Safety Data Sheet
POLURENE MT100

Version:3 Revision date: 23/7/2012

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier
Trade name:
POLURENE MT100

1.2. Relevant identified uses of the substance/mixture and uses advised against
Recommended use: Hardener for coating materials or adhesives for industrial and trade applications.
Uses advised against: Not suitable for DIY use.

1.3. Details of the supplier of the safety data sheet
S.A.P.I.C.I. Spa Via Bergamo, 2 - 20063 Cernusco s/N (MI)
Tel +39 02 921871 Fax +39 02 92102331
Responsible for the safety data sheet: HSE@sapici.it

1.4. Emergency telephone number
Poison Center - Niguarda Hospital - Milan - Tel. +39 02 66101029

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:
Properties / Symbols:
Xn Harmful
Xi Irritant

Harmful by inhalation.
Irritating to respiratory system.
May cause sensitization by skin contact.

EC regulation criteria 1272/2008 (CLP):

 Warning, Acute Tox. 4, Harmful if inhaled.

 Warning, Skin Sens. 1, May cause an allergic skin reaction.

 Warning, STOT SE 3, May cause respiratory irritation.

Adverse physicochemical, human health and environmental effects:
No other hazards

2.2. Label elements

Labelling (67/548/CEE, 1999/45/CE):

Symbols:
Xn Harmful
R Phrases:
R20 Harmful by inhalation.
R37 Irritating to respiratory system.
R43 May cause sensitization by skin contact.
S Phrases:
S24 Avoid contact with skin.
S37 Wear suitable gloves.
Contents:
HDI oligomers, isocyanurate
Special Provisions:
Contains isocyanates. See information supplied by the manufacturer.

Labelling (1272/2008/CE):
Symbols:

Warning
Hazard statements:
H332 Harmful if inhaled.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
Precautionary statements:
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P501 Dispose of contents/container in accordance with applicable regulations.
Special Provisions:
EUH204 Contains isocyanates. May produce an allergic reaction.
Contents:
HDI oligomers, isocyanurate
hexamethylene-di-isocyanate

2.3. Other hazards
vPvB Substances: None - PBT Substances: None

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

~100 % HDI oligomers, isocyanurate
REACH No.: 01-2119485796-17-XXXX, EC: 931-274-8
Xn,Xi; R20-37-43
 3.1/4/Inhal Acute Tox. 4 H332

 3.4.2/1 Skin Sens. 1 H317

 3.8/3 STOT SE 3 H335

<0.2 % hexamethylene-di-isocyanate
REACH No.: 01-2119457571-37-xxxx, Index number: 615-011-00-1, CAS: 822-06-0, EC: 212-485-8
T,Xn,Xi; R23-36/37/38-42/43
 3.3/2 Eye Irrit. 2 H319

 3.8/3 STOT SE 3 H335

 3.2/2 Skin Irrit. 2 H315

 3.4.1/1 Resp. Sens. 1 H334

 3.4.2/1 Skin Sens. 1 H317

 3.1/3/Inhal Acute Tox. 3 H331

3.2. Mixtures
N.A.

4. FIRST AID MEASURES

4.1. Description of first aid measures

In case of skin contact:
Immediately take off all contaminated clothing.
Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.
Wash thoroughly the body (shower or bath).
Remove contaminated clothing immediatley and dispose off safely.

In case of eyes contact:
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do NOT induce vomiting.

In case of Inhalation:
If breathing is irregular or stopped, administer artificial respiration.
In case of inhalation, consult a doctor immediately and show him packing or label.

4.2. Most important symptoms and effects, both acute and delayed
None

4.3. Indication of any immediate medical attention and special treatment needed
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

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5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media
Suitable extinguishing media:
Fire extinguishing powder, foam or CO2. Use foam and water jets only in case of extensive fire outbreak.
Extinguishing media which must not be used for safety reasons: high volume water jet.

5.2. Special hazards arising from the substance or mixture
Do not inhale explosion and combustion gases.
Burning releases carbon monoxide, carbon dioxide, oxides of nitrogen, isocyanate vapors and traces of hydrogen cyanide.

5.3. Advice for fire-fighters
During the extinction of fires it is necessary to protect the airway with a breathing apparatus and protective clothing resistant to chemicals
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

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6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Provide adequate ventilation.
Use appropriate respiratory protection.
See protective measures under point 7 and 8.

6.2. Environmental precautions
Retain contaminated washing water and dispose it.
In case of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up
Remove mechanically; cover the residuals with moist absorbent material (eg. Sawdust, reactive chemical binders based on calcium silicate hydrate, sand). After about 1 hour collect it in a waste

container. Do not close (it releases carbon dioxide). Keep moist and leave it open for several days, in a place under control.

6.4. Reference to other sections
See also section 8 and 13.

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7. HANDLING AND STORAGE

7.1. Precautions for safe handling
Avoid contact with skin and eyes, inhaltion of vapours and mists.
Use localized ventilation system.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contamined clothing should be changed before entering eating areas.

See also section 8 for recomened protective equipment.

7.2. Conditions for safe storage, including any incompatibilities
Keep this product in a dry place.
Keep away from food, drink and feed.
Further information on the storage conditions which must be observed to preserve quality can be found in our product information sheet.
Adequately ventilated premises.

7.3. Specific end use(s)
None in particular

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters
hexamethylene-di-isocyanate - CAS: 822-06-0
TLV TWA: 0.005 ppm0.034 mg/m3

DNEL Exposure Limit Values
N.A.
PNEC Exposure Limit Values
N.A.

8.2. Exposure controls
Eye protection:
Not needed for normal use. Anyway, operate according good working practices.
Skin protection:
Wear suitable protective clothing.
Hand protection:
Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.
Respiratory protection:

In places with poor ventilation and during the spraying process it is necessary to protect the respiratory tract. It is recommended to wear a mask with air supply or a mask with combination filter A2-P2 for short-term jobs.
It is recommended to wear a mask with air supply or a mask with combination filter A2-P2 for short-term jobs.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance and colour:	Colourless liquid
Boiling point:	>220 °C
Flash point:	137 °C
Relative density:	1.16 g/cm3
Solubility in water:	Insoluble, REACTS WITH WATER

9.2. Other information

The indicated values do not necessarily correspond to the product specification. Please refer to the technical information sheet for specification data.

10. STABILITY AND REACTIVITY

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

It may generate flammable gases on contact with elementary metals (alkalis and alkaline earth, alloys in powder or vapours) and powerful reducing agents.
It may generate toxic gases on contact with oxidising mineral acids, and powerful oxidising agents.
It may catch fire on contact with oxidising mineral acids, and powerful oxidising agents.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

10.6. Hazardous decomposition products

None.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information of the mixture:

N.A.
Toxicological information of the main substances found in the mixture:
hexamethylene-di-isocyanate - CAS: 822-06-0
LD50 (RABBIT) SKIN: 570 MG/KG

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

a) acute toxicity;
b) skin corrosion/irritation;
c) serious eye damage/irritation;
d) respiratory or skin sensitisation;
e) germ cell mutagenicity;
f) carcinogenicity;
g) reproductive toxicity;
h) STOT-single exposure;
i) STOT-repeated exposure;
j) aspiration hazard.

12. ECOLOGICAL INFORMATION

12.1. Toxicity
Adopt sound working practices, so that the product is not released into the environment.

12.2. Persistence and degradability
Information not available.

12.3. Bioaccumulative potential
Information not available.

12.4. Mobility in soil
Information not available.

12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects
Information not available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

14. TRANSPORT INFORMATION

ADR (road) : not regulated
IMDG (ship) : not regulated
ICAO (air) : not regulated

15. REGULATORY INFORMATION

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

Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances). Dir. 99/45/EEC (Classification, packaging and labelling of dangerous preparations). Dir. 98/24/EC (Risks related to chemical agents at work). Dir. 2000/39/EC (Occupational exposure limit values); Dir. 2006/8/CE. Regulation (CE) n.1907/2006 (REACH), Regulation (CE) n.1272/2008 (CLP), Regulation (CE) n.790/2009 (1°ATP CLP), Regulation (EU) n.453/2010 (Annex I).

Where applicable, refer to the following regulatory provisions:
Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent amendments.
Regulation (EC) nr.648/2004 (detergents).
1999/13/EC (VOC directive)

15.2. Chemical Safety Assessment

No

16. OTHER INFORMATION

Text of phrases referred to under heading 3:

R20 Harmful by inhalation.
R23 Toxic by inhalation.
R36/37/38 Irritating to eyes, respiratory system and skin.
R37 Irritating to respiratory system.
R42/43 May cause sensitization by inhalation and skin contact.
R43 May cause sensitization by skin contact.

H332 Harmful if inhaled.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H331 Toxic if inhaled.

This safety data sheet has been completely updated in compliance to Regulation 453/2010/EU.
This document was prepared by a competent person who has received appropriate training.
Main bibliographic sources:

NIOSH - Registry of toxic effects of chemical substances (1983)
I.N.R.S. - Fiche Toxicologique
CCNL - Appendix 1 "TLV for 1989-90"
Advanced Health Institute - National Chemical Substances Inventory

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. 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.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
WGK:	German Water Hazard Class.