

Printing date 05/06/2015 Version Number 1.0 Reviewed on 05/06/2015

1 Identification

Product identifier

Trade name: Flex LV PURe

SDS ID Number: 2460

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

Waterproofing.

Specialty construction product. Not intended for other uses

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

W.R. Grace & Co. -Conn. 62 Whittemore Avenue Cambridge, MA 02140 USA

Grace Canada, Inc. 294 Clements Road W. Ajax, Ontario L1S 3C6 Canada

Information department:

Environmental Health & Safety USA: +1-617-876-1400 (24 hours)

+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts

CAN: 1-905-683-8561 (24 hours)

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

2 Hazard(s) identification

Classification of the substance or mixture

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

Suspected of causing cancer.

May cause damage to organs through prolonged or repeated exposure.

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms





GHS07 GHS08

Danger

(Cont. on page 2)

Trade name: Flex LV PURe

(Cont. from page 1)

Hazard-determining components of labeling:

Methylenediphenyl diisocyanate, mixture of isomers

Diphenylmethane-4,4'-di-isocyanate

Precautionary statements

Wear respiratory protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If on skin: Wash with plenty of water.

If eye irritation persists: Get medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

NFPA ratings (scale 0 - 4)



Health = 1 Fire = 1Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = *2 Flammability = 1 Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with additional nonhazardous ingredients.

Hazardous components:				
26447-40-5	Methylenediphenyl diisocyanate, mixture of isomers	10-20%		
101-68-8	Diphenylmethane-4,4'-di-isocyanate	1.0-2.0%		

Additional information: For the wording of the listed risk phrases refer to section 16.

4 First-aid measures

Description of first aid measures

General information: Get medical advice/attention if you feel unwell.

After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contact:

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

After eye contact:

Rinse opened eye for several minutes under running water.

(Cont. on page 3)

Trade name: Flex LV PURe

(Cont. from page 2)

Rinse cautiously with water for several minutes.

Seek immediate medical advice.

After swallowing:

Wash out mouth with water

Rinse mouth.

Do not induce vomiting; immediately call for medical help.

Never give anything by mouth to an unconscious person.

Information for doctor:

Most important symptoms and effects, both acute and delayed

May cause sensitization by skin contact.

Irritating to eyes.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

Special hazards arising from the substance or mixture No further relevant information available.

Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Methods and material for containment and cleaning up:

Contain and/or absorb spill with inert material (i.e. sand, vermiculite) then place in a suitable container.

Sweep up spilled product into receptacles.

Dispose contaminated material as waste according to section 13 of the SDS.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling

Open and handle receptacle with care.

Prevent formation of aerosols.

Avoid contact with skin.

(Cont. on page 4)

Trade name: Flex LV PURe

(Cont. from page 3)

Avoid contact with eyes.

Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities

Storage:

Information about storage in one common storage facility: No special measures required.

Further information about storage conditions: Keep receptacle tightly sealed.

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

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:				
101-68-8 Diphenylmethane-4,4'-di-isocyanate				
PEL (USA)	Ceiling limit value: 0.2 mg/m³, 0.02 ppm			
REL (USA)	Long-term value: 0.05 mg/m³, 0.005 ppm Ceiling limit value: 0.2* mg/m³, 0.02* ppm *10-min			
TLV (USA)	Long-term value: 0.051 mg/m³, 0.005 ppm			

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Avoid contact with the eyes and skin.

The usual precautionary measures for handling chemicals should be followed.

Breathing equipment:

Due to the presence of isocyanate, supplied air respirators must be worn whenever the product is applied in poorly ventilated areas unless local exhaust will maintain exposures below acceptable limits. A chemical cartridge respirator with organic vapour cartridge is required when local exhaust is unavailable or inadequate to control exposures below required limits. When supplied-air respirators are not available or use is not practical, an air-purifying respirator may be an acceptable alternative if the recommendations below are followed:

Use of fans to improve air circulation and general ventilation or exhaust ventilation to remove MDI vapours when working in confined spaces.

The use of an air-purifying respirator fitted with organic vapour cartridge and a well managed cartridge change schedule. Due to the low exposure limits and poor odour warning properties, cartridges should be replaced on a daily basis at a minimum.

To complement the above, a viable isocyanate measurement system should be used to monitor workplace levels.

Protection of hands:

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Material of gloves

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

(Cont. on page 5)

Trade name: Flex LV PURe

(Cont. from page 4)

Eye protection:



Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.



A face shield should also be worn if there is potential exposure to splash or spray.

Body protection:

Evaporation rate

Water:

Solubility in / Miscibility with

Partition coefficient (n-octanol/water): Not determined.

Protective work clothing

Use personal protective equipment as required.

9 Physical and chemical properties

Take off contaminated clothing and wash before reuse.

General Information	
Appearance:	
Form:	Liquid
Color:	Yellow
Odor:	Sweet.
Odour threshold:	Not determined.
pH-value (~):	Not determined.
Change in condition Melting point/Melting range:	Undetermined.
Boiling point/Boiling range: Flash point:	Undetermined. > 130 °C (> 266 °F)
Flammability (solid, gaseous):	Not applicable.
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
VOC Content (max):	Not determined.
Vapor pressure:	Not determined.
Density: (~) at 20 °C (68 °F)	$1.0 \text{ g/cm}^3 (8.345 \text{ lbs/gal})$
Relative density	Not determined.
Vapour density	Not determined.

Not determined.

Not miscible or difficult to mix.

(Cont. on page 6)

Printing date 05/06/2015 Version Number 1.0 Reviewed on 05/06/2015

Trade name: Flex LV PURe

		(Cont. from page 5)
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Molecular weight	Not applicable.	
Other information	No further relevant information available.	

10 Stability and reactivity

Reactivity Stable under normal conditions.

Chemical stability

Thermal decomposition: No decomposition if used according to specifications. **Possibility of hazardous reactions** Reacts with acids, oxidising agents.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: Carbon monoxide and carbon dioxide

Additional information: See section 7 for information on handling, storage and conditions to be avoided.

11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values relevant for classification:						
101-68-8 Diphenylmethane-4,4'-di-isocyanate						
Oral	LD50	> 10000 mg/kg (rat)				
Dermal	LD50	> 9400 mg/kg (rabbit)				
Inhalative	LC50, 4h	0.49 mg/l (rat)				

Primary irritant effect:

on the skin: Causes skin irritation.

on the eye: Causes serious eye irritation.

inhalation:

May cause respiratory irritation. May cause drowsiness or dizziness.

Sensitization:

Sensitization possible through inhalation.

Sensitization possible through skin contact.

Additional toxicological information:

Carcinogenic categories

IARC (International Agency for Research on Cancer) Human Carcinogenicity: Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable

101-68-8 Diphenylmethane-4,4'-di-isocyanate

nt. on page 7

Printing date 05/06/2015 Version Number 1.0 Reviewed on 05/06/2015

Trade name: Flex LV PURe

(Cont. from page 6)

NTP (National Toxicology Program)

K-Known to be carcinogenic, R-May reasonably be anticipated to be carcinogenic

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes: Not known to be hazardous to water.

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods Comply with Federal, State and local regulations.

Recommendation:



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

14 Transport information

UN-Number

DOT, ADR, ADN, IMDG, IATANot applicable.

UN proper shipping name

DOT, ADR, ADN, IMDG, IATANot applicable.

(Cont. on page 8)

• USGHS

Printing date 05/06/2015 Version Number 1.0 Reviewed on 05/06/2015

Trade name: Flex LV PURe

	(Cont. from page 7)
Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA	
Class	Not applicable.
Packing group DOT, ADR, IMDG, IATA	Not applicable.
Environmental hazards: Marine pollutant:	No
Special precautions for user	Not applicable.
Transport/Additional information	on: Not classified as a dangerous good for transport by road, rail or air.
DOT	
Remarks:	Not Regulated.

15 Regulatory information

SARA (Superfund Amendments and Reauthorization Act)

Section 302/304 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

101-68-8 Diphenylmethane-4,4'-di-isocyanate

1.1%

SARA Section 312/Tier I & II Hazard Categories:

Health Immediate (acute)
Health Delayed (chronic)
Flammable
Reactive
No
Pressure
Yes
No
No

North America Chemical Inventory Status

TSCA (Toxic Substances Control Act - United States):

All ingredients are listed or exempt from listing unless otherwise noted below.

CEPA (Canadian DSL):

All ingredients are listed or exempt from listing unless otherwise noted below.

Right to Know Ingredient Disclosure

6846-50-0 2,2-dimethyl-1-(methylethyl)-1,3-propanediyl bis(2-methylpropanoate)

Modified MDI

California Proposition 65

Chemicals known to cause cancer:
None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

(Cont. on page 9)

Printing date 05/06/2015 Version Number 1.0 Reviewed on 05/06/2015

Trade name: Flex LV PURe

(Cont. from page 8)

Carcinogenicity Categories

EPA (Environmental Protection Agency)

101-68-8 Diphenylmethane-4,4'-di-isocyanate

D, CBD

TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)

Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable

None of the ingredients is listed.

NIOSH-Cancer (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

Volatile Organic Compounds (VOC) reported per the Emission Standards.

If no g/L value is provided this product is not subject to above standard.

16 Other information

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

Department issuing SDS:

W.R. Grace & Co. -Conn. 62 Whittemore Avenue Cambridge, MA 02140 USA USA: +1-617-876-1400 (24 hours)

+1-800-354-5414

Date of preparation / last revision 05/06/2015 / -

The first date of preparation 05/01/2015

Number of revision times and the latest revision date 1.0 / 05/06/2015

USGHS