



# SAFETY DATA SHEET

# **XTRA-STIK Insulation Adhesive**

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

1.1. Product identifier

XTRA-STIK Insulation Adhesive Product name

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

Identified uses Adhesive.

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

**Supplier** 

**Laydex Limited** 

Unit 3, Allied Industrial Estate,

**Kylemore Road** Dublin 10, Ireland

Phone: +353 (0) 1 642 6600 Email: sales@laydex.ie Web: www.laydex.ie

1.4. Emergency telephone number

**Emergency telephone** +353 (0) 1 642 6600 (NOT 24HRS)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334 Skin Sens. 1

- H317 Carc. 2 - H351 STOT SE 3 - H335 STOT RE 2 - H373

**Environmental hazards** Not Classified

1999/45/EC)

Classification (67/548/EEC or Xn;R20,R48/20. Carc. Cat. 3;R40. R42/43. Xi;R36/37/38.

**Human health** Contains non-volatile isocyanate. Heating may generate vapours which irritate the respiratory

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

2.2. Label elements

**Pictogram** 





Signal word Danger

**Hazard statements** 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.

**Precautionary statements** P260 Do not breathe vapour/ 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.

P308+P313 IF exposed or concerned: Get medical advice/ attention.

P501 Dispose of contents/ container in accordance with national regulations.

Supplemental label

information

EUH204 Contains isocyanates. May produce an allergic reaction.

Contains DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES),

**BIS(DIMETHYLAMINOETHYL)ETHER** 

Supplementary precautionary

statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing vapour/ spray.

P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P284 [In case of inadequate ventilation] wear respiratory protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/ doctor if you feel unwell.
P314 Get medical advice/ attention if you feel unwell.
P321 Specific treatment (see medical advice on this label).
P332+P313 If skin irritation occurs: Get medical advice/ attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.

P337+P313 If eye irritation persists: Get medical advice/ attention.

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.

P362+P364 Take off contaminated clothing and wash it before reuse. P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

### 2.3. Other hazards

## SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF

30-60%

**ISOMERS AND HOMOLOGUES)** 

CAS number: 9016-87-9 REACH registration number: 01-

2119457024-46-0006

Classification

Classification (67/548/EEC or 1999/45/EC)

Xn;R20,R48/20. Carc. Cat. 3;R40. Xi;R36/37/38. R42/43.

Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 Carc. 2 - H351 STOT SE 3 - H335

STOT RE 2 - H373

Acute Tox. 4 - H332

2,2'DIMORPHOLINYLDIETHYL ETHER

1-5%

CAS number: 6425-39-4 EC number: 229-194-7 REACH registration number: 01-

2119969278-20-0000

Classification Classification (67/548/EEC or 1999/45/EC)

Eye Irrit. 2 - H319 Xi;R36.

**BIS(DIMETHYLAMINOETHYL)ETHER** 

<1%

CAS number: 3033-62-3

Classification

Classification (67/548/EEC or 1999/45/EC)

Xn;R20/21/22. C;R34. R52/53.

Acute Tox. 4 - H302 Acute Tox. 3 - H311 Acute Tox. 3 - H331 Skin Corr. 1C - H314 Eye Dam. 1 - H318 Aquatic Chronic 3 - H412

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

### SECTION 4: First aid measures

### 4.1. Description of first aid measures

**General information** Remove affected person from source of contamination.

**Inhalation** Move affected person to fresh air at once. Get medical attention if any discomfort continues.

**Ingestion** DO NOT induce vomiting. Get medical attention immediately.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Get medical

attention if any discomfort continues.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide

apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after

washing. Show this Safety Data Sheet to the medical personnel.

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

General information The severity of the symptoms described will vary dependent on the concentration and the

length of exposure.

**Inhalation** Irritation of nose, throat and airway. Coughing, chest tightness, feeling of chest pressure.

Ingestion May cause discomfort if swallowed.

**Skin contact** Prolonged skin contact may cause redness and irritation.

**Eye contact** Severe irritation, burning and tearing.

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

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

#### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

**Suitable extinguishing media** Extinguish with foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

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

**Specific hazards** The product is non-combustible. Irritating gases or vapours. Not known.

Hazardous combustion

products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or

vapours. Oxides of carbon. Oxides of nitrogen.

#### 5.3. Advice for firefighters

Protective actions during

firefighting

Containers close to fire should be removed or cooled with water. Do not allow water to contact

any leaked material.

Special protective equipment

for firefighters

Wear chemical protective suit. Wear positive-pressure self-contained breathing apparatus

(SCBA) and appropriate protective clothing.

### SECTION 6: Accidental release measures

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

**Personal precautions**Wear protective clothing as described in Section 8 of this safety data sheet.

# 6.2. Environmental precautions

**Environmental precautions** Do not discharge into drains or watercourses or onto the ground.

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

Methods for cleaning up Absorb spillage with non-combustible, absorbent material. Absorb spillage with non-

combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Provide adequate ventilation. Contain spillage with sand, earth or other suitable

non-combustible material. Avoid the spillage or runoff entering drains, sewers or

watercourses.

#### 6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

# SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Usage precautions Avoid inhalation of vapours and spray/mists. Avoid contact with skin and eyes. Do not use in

confined spaces without adequate ventilation and/or respirator. Spraying is permitted only in

closed systems, spray cabinets or spray boxes with adequate ventilation.

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

Storage precautions Store in closed original container at temperatures between 5°C and 25°C.

Storage class Chemical storage.

7.3. Specific end use(s

Specific end use(s The identified uses for this product are detailed in Section 1.2.

#### SECTION 8: Exposure Controls/personal protection

#### 8.1. Control parameters

#### Occupational exposure limits

#### DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES)

Long-term exposure limit (8-hour TWA): WEL 0.07 mg/m<sup>3</sup> Short-term exposure limit (15-minute): WEL 0.02 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

### DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES) (CAS: 9016-87-9)

Ingredient comments WEL = Workplace Exposure Limits

**DNEL** Workers - Dermal; Short term systemic effects: 50 mg/kg

> Workers - Inhalation; Short term systemic effects: 0.1 mg/m<sup>3</sup> Workers - Dermal; Short term local effects: 28.7 mg/cm<sup>2</sup> Workers - Inhalation; Short term local effects: 0.1 mg/m³ Workers - Inhalation; Long term systemic effects: 0.05 mg/m³ Workers - Inhalation; Long term local effects: 0.05 mg/m<sup>3</sup>

General population - Dermal; Short term systemic effects: 25 mg/kg General population - Inhalation; Short term systemic effects: 0.05 mg/m3 General population - Oral; Short term systemic effects: 20 mg/kg General population - Dermal; Short term local effects: 17.2 mg/cm<sup>2</sup> General population - Inhalation; Short term local effects: 0.05 mg/m3 General population - Inhalation; Long term systemic effects: 0.025 mg/m3 General population - Inhalation; Long term local effects: 0.025 mg/m3

**PNEC** - Fresh water; 1 mg/l

> - Marine water; 0.1 mg/l - Soil; 1 mg/kg dry weight

- STP; 1 mg/l

#### 8.2. Exposure controls

#### Protective equipment









Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Wear chemical splash goggles.

Hand protection

It is recommended that gloves are made of the following material: Nitrile rubber. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended. For exposure up to 8 hours, wear gloves made of the following material: Nitrile rubber.

Other skin and body

protection

Wear suitable protective clothing as protection against splashing or contamination. Wear

apron or protective clothing in case of contact.

Hygiene measures

Use engineering controls to reduce air contamination to permissible exposure level. Wash

hands after handling. When using do not eat, drink or smoke.

Respiratory protection If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator

fitted with the following cartridge: Gas filter, type AX.

**Environmental exposure** 

controls

Keep container tightly sealed when not in use.

# **SECTION 9: Physical and Chemical Properties**

### 9.1. Information on basic physical and chemical properties

Appearance Coloured liquid.

Colour Blue.

Odour Musty (mouldy).

Odour threshold Not available.

**pH** Not available.

Melting point <10°C

Initial boiling point and range 330°C @ mbar

Flash point >200°C CC (Closed cup).

**Evaporation rate** slow

**Evaporation factor** Not available.

Flammability (solid, gas) Not available.

Other flammability Not available.

Vapour pressure 0.01 Pa @ °C

Vapour density 8.5

Relative density 1.24 @ 20°C

Bulk density Not available.

Solubility(ies) Insoluble in water. Hardens in contact with water.

Partition coefficient Not available.

Auto-ignition temperature >600°C

**Decomposition Temperature** Not available.

Viscosity approx. 1300 cP @ 20°C

**Explosive properties** Not available.

Explosive under the influence

of a flame

Not considered to be explosive.

Oxidising properties Not available.

**Comments** Information given is applicable to the product as supplied.

#### 9.2. Other information

Other information No information required.

Refractive index Not available.

Particle size Not available.

Molecular weight Not available.

Volatility Not available.

Saturation concentration Not available.

Critical temperature Not available.

### SECTION 10: Stability and reactivity

10.1. Reactivity

**Reactivity** The product will harden into a solid mass in contact with water and moisture.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

Not applicable. May polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid contact with water.

10.5. Incompatible materials

10.6. Hazardous decomposition products

Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or

vapours. Oxides of carbon. Oxides of nitrogen.

### SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity - dermal

ATE dermal (mg/kg) 250,000.0

Acute toxicity - inhalation

ATE inhalation (gases ppm) 583,333.33

ATE inhalation (vapours mg/l) 21.98

ATE inhalation (dusts/mists

3.0

mg/l)

Skin corrosion/irritation

Animal data Irritating.

Serious eye damage/irritation

Serious eye damage/irritation Moderately irritating.

Respiratory sensitisation

Respiratory sensitisation Sensitising.

Carcinogenicity

Carcinogenicity Suspected carcinogen based on limited evidence.

Target organ for

carcinogenicity

development

No specific target organs known.

Reproductive toxicity

Reproductive toxicity -

This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Morphological changes that are potentially reversible but provide clear evidence of marked

organ dysfunction.

Aspiration hazard

Aspiration hazard Not anticipated to present an aspiration hazard, based on chemical structure.

.

**Inhalation** Irritating to respiratory system. May cause sensitisation by inhalation.

**Ingestion** May cause stomach pain or vomiting.

Skin contact Irritating to skin. May cause sensitisation by skin contact.

**Eye contact** Irritation of eyes and mucous membranes.

Acute and chronic health

hazards

May cause sensitisation by skin contact. The product contains small quantities of isocyanate. May cause respiratory allergy. May cause respiratory system irritation. May cause respiratory

system irritation. Frequent inhalation of vapours may cause respiratory allergy.

Route of entry Inhalation Skin and/or eye contact

Medical symptoms Irritation of eyes and mucous membranes. Coughing, chest tightness, feeling of chest

pressure.

Medical considerations Chronic respiratory and obstructive airway diseases.

### DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES)

Acute toxicity - oral

Acute toxicity oral (LD50

10,000.0

mg/kg)

Species Rat

ATE oral (mg/kg) 10,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> 9,400.0

mg/kg)

**Species** Rabbit

ATE dermal (mg/kg) 9,400.0

Acute toxicity - inhalation

Acute toxicity inhalation

0.493

0.31

(LC50 vapours mg/l)

Species Rat

Acute toxicity inhalation

(LC50 dust/mist mg/l)

**Species** Rat

ATE inhalation (vapours

mg/l)

ATE inhalation 1.5

(dusts/mists mg/l)

Skin corrosion/irritation

Animal data Irritating.

Serious eye damage/irritation

Serious eye damage/irritation

Moderately irritating.

11.0

Respiratory sensitisation

Respiratory sensitisation Sensitising.

Carcinogenicity

**Carcinogenicity** Suspected carcinogen based on limited evidence.

Target organ for carcinogenicity No specific target organs known.

Reproductive toxicity

Reproductive toxicity -

development

This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Morphological changes that are potentially reversible but provide clear evidence of

marked organ dysfunction.

Aspiration hazard

Aspiration hazard Not anticipated to present an aspiration hazard, based on chemical structure.

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**Inhalation** Irritating to respiratory system. May cause sensitisation by inhalation.

**Ingestion** May cause stomach pain or vomiting.

**Skin contact** Irritating to skin. May cause sensitisation by skin contact.

**Eye contact** Irritation of eyes and mucous membranes.

Acute and chronic health

hazards

May cause sensitisation by skin contact. The product contains small quantities of isocyanate. May cause respiratory allergy. May cause respiratory system irritation.

May cause respiratory system irritation. Frequent inhalation of vapours may cause

respiratory allergy.

Route of entry Inhalation Skin and/or eye contact

Medical symptoms Irritation of eyes and mucous membranes. Coughing, chest tightness, feeling of

chest pressure.

**Medical considerations** Chronic respiratory and obstructive airway diseases.

2,2'DIMORPHOLINYLDIETHYL ETHER

Acute toxicity - oral

Notes (oral LD<sub>50</sub>) No information available.

Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) No information available.

Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>) No information available.

Skin corrosion/irritation

**Skin corrosion/irritation** No information available.

Serious eye damage/irritation

Serious eye

No information available.

damage/irritation

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

**Skin sensitisation** No information available.

Carcinogenicity

IARC carcinogenicity No component of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

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**Inhalation** May be harmful if inhaled. Spray/mists may cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin contact** May be absorbed through the skin. May be harmful in contact with skin. May cause

skin irritation.

**Eye contact** May cause eye irritation.

**SECTION 12: Ecological Information** 

**Ecotoxicity** The product is not expected to be hazardous to the environment.

DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES)

**Ecotoxicity** The product is not expected to be hazardous to the environment.

12.1. Toxicity

Acute toxicity - fish LC50, 96 hours: > 1000 mg/l, Freshwater fish

Acute toxicity - aquatic

invertebrates

EC<sub>50</sub>, 48 hours: >500 mg/l, Daphnia magna

DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES)

Acute toxicity - fish LC50, 96 hours: > 1000 mg/l, Freshwater fish

Acute toxicity - aquatic

invertebrates

EC<sub>50</sub>, 48 hours: >500 mg/l, Daphnia magna

Acute toxicity - aquatic

plants

EC<sub>50</sub>, 72 hours: ~ 1640 mg/l, Scenedesmus subspicatus

Acute toxicity -

EC<sub>50</sub>, 3 hours: 100 mg/l, Activated sludge

microorganisms

Chronic toxicity - aquatic

NOEC, 21 days: 10 mg/l, Daphnia magna

invertebrates

### 12.2. Persistence and degradability

Persistence and degradability The product is not readily biodegradable.

Stability (hydrolysis) Reacts with water.

Biological oxygen demand < 10 g O<sub>2</sub>/g substance

#### DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES)

Persistence and degradability

The product is not readily biodegradable.

Stability (hydrolysis) Reacts with water.

Biological oxygen demand < 10 g O<sub>2</sub>/g substance

#### 12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Partition coefficient Not available.

### DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES)

**Bioaccumulative potential** The product does not contain any substances expected to be bioaccumulating.

Partition coefficient Not available.

12.4. Mobility in soil

**Mobility** The product is non-volatile.

#### DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES)

**Mobility** The product is non-volatile.

### 12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

This product does not contain any substances classified as PBT or vPvB.

assessment

# DIPHENYLMETHANEDIISOCYANATE (MIXTURE OF ISOMERS AND HOMOLOGUES)

**Results of PBT and vPvB** This product does not contain any substances classified as PBT or vPvB. assessment

#### 12.6. Other adverse effects

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

General information Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site

in accordance with the requirements of the local Waste Disposal Authority.

**Disposal methods**Dispose of waste to licensed waste disposal site in accordance with the requirements of the

local Waste Disposal Authority.

#### **SECTION 14: Transport information**

**General** Wear protective clothing as described in Section 8 of this safety data sheet.

### 14.1. UN number

Not applicable.

#### 14.2. UN proper shipping name

14.3. Transport hazard class(es)

#### 14.4. Packing group

### 14.5. Environmental hazards

### Environmentally hazardous substance/marine pollutant

No

#### 14.6. Special precautions for user

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

### SECTION 15: Regulatory information

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

National regulations Health and Safety at Work etc. Act 1974 (as amended).

The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as

amended).

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009

No. 716).

Control of Substances Hazardous to Health Regulations 2002 (as amended).

**EU legislation** Commission Directive 91/322/EEC of 29 May 1991 on establishing indicative limit values by

implementing Council Directive 80/1107/EEC on the protection of workers from the risks

related to exposure to chemical, physical and biological agents at work.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of

Chemicals (REACH) (as amended).

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

#### SECTION 16: Other information

Issued by Compliance

Revision date 25/05/2016

Revision 20

SDS number 20974

Risk phrases in full R20 Harmful by inhalation.

R36/37/38 Irritating to eyes, respiratory system and skin.

R40 Limited evidence of a carcinogenic effect.

R42/43 May cause sensitisation by inhalation and skin contact.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through

inhalation.

**Hazard statements in full** H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage. H319 Causes serious eye irritation.

H331 Toxic 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.

Store Between 5'c - 25'c



This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.