

AXIOM GUARD LIQUID MEMBRANE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 4/29/2015 Revision date: 10/30/2024 Supersedes version of: 11/17/2023 Version: 1.7

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

1.1. Product identifier

Product form : Mixture
Product name : AXIOM GUARD LIQUID MEMBRANE
Product code : 50-2-10-AXIOM-GUARD

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

Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : Industrial
For professional use only
Use of the substance/mixture : New Generation, Low Solvent, Thixotropic, Polyurethane liquid membrane for waterproofing and protection

Uses advised against

Restrictions on use : The product is not recommended for any industrial, professional or consumer use other than the identified uses above

1.3. Details of the supplier of the safety data sheet

VISQUEEN

1.4. Emergency telephone number

No additional information available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Precautionary statements (CLP) : P402+P404 - Store in a dry place. Store in a closed container.
P501 - Dispose of contents to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
EUH-statements : EUH208 - Contains m-tolylidene diisocyanate; toluene-diisocyanate(26471-62-5). May produce an allergic reaction.
EUH210 - Safety data sheet available on request.

2.3. Other hazards

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

AXIOM GUARD LIQUID MEMBRANE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Reaction mass of ethylbenzene and m-xylene and p-xylene	EC-No.: 905-562-9 REACH-no: 01-2119488216-32	< 5	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
m-tolylidene diisocyanate; toluene-diisocyanate	CAS-No.: 26471-62-5 EC-No.: 247-722-4 EC Index-No.: 615-006-00-4 REACH-no: 01-2119454791-34		Acute Tox. 1 (Inhalation), H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 Aquatic Chronic 3, H412

Specific concentration limits:

Name	Product identifier	Specific concentration limits (%)
m-tolylidene diisocyanate; toluene-diisocyanate	CAS-No.: 26471-62-5 EC-No.: 247-722-4 EC Index-No.: 615-006-00-4 REACH-no: 01-2119454791-34	(0.1 ≤ C ≤ 100) Resp. Sens. 1; H334

Comments : If REACH registration numbers do not appear, the substance is either exempt from registration or does not meet the minimum volume threshold for registration.

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

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

No additional information available

AXIOM GUARD LIQUID MEMBRANE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Extremely high or low temperatures. Keep container closed when not in use.
Incompatible products : water, amines and alcohol's.

7.3. Specific end use(s)

No additional information available

AXIOM GUARD LIQUID MEMBRANE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL and PNEC

m-tolylidene diisocyanate; toluene-diisocyanate (26471-62-5)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	0.14 mg/m ³
Acute - local effects, inhalation	0.14 mg/m ³
Long-term - systemic effects, inhalation	0.035 mg/m ³
Long-term - local effects, inhalation	0.035 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	12.5 µg/L
PNEC aqua (marine water)	1.25 µg/L
PNEC aqua (intermittent, freshwater)	125 µg/L
PNEC (Soil)	
PNEC soil	> 1 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	> 1 mg/l
Reaction mass of ethylbenzene and m-xylene and p-xylene	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	442 mg/m ³
Acute - local effects, inhalation	293 mg/m ³
Long-term - systemic effects, dermal	180 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	77 mg/m ³
Long-term - local effects, inhalation	221 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	260 mg/m ³
Acute - local effects, inhalation	260 mg/m ³
Long-term - systemic effects, oral	1.6 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	15 mg/m ³
Long-term - systemic effects, dermal	125 mg/kg bodyweight/day
Long-term - local effects, inhalation	65.3 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	44 µg/L
PNEC aqua (marine water)	4.4 µg/L
PNEC aqua (intermittent, freshwater)	0.327 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	2.52 mg/kg dwt
PNEC sediment (marine water)	252 µg/kg dw

AXIOM GUARD LIQUID MEMBRANE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Reaction mass of ethylbenzene and m-xylene and p-xylene

PNEC (Soil)

PNEC soil	852 µg/kg dw
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PNEC (STP)

PNEC sewage treatment plant	1.6 mg/l
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8.2. Exposure controls

Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Chemical goggles or safety glasses

Skin protection

Skin and body protection:

Personal protective equipment for the body and appropriate footwear should be selected depending on the task being performed and possible exposure

Hand protection:

Wear protective gloves. Suitable materials for safety gloves (EN 374):

Butyl rubber, Nitrile rubber, neoprene rubber. For prolonged or repeated exposure, gloves of class 5 or higher are recommended (breakthrough time >240min according to EN374). For short time use, gloves of class 3 or higher are recommended (breakthrough time >60min according to EN374). The thickness of gloves should be >0.35mm in order to provide adequate protection for prolonged contact with the product.

Respiratory protection

Respiratory protection:

Wear respiratory protection. If concentration of one or more substances present in the product exceeds the exposure limit, use respiratory protective device (refer to EN 529)

Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Grey.
Appearance	: Viscous liquid.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Non flammable.
Explosive properties	: Not applicable, product is not explosive.
Oxidising properties	: Not applicable, product is not oxidising.
Lower explosion limit	: Not available

AXIOM GUARD LIQUID MEMBRANE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Upper explosion limit	: Not available
Flash point	: > 65 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not applicable, product is solvent-based
Viscosity, kinematic	: > 20.5 mm ² /s
Viscosity, dynamic	: 3000 – 7000 cP
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1.5 – 1.6 g/cm ³
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

Other safety characteristics

VOC content : 70 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None under normal use.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

water, amines and alcohol's.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

m-tolylidene diisocyanate; toluene-diisocyanate (26471-62-5)

LD50 oral rat	4130 mg/kg Source: ECHA
LD50 dermal rabbit	> 9400 mg/kg Source: ECHA
LC50 Inhalation - Rat [ppm]	66 ppm/1h
LC50 Inhalation - Rat (Vapours)	0.234 mg/l Source: ECHA

AXIOM GUARD LIQUID MEMBRANE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Reaction mass of ethylbenzene and m-xylene and p-xylene

LD50 oral rat	3523 mg/kg
LD50 dermal rabbit	12126 mg/kg
LC50 Inhalation - Rat (Vapours)	27124 mg/l/4h

Skin corrosion/irritation	: Not classified pH: Not applicable, product is solvent-based
Additional information	: Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Not classified pH: Not applicable, product is solvent-based
Additional information	: Based on available data, the classification criteria are not met
Respiratory or skin sensitisation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met

m-tolylidene diisocyanate; toluene-diisocyanate (26471-62-5)

IARC group	2B - Possibly carcinogenic to humans
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-single exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met

m-tolylidene diisocyanate; toluene-diisocyanate (26471-62-5)

STOT-single exposure	May cause respiratory irritation.
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Reaction mass of ethylbenzene and m-xylene and p-xylene

STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met

Reaction mass of ethylbenzene and m-xylene and p-xylene

LOAEL (oral, rat, 90 days)	150 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EPA OPP 82-1 (90-Day Oral Toxicity)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met

AXIOM GUARD LIQUID MEMBRANE

Viscosity, kinematic	> 20.5 mm ² /s
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m-tolylidene diisocyanate; toluene-diisocyanate (26471-62-5)

Viscosity, kinematic	2.221 mm ² /s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm ² /s)'
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11.2. Information on other hazards

Other information

Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met
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AXIOM GUARD LIQUID MEMBRANE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

m-tolylidene diisocyanate; toluene-diisocyanate (26471-62-5)

LC50 - Fish [1]	133 mg/l Total exposure duration: 96 hours
EC50 - Crustacea [1]	12.5 mg/l Test organisms (species): Daphnia magna
EC50 - Other aquatic organisms [1]	18.3 mg/l Test organisms (species): Americamysis bahia (previous name: Mysidopsis bahia)
EC50 96h - Algae [1]	3230 mg/l Test organisms (species): Skeletonema costatum
EC50 96h - Algae [2]	4300 mg/l Test organisms (species): Chlorella vulgaris
LOEC (chronic)	2.2 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	1.1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

Reaction mass of ethylbenzene and m-xylene and p-xylene

LC50 - Fish [1]	2.6 mg/l LC50 96h fish
EC50 - Crustacea [1]	> 3.4 mg/l Test organisms (species): Ceriodaphnia dubia
LOEC (chronic)	3.16 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	1.29 mg/l

12.2. Persistence and degradability

AXIOM GUARD LIQUID MEMBRANE

Persistence and degradability : No available data.

m-tolylidene diisocyanate; toluene-diisocyanate (26471-62-5)

Persistence and degradability : Rapidly degradable

Reaction mass of ethylbenzene and m-xylene and p-xylene

Persistence and degradability : Rapidly degradable

12.3. Bioaccumulative potential

AXIOM GUARD LIQUID MEMBRANE

Bioaccumulative potential : No available data.

m-tolylidene diisocyanate; toluene-diisocyanate (26471-62-5)

Partition coefficient n-octanol/water (Log Pow) : 3.74 Source: CHemIDplus

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

AXIOM GUARD LIQUID MEMBRANE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

12.7. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecological waste information : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

UN-No. (ADR) : Not applicable
UN-No. (IMDG) : Not applicable
UN-No. (IATA) : Not applicable
UN-No. (ADN) : Not applicable
UN-No. (RID) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR) : Not applicable

IMDG
Transport hazard class(es) (IMDG) : Not applicable

IATA
Transport hazard class(es) (IATA) : Not applicable

ADN
Transport hazard class(es) (ADN) : Not applicable

RID
Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available

14.6. Special precautions for user

Overland transport
Not applicable

AXIOM GUARD LIQUID MEMBRANE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

VOC Directive (2004/42)

VOC content : 70 g/l

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

No data available

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

AXIOM GUARD LIQUID MEMBRANE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Other information : None.

Full text of H- and EUH-statements:	
Acute Tox. 1 (Inhalation)	Acute toxicity (inhal.), Category 1
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
EUH208	Contains m-tolylidene diisocyanate; toluene-diisocyanate(26471-62-5). May produce an allergic reaction.
EUH210	Safety data sheet available on request.
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
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.
H412	Harmful to aquatic life with long lasting effects.
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Safety Data Sheet applicable for regions : GB

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.