



SAFETY DATA SHEET

SOLITHANE® S 113

Version: 1.2 Revision Date: 06/28/2017 Print Date: 08/01/2017

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: SOLITHANE® S 113

Product Use Description: Polymer

Company: LANXESS Solutions US Inc.
199 Benson Road
Middlebury, CT
06749
United States of America (USA)

Telephone: (US) +1 866-430-2775

Sc SERVICE CHIMIE
5, Place de l'Eglise
77400 ST THIBAULT
Tel. 01 64 30 89 22 - Fax 01 64 30 87 49
• CHIMIE FINE & RECYCLAGE •

Emergency telephone number: CHEMTREC: (24 hours) 800-424-9300
US : 800-292-5898 (Technical inquiries)

For additional emergency telephone numbers see section 16 of the Safety Data Sheet.

Prepared by Product Safety Department
(US) +1 866-430-2775

MSDSRequest@chemtura.com

Recommended use of the chemical and restrictions on use

Recommended use : Polymer

Restrictions on use : Reserved for industrial and professional use.

SECTION 2. HAZARDS IDENTIFICATION

Form	liquid
Colour	light yellow
Odour	pungent

GHS Classification

Acute toxicity (Inhalation) : Category 2
Respiratory sensitisation : Category 1
Skin sensitisation : Category 1
Carcinogenicity : Category 2

GHS label elements



SAFETY DATA SHEET

SOLITHANE® S 113

Version: 1.2

Revision Date: 06/28/2017

Print Date: 08/01/2017

Signal word : **Danger**

Hazard pictograms :

Hazard statements : H317 May cause an allergic skin reaction.
H330 Fatal if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H351 Suspected of causing cancer.

Other hazards : None

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
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.
P281 Use personal protective equipment as required.
P284 Wear respiratory protection.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 + P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P363 Wash contaminated clothing before reuse.
Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Carcinogenicity:
IARC : Group 2B: Possibly carcinogenic to humans
m-tolylidene diisocyanate 26471-62-5


SAFETY DATA SHEET
SOLITHANE® S 113

Version: 1.2

Revision Date: 06/28/2017

Print Date: 08/01/2017

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

Reasonably anticipated to be a human carcinogen

m-tolylidene diisocyanate 26471-62-5

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS
Hazardous components

Chemical name	CAS-No.	Concentration (%)
m-tolylidene diisocyanate	26471-62-5	>= 5 - < 10 %

SECTION 4. FIRST AID MEASURES

- If inhaled : Remove to fresh air.
Give oxygen or artificial respiration if needed.
Get medical attention immediately.
- In case of skin contact : Remove contaminated clothing and shoes.
Wash off with soap and plenty of water.
Obtain medical attention.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,
for at least 15 minutes.
If symptoms persist, call a physician.
- If swallowed : Get medical attention immediately.
- Most important symptoms and effects, both acute and delayed : Lachrymation
Breathing difficulties
sensitising effects
- Notes to physician : Oxygen, if needed.
For specialist advice physicians should contact the Poisons Information Service.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray
Dry chemical
- Specific hazards during firefighting : Burning produces irritant fumes.
Exposure to decomposition products may be a hazard to


SAFETY DATA SHEET
SOLITHANE® S 113

Version: 1.2

Revision Date: 06/28/2017

Print Date: 08/01/2017

through the ventilation system.
 Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
 When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
 Due to the poor warning properties regarding the chemical(s) of concern, negative pressure air purifying respirators are not recommended at any exposure level in excess of the exposure limit values.
- Hand protection
 Remarks : butyl-rubber
- Eye protection : Safety glasses with side-shields
 or
 Safety goggles
- Skin and body protection : Impervious clothing
- Hygiene measures : Purge open drums with nitrogen before resealing.
 Allergic reactions may develop after inhalation of low concentrations, also several hours after exposure. Regular medical checks, including lung function, are recommended for long term and repeated use of isocyanates.
 Wash hands before breaks and at the end of workday.
 Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Color : light yellow
- Odor : pungent
- Odour Threshold : No data available
- pH : Not applicable
- Melting point/range :
 Not applicable
- Boiling point/boiling range : No data available
- Evaporation rate : No data available
- Flash point : 150 - 175 °C


SAFETY DATA SHEET
SOLITHANE® S 113

Version: 1.2

Revision Date: 06/28/2017

Print Date: 08/01/2017

Method: closed cup

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : 1.073

Density : No data available

Solubility(ies)

Water solubility : No data available

 Solubility in other solvents : soluble
 Solvent: Tetrahydrofuran

 soluble
 Solvent: Dimethylformamide

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : No data available

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : Hazardous polymerisation does not occur.

Conditions to avoid : Exposure to moisture

 Incompatible materials : Alcohols
 Strong oxidizing agents
 Water

**SAFETY DATA SHEET****SOLITHANE® S 113**

Version: 1.2

Revision Date: 06/28/2017

Print Date: 08/01/2017

Hazardous decomposition products : Carbon oxides
Nitrogen oxides (NOx)
Hydrocarbons
Isocyanates

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Acute inhalation toxicity : Acute toxicity estimate: 1.11 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Components:**m-tolyldiene diisocyanate:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0.1 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): > 9,400 mg/kg

Skin corrosion/irritation**Components:****m-tolyldiene diisocyanate:**

Species: Rabbit

Result: Severe skin irritation

Serious eye damage/eye irritation**Components:****m-tolyldiene diisocyanate:**

Species: Rabbit

Result: Risk of serious damage to eyes.

Respiratory or skin sensitisation**Components:****m-tolyldiene diisocyanate:**

Species: Guinea pig

Assessment: May cause sensitisation by skin contact.

Result: Causes sensitisation.

Carcinogenicity


SAFETY DATA SHEET
SOLITHANE® S 113

Version: 1.2	Revision Date: 06/28/2017	Print Date: 08/01/2017
--------------	---------------------------	------------------------

IARC	Group 2B: Possibly carcinogenic to humans m-tolylidene diisocyanate 26471-62-5
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	Reasonably anticipated to be a human carcinogen m-tolylidene diisocyanate 26471-62-5

Further information
Product:

Remarks: The product itself has not been tested.

SECTION 12. ECOLOGICAL INFORMATION
Ecotoxicity effects

Toxicity to fish
 m-tolylidene diisocyanate (Component) : LC50: 147 mg/l
 Exposure time: 48 h
 Species: Pimephales promelas (fathead minnow)

LC50: 133 mg/l
 Exposure time: 96 h
 Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates
 m-tolylidene diisocyanate (Component) : LC50: > 508 mg/l
 Exposure time: 48 h
 Species: Grass shrimp (Palaemonetes pugio)

EC50: 12.5 mg/l
 Exposure time: 48 h
 Species: Daphnia magna (Water flea)

Toxicity to algae
 m-tolylidene diisocyanate (Component) : EC50: 4,300 mg/l
 Exposure time: 96 h
 Species: Chlorella vulgaris (Fresh water algae)

**SAFETY DATA SHEET****SOLITHANE® S 113**

Version: 1.2

Revision Date: 06/28/2017

Print Date: 08/01/2017

Elimination information (persistence and degradability)Bioaccumulation (Product) : Remarks:
No data availableMobility (Product) : Remarks:
No data available

Biodegradability (Product) : Result: No data available

Ecotoxicology Assessment

Results of PBT assessment (Product)

This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

Additional ecological information (Product) : There is no data available for this product.

(Product) : The product itself has not been tested.
The following information is applicable to a component of this material:**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**Waste from residues : Waste must be classified and labelled prior to recycling or disposal.
In well ventilated area, fill drums with several centimeters of water. Leave drum open and slowly shake and roll to allow water contact. Leave open to air for sufficient time to cure. Dispose of waste product or used containers according to local regulations.
Do not contaminate ponds, waterways or ditches with chemical or used container.**SECTION 14. TRANSPORT INFORMATION****International Regulations****IATA-DGR**UN/ID No. : UN 2206
Proper shipping name : Isocyanates, toxic, n.o.s.
(m-tolyldiene diisocyanate)

Class : 6.1

Packing group : III


SAFETY DATA SHEET
SOLITHANE® S 113

Version: 1.2

Revision Date: 06/28/2017

Print Date: 08/01/2017

m-tolylidene diisocyanate 26471-62-5

California Prop 65
WARNING! This product contains a chemical known to the State of California to cause cancer.

m-tolylidene diisocyanate 26471-62-5

Please note that Section 3 of this document lists only the hazardous components required by the specific country or region hazard communication regulations. The chemical identifiers listed in Section 3 are used globally for hazard communication purposes and may not reflect those used for chemical inventory coverage in a particular country or region. The chemical inventory information given in Section 15 of this document applies to the product as a whole and should be used when evaluating inventory compliance.

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

DSL	All components of this product are on the Canadian DSL
AICS	On the inventory, or in compliance with the inventory
NZIoC	Not in compliance with the inventory
ENCS	On the inventory, or in compliance with the inventory
KECI	On the inventory, or in compliance with the inventory
PICCS	Not in compliance with the inventory
IECSC	On the inventory, or in compliance with the inventory
TCSI	On the inventory, or in compliance with the inventory
US.TSCA	On TSCA Inventory

SECTION 16. OTHER INFORMATION
Further information
Other Emergency Phone Number

<u>Latin America:</u>	Brazil	+55 113 711 9144
	All other countries	+44 (0) 1235 239 670
<u>Mexico:</u>		+52 555 004 8763

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.