiveleni di Milano 02 66101029 (CAV Ospedale Niguarda Ca' Granda -Milano) (24h)

Centro Antiveleni di Pavia 0382 24444 (CAV IRCCS Fondazione Maugeri - Pavia)

Centro Antiveleni di Bergamo 800 883300 (CAV Ospedali Riuniti - Bergamo)

Centro Antiveleni di Firenze 055 7947819 (CAV Ospedale Careggi - Firenze)

Centro Antiveleni di Roma 06 3054343 (CAV Policlinico Gemelli - Roma)

Centro Antiveleni di Roma 06 49978000 (CAV Policlinico Umberto I - Roma) Centro Antiveleni di Napoli 081 7472870 (CAV Ospedale Cardarelli - Napoli)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

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

Acute Tox. 4 ; H332 - Acute toxicity (inhalative) : Category 4 ; Harmful if inhaled.

Carc. 2 ; H351 - Carcinogenicity : Category 2 ; Suspected of causing cancer.

Eye Irrit. 2 ; H319 - Serious eye damage/eye irritation : Category 2 ; Causes serious eye irritation.

Skin Irrit. 2 ; H315 - Skin corrosion/irritation : Category 2 ; Causes skin irritation.

Resp. Sens. 1 ; H334 - Sensitisation to the respiratory tract : Category 1 ; May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin Sens. 1 ; H317 - Skin sensitisation : Category 1 ; May cause an allergic skin reaction.

STOT SE 3 ; H335 - STOT-single exposure : Category 3 ; May cause respiratory irritation.

STOT RE 2 ; H373 - STOT-repeated exposure : Category 2 ; 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



Health hazard (GHS08) · Exclamation mark (GHS07)

###### Signal word

Danger

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### Hazard components for labelling

4,4'-METHYLENEDIPHENYL DIISOCYANATE ; CAS No. : 101-68-8  
METHYLENEDIPHENYL DIISOCYANATE ; CAS No. : 26447-40-5  
4,4'-METHYLENEDIPHENYL DIISOCYANATE, OLIGOMERS ; CAS No. : 25686-28-6

### Hazard statements

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H351 Suspected of causing cancer.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H332 Harmful if inhaled.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.

### Precautionary statements

P201 Obtain special instructions before use.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P302+P352 IF ON SKIN: Wash with plenty of water/....  
P308+P313 IF exposed or concerned: Get medical advice/attention.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P501 Dispose of contents/container in accordance with local regulation

### Special rules for supplemental label elements for certain mixtures

O220 For professional use only  
EUH204 Contains isocyanates. May produce an allergic reaction.

### 2.3 Other hazards

None

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Hazardous ingredients

4,4'-METHYLENEDIPHENYL DIISOCYANATE ; REACH registration No. : 01-2119457014-47 ; EC No. : 202-966-0; CAS No. : 101-68-8

Weight fraction :  $\geq 30 - < 35$  %  
Classification 1272/2008 [CLP] : Resp. Sens. 1 ; H334 Carc. 2 ; H351 STOT RE 2 ; H373 Acute Tox. 4 ; H332 Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Eye Irrit. 2 ; H319 STOT SE 3 ; H335

METHYLENEDIPHENYL DIISOCYANATE ; EC No. : 247-714-0; CAS No. : 26447-40-5

Weight fraction :  $\geq 5 - < 10$  %  
Classification 1272/2008 [CLP] : Resp. Sens. 1 ; H334 Acute Tox. 4 ; H332 Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Eye Irrit. 2 ; H319 STOT SE 3 ; H335

4,4'-METHYLENEDIPHENYL DIISOCYANATE, OLIGOMERS ; REACH registration No. : 01-2119457013-49 ; EC No. : 500-040-3; CAS No. : 25686-28-6

Weight fraction :  $\geq 5 - < 10$  %  
Classification 1272/2008 [CLP] : Resp. Sens. 1B ; H334 Carc. 2 ; H351 STOT RE 2 ; H373 Acute Tox. 4 ; H332 Skin Irrit. 2 ; H315 Skin Sens. 1B ; H317 Eye Irrit. 2 ; H319 STOT SE 3 ; H335

PROPYLENE CARBONATE ; REACH registration No. : 01-2119537232-48 ; EC No. : 203-572-1; CAS No. : 108-32-7

Weight fraction :  $\geq 5 - < 10$  %  
Classification 1272/2008 [CLP] : Eye Irrit. 2 ; H319

#### Additional information

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

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

When in doubt or if symptoms are observed, get medical advice.

##### Following inhalation

Remove victim out of the danger area. Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

##### In case of skin contact

Wash immediately with: Water Remove contaminated, saturated clothing immediately. In case of skin irritation, consult a physician. In case of skin reactions, consult a physician.

##### After eye contact

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

##### After ingestion

Never give anything by mouth to an unconscious person or a person with cramps.

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

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Causes severe irritation of respiratory tract, of skin and eyes

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

None

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

Extinguishing powder alcohol resistant foam Carbon dioxide (CO2) Water mist

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

##### Hazardous combustion products

Carbon monoxide. Isocyanates

#### 5.3 Advice for firefighters

Remove persons to safety.

##### Special protective equipment for firefighters

Do not inhale explosion and combustion gases. Use appropriate respiratory protection.

### SECTION 6: Accidental release measures

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

Clear spills immediately. Wear a self-contained breathing apparatus and chemical protective clothing.

##### For non-emergency personnel

Remove persons to safety.

#### 6.2 Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

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

##### For containment

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal.

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### For cleaning up

The contaminated area should be cleaned up immediately with: Water Retain contaminated washing water and dispose it.

### 6.4 Reference to other sections

Reference to other sections Safe handling: see section 7 Personal protection equipment: see section 8

## SECTION 7: Handling and storage



### 7.1 Precautions for safe handling

#### Protective measures

##### Specific requirements or handling rules

Do not breathe dust. Do not breathe gas/fumes/vapour/spray. See section 8.

#### Advices on general occupational hygiene

Normal precautions taken when handling chemicals should be observed.

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

Only use containers specifically approved for the substance/product.

#### Requirements for storage rooms and vessels

Keep in a cool, well-ventilated place. Protect against UV-radiation/sunlight Humidity.

#### Hints on joint storage

Storage class : 10

Storage class (TRGS 510) : 10

#### Keep away from

Store at least 3 metres apart from: Chemicals/products that react together readily

#### Further information on storage conditions

Keep container tightly closed and in a well-ventilated place.

### 7.3 Specific end use(s)

None

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limit values

4,4'-METHYLENEDIPHENYL DIISOCYANATE ; CAS No. : 101-68-8

Limit value type (country of origin) : TRGS 900 ( D )

Parameter : E: inhalable fraction

Limit value : 0,05 mg/m<sup>3</sup>

Peak limitation : 1/=2=(I)

Remark : Sa, Y

Version : 06.11.2015

#### DNEL/DMEL and PNEC values

##### DNEL/DMEL

### 8.2 Exposure controls

#### Appropriate engineering controls

If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be

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worn.

## Personal protection equipment



When using do not eat, drink, smoke, sniff.

## Eye/face protection

### Suitable eye protection

Safety glasses with side shields (EN 166).

## Skin protection

### Hand protection

Wear rubber gloves approved under standard EN374.

## Respiratory protection

Respiratory protection necessary at: exceeding exposure limit values

### Suitable respiratory protection apparatus

Full-/half-/quarter-face masks (DIN EN 136/140) Filter type: B

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Safety relevant basis data

Aspect		liquid
Colour		yellowish
Odour		typical
Melting point/melting range :	( 1013 hPa )	No data available
Vapour density	( air = 1 )	Data not available
Initial boiling point and boiling range :	( 1013 hPa )	No data available
Decomposition temperature :	>	200 °C
Self flammability		Not selfigniting
Flash point :	>	60 °C
Flammability (solid, gas)		Data not available
Lower explosion limit :		No data available
Upper explosion limit :		No data available
Explosive properties		Product is not explosive
Vapour pressure	( 20 °C )	No data available
Density :	( 20 °C )	1,11 - 1,12 g/cm <sup>3</sup>
Density :	( 23 °C )	No data available
Water solubility :	( 20 °C )	Partially soluble
pH :		No data available
Log Pow	( 20 °C )	not applicable
Viscosity :	( 23 °C )	No data available
Odour threshold		Data not available
Evaporation rate		Data not available
Maximum VOC content (EC) :		51,8 Wt %
Oxidizing properties		Data not available

### 9.2 Other information

None

## SECTION 10: Stability and reactivity

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### 10.1 Reactivity

Reacts with water or moisture. Danger of polymerisation.

### 10.2 Chemical stability

See section 7. No additional measures necessary.

### 10.3 Possibility of hazardous reactions

Reacts violently with water.

### 10.4 Conditions to avoid

Do not expose this product to high temperatures. Evitare il contatto con l'acqua. Sensible to moisture.

### 10.5 Incompatible materials

Exothermic reaction with alcohols, amines, water with CO<sub>2</sub> separation. May react violently with acids, bases and strong oxidants.

### 10.6 Hazardous decomposition products

Carbon monoxide. Isocyanates

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute effects

##### Acute oral toxicity

Parameter : LD50  
Exposure route : Oral  
Species : Rat  
Effective dose : > 2000 mg/kg

##### Acute dermal toxicity

Parameter : LD0 ( PROPYLENE CARBONATE ; CAS No. : 108-32-7 )  
Exposure route : Dermal  
Species : Rabbit  
Effective dose : > 2000 mg/kg

##### Acute inhalation toxicity

Parameter : LC50 ( 4,4'-METHYLENEDIPHENYL DIISOCYANATE ; CAS No. : 101-68-8 )  
Exposure route : Inhalation  
Species : Rat  
Effective dose : 490 mg/m<sup>3</sup>

#### Irritant and corrosive effects

##### Primary irritation to the skin

Irritant.

##### Irritation to eyes

Irritant.

##### Irritation to respiratory tract

Irritant.

#### Sensitisation

##### In case of skin contact

sensitising.

##### In case of inhalation

sensitising.

#### Repeated dose toxicity (subacute, subchronic, chronic)

Causes damage to respiratory system through prolonged or repeated exposure through inhalation.

#### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

##### Carcinogenicity

Suspected of causing cancer.

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### SECTION 12: Ecological information

Do not allow uncontrolled discharge of product into the environment.

#### 12.1 Toxicity

##### Aquatic toxicity

###### Acute (short-term) fish toxicity

Parameter : LC50 ( PROPYLENE CARBONATE ; CAS No. : 108-32-7 )  
Species : Cyprinus carpio (Common Carp)  
Effective dose : > 1000 mg/l  
Exposure time : 96 h

###### Acute (short-term) daphnia toxicity

Parameter : EC50 ( PROPYLENE CARBONATE ; CAS No. : 108-32-7 )  
Species : Daphnia magna (Big water flea)  
Effective dose : > 1000 mg/l  
Exposure time : 48 h

###### Acute (short-term) algae toxicity

Parameter : EC50 ( PROPYLENE CARBONATE ; CAS No. : 108-32-7 )  
Species : Scenedesmus subspicatus  
Effective dose : > 900 mg/l  
Exposure time : 72 h

###### Bacteria toxicity

Parameter : EC50 ( PROPYLENE CARBONATE ; CAS No. : 108-32-7 )  
Species : Bacteria- activated sludge

#### 12.2 Persistence and degradability

No information available.

#### 12.3 Bioaccumulative potential

No information available.

#### 12.4 Mobility in soil

No information available.

#### 12.5 Results of PBT and vPvB assessment

No information available.

#### 12.6 Other adverse effects

No information available.

#### 12.7 Additional ecotoxicological information

None

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

##### Product/Packaging disposal

Dispose according to legislation.

### SECTION 14: Transport information

#### 14.1 UN number

No dangerous good in sense of these transport regulations.

#### 14.2 UN proper shipping name

No dangerous good in sense of these transport regulations.

#### 14.3 Transport hazard class(es)

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No dangerous good in sense of these transport regulations.

#### 14.4 Packing group

No dangerous good in sense of these transport regulations.

#### 14.5 Environmental hazards

No dangerous good in sense of these transport regulations.

#### 14.6 Special precautions for user

None

#### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

### SECTION 15: Regulatory information

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

##### EU legislation

Regulation (EC) 1907/2006 (REACH).

Regulation (EC) No 1272/2008 (CLP).

Regulation (EU) 2015/830 requirements for the compilation of safety data sheets.

Amendings, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008: Commission Regulation (EC) No 790/2009 (I ATP). Commission Regulation (EU) No 286/2011(II ATP). Commission Regulation (EU) No 618/2012 (III ATP). Commission Regulation (EU) No 487/2013 (IV ATP). Commission Regulation (EU) No 944/2013 (V ATP). Commission Regulation (EU) No 605/2014 (VI ATP). Commission Regulation (EU) No 1297/2014 (VII ATP). Commission Regulation (EU) No 2015/1221 (VIII ATP).

##### Other regulations (EU)

**Regulation (CE) 1907/2006: Substance of very high concern included in the SVHC Candidate List**

None

##### National regulations

Italy: Legislative Decree 81/2008 (Consolidated Law on protection of health and safety at work), as amended and Directive 2009/161/UE - chemical risk assessment in accordance with Title IX

##### Technische Anleitung Luft (TA-Luft)

Weight fraction (Number 5.2.5. I) : 30 - 35 %

##### Water hazard class (WGK)

Class : 1 (Slightly hazardous to water) Classification according to VwVwS

#### 15.2 Chemical safety assessment

not applicable

### SECTION 16: Other information

#### 16.1 Indication of changes

None

#### 16.2 Abbreviations and acronyms

##### LEGENDA:

ADR:	Accord européen relative au transport international des marchandises dangereuses par route (accordo europeo relativo al trasporto internazionale delle merci pericolose su strada)
ASTM:	ASTM International, originariamente nota come American Society for Testing and Materials (ASTM)
EINECS:	European Inventory of Existing Commercial Chemical Substances (Registro Europeo delle Sostanze chimiche in Commercio)
EC(0/50/100):	Effective Concentration 0/50/100 (Concentrazione Effettiva Massima per 0/50/100% degli Individui)
LC(0/50/100):	Lethal Concentration 0/50/100 (Concentrazione Letale per 0/50/100% degli Individui)
IC50:	Inhibitor Concentration 50 (Concentrazione Inibente per il 50% degli Individui)
NOEL:	No Observed Effect Level (Dose massima senza effetti)
NOEC:	No Observed Effect Concentration (Concentrazione massima senza effetti)



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LOEC:	Lowest Observed Effect Concentration (Concentrazione massima alla quale è possibile evidenziare un effetto)
DNEL:	Derived No Effect Level (Dose derivata di non effetto)
DMEL:	Derived Minimum Effect Level (Dose derivata di minimo effetto)
CLP:	Classification, Labelling and Packaging (Classificazione, Etichettatura e Imballaggio)
CSR:	Rapporto sulla Sicurezza Chimica (Chemical Safety Report)
LD(0/50/100):	Lethal Dose 0/50/100 (Dose Letale per 0/50/100% degli Individui)
IATA:	International Air Transport Association (Associazione Internazionale del Trasporto Aereo)
ICAO:	International Civil Aviation Organization (Organizzazione Internazionale dell'Aviazione Civile)
Codice IMDG:	International Maritime Dangerous Goods code (Codice sul Regolamento del Trasporto Marittimo)
PBT:	Persistent, bioaccumulative and toxic (sostanze persistenti bioaccumulabili e tossiche)
RID:	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regolamento concernente il trasporto Internazionale ferroviario delle merci Pericolose)
STEL:	Short term exposure limit (limite di esposizione a breve termine)
TLV:	Threshold limit value (soglia di valore limite)
TWA:	Time Weighted Average (media ponderata nel tempo)
UE:	Unione Europea
vPvB:	Very persistent very bioaccumulative (sostanze molto persistenti e molto bioaccumulabili)
N.D.:	Non disponibile.
N.A.:	Non applicabile
AwSV.:	Ordinance on facilities for handling substances that are hazardous to water (Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV))
PNEC:	Predicted No Effect Concentration
PNOS:	Particulates not Otherwise Specified
BOD:	Biochemical Oxygen Demand
COD:	Chemical Oxygen Demand
BCF:	BioConcentration Factor
TRGS :	Technische Regeln für Gefahrstoffe -Technical Rules for Hazardous Substances, defined by The Federal Institute for Occupational Safety and Health, Germany
LCLo:	Lethal Concentration Low (La minima concentrazione letale)
ThOD:	Theoretical Oxygen Demand

### 16.3 Key literature references and sources for data

None

### 16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

calculated.

### 16.5 Relevant H- and EUH-phrases (Number and full text)

H302	Harmful if swallowed.
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.

### 16.6 Training advice

None

### 16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety

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data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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