Safety Data Sheet 1907/2006/EC - REACH (GB)
X100 Spraybond Canister

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

1.1 Product identifier

X100 Spraybond Canister

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

1.2.1 Relevant uses

For glue, filling, fixing and insulating gaps and cavities.

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Zettex Europe BV
Plaza 20, 4782 SK Moerdijk
The Netherlands
+31(0)888-938839
info@zettex.nl
www.zettex.nl

1.4 Emergency telephone number

+31(0)888-938839

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Flam. Gas 1: H220 Extremely flammable gas.
Press. Gas (Compressed gas): H280 Contains gas under pressure; may explode if heated.
Carc. 2: H351 Suspected of causing cancer.
Skin Sens. 1: H317 May cause an allergic skin reaction.
Resp. Sens. 1: H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Eye Irrit. 2: H319 Causes serious eye irritation.
Skin Irrit. 2: H315 Causes skin irritation.
STOT SE 3: H335 May cause respiratory irritation.
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure through inhalation.

2.2 Label elements

Hazard pictograms


Signal word DANGER

Contains: Diphenylmethanediisocyanate, isomeres and homologues

Hazard statements

H220 Extremely flammable gas.
H280 Contains gas under pressure; may explode if heated.
H351 Suspected of causing cancer.
H317 May cause an allergic skin reaction.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure through inhalation.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P260 Do not breathe vapours.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves / eye protection / face protection.
P284 In case of inadequate ventilation wear respiratory protection.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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+P311 IF exposed or concerned: Call a POISON CENTER / doctor /…
P410+P403 Protect from sunlight. Store in a well-ventilated place.

Special labelling EUH204 Contains isocyanates. May produce an allergic reaction.

2.3 Other hazards

Environmental hazards Does not contain any PBT or vPvB substances.

Other hazards Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

Product-type:

The product is a mixture.

Range [%]	Substance
10 - <20	Tris(2-chloro-1-methylethyl) phosphate
	CAS: 13674-84-5, EINECS/ELINCS: 237-158-7, Reg-No.: 01-2119486772-26-XXXX
	GHS/CLP: Acute Tox. 4: H302
10 - 15	Diphenylmethanediisocyanate, isomeres and homologues
	CAS: 9016-87-9, EINECS/ELINCS: Polymer
	GHS/CLP: Skin Irrit. 2: H315 - Skin Sens. 1: H317 - Eye Irrit. 2: H319 - Acute Tox. 4: H332 - Resp. Sens. 1: H334 - STOT SE 3: H335 - Carc. 2: H351 - STOT RE 2: H373
5 - 20	Dimethyl ether
	CAS: 115-10-6, EINECS/ELINCS: 204-065-8, EU-INDEX: 603-019-00-8, Reg-No.: 01-2119472128-37-XXXX
	GHS/CLP: Flam. Gas 1: H220 - Press. Gas: H280
1 - 10	iso-Butane
	CAS: 75-28-5, EINECS/ELINCS: 200-857-2, EU-INDEX: 601-004-00-0
	GHS/CLP: Flam. Gas 1: H220 - Press. Gas (Compressed gas): H280
1 - 10	Propane
	CAS: 74-98-6, EINECS/ELINCS: 200-827-9, EU-INDEX: 601-003-00-5
	GHS/CLP: Flam. Gas 1: H220 - Press. Gas (Compressed gas): H280

Comment on component parts Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Take off contaminated clothing and wash before reuse.

Inhalation Remove the victim into fresh air and keep him calm.
In the event of symptoms seek medical treatment.

Skin contact In case of contact with skin wash off immediately with soap and water.
Consult a doctor if skin irritation persists.

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Ingestion Seek medical advice immediately.

4.2 Most important symptoms and effects, both acute and delayed

Headache
Drowsiness
Vertigo
Allergic reactions

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Carbon dioxide.
Water spray jet.
Dry powder.
Foam.

Extinguishing media that must not be used Full water jet.

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.
Hydrogen chloride (HCl).
Hydrogen cyanide (HCN).
Nitrogen oxides (NOx).
Bursting Containers can be forcibly projected from a fire.

5.3 Advice for firefighters

Use self-contained breathing apparatus.
Do not inhale explosion and/or combustion gases.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.
Cool containers at risk with water spray jet.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from all sources of ignition.
Ensure adequate ventilation.
Use personal protective equipment (protective gloves, safety glasses, protective clothing).

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up mechanically.
Take up residues with absorbent material (e.g. sand).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.

Keep away from all sources of ignition - Refrain from smoking.
Propellant can form an explosive mixture with air.

Do not eat, drink, smoke or take drugs at work.
After worktime and before work breaks the affected skin areas must be thoroughly cleaned.
Use barrier skin cream.
Take off contaminated clothing and wash before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Prevent penetration into the ground.

Do not store together with oxidizing agents.
Do not store together with food and animal food/diet.

Keep container in a well-ventilated place.
Keep in a cool place, heat causes increase in pressure and risk of bursting.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Substance
Dimethyl ether
CAS: 115-10-6, EINECS/ELINCS: 204-065-8, EU-INDEX: 603-019-00-8, Reg-No.: 01-2119472128-37-XXXX
Long-term exposure: 400 ppm, 766 mg/m³
Short-term exposure (15-minute): 500 ppm, 958 mg/m³
Diphenylmethanediisocyanate, isomeres and homologues
CAS: 9016-87-9, EINECS/ELINCS: Polymer
Long-term exposure: 0,02 mg/m³, as NCO, Sen
Short-term exposure (15-minute): 0,07 mg/m³
iso-Butane
CAS: 75-28-5, EINECS/ELINCS: 200-857-2, EU-INDEX: 601-004-00-0
Long-term exposure: 600 ppm, 1450 mg/m³, (Butane)
Short-term exposure (15-minute): 750 ppm, 1810 mg/m³

Ingredients with occupational exposure limits to be monitored (EU)

Substance / EC LIMIT VALUES
Dimethyl ether
CAS: 115-10-6, EINECS/ELINCS: 204-065-8, EU-INDEX: 603-019-00-8, Reg-No.: 01-2119472128-37-XXXX
Eight hours: 1000 ppm, 1920 mg/m³

DNEL

Substance
Tris(2-chloro-1-methylethyl) phosphate, CAS: 13674-84-5
Industrial, inhalative, Acute - local effects: 22,4 mg/m³.
Industrial, dermal, Acute - local effects: 8 mg/kg bw/day.
Industrial, dermal, Long-term - systemic effects: 2,08 mg/kg bw/day.
Industrial, inhalative, Long-term - systemic effects: 5,82 mg/m³.
general population, inhalative, Acute - local effects: 11,2 mg/m³.
general population, oral, Long-term - systemic effects: 0,52 mg/kg bw/day.
general population, dermal, Long-term - systemic effects: 1,04 mg/kg bw/day.
general population, dermal, Acute - local effects: 4 mg/kg bw/day.
general population, inhalative, Long-term - systemic effects: 1,46 mg/m³.
Dimethyl ether, CAS: 115-10-6
Industrial, inhalative, Long-term - systemic effects: 1894 mg/m³.
general population, inhalative, Long-term - systemic effects: 471 mg/m³.

PNEC

Substance
Tris(2-chloro-1-methylethyl) phosphate, CAS: 13674-84-5
oral (food), 11,6 mg/kg.
soil, 1,7 mg/kg.
sediment (freshwater), 13,4 mg/kg.
sediment (seaater), 1,34 mg/kg.
sewage treatment plants (STP), 7,84 mg/L.
seawater, 0,064 mg/L.
freshwater, 0,64 mg/L.

Dimethyl ether, CAS: 115-10-6
sediment (seaater), 69 µg/L.
seawater, 16 µg/L.
sewage treatment plants (STP), 160 mg/l.
soil, 45 µg/kg.
sediment, 681 µg/kg.
freshwater, 155 µg/L.

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	0,7mm Nitrile rubber, >480 min (EN 374-1/-2/-3). The details concerned are recommendations. Please contact the glove supplier for further information.
Skin protection	Protective clothing.
Other	Avoid contact with eyes and skin. Do not inhale vapours. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	Respiratory protection mask in the event of high concentrations. Short term: filter apparatus, combination filter A-P2. (DIN EN 14387)
Thermal hazards	none
Delimitation and monitoring of the environmental exposition	Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	compressed gas
Color	not determined
Odor	characteristic
Odour threshold	not determined
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	not applicable
Flash point [°C]	not applicable
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	not determined
Upper explosion limit	not determined
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	not determined
Density [g/ml]	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	reacts with water
Partition coefficient [n-octanol/water]	not determined
Viscosity	not applicable
Relative vapour density determined in air	not applicable
Evaporation speed	not applicable
Melting point [°C]	not applicable
Autoignition temperature [°C]	not applicable
Decomposition temperature [°C]	not applicable

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

In case of proper use the intended polymerisationsreaction takes place.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Because of the high vapour pressure, containers are liable to burst if temperature rises.
Formation of explosive gas/air mixtures.

10.4 Conditions to avoid

See SECTION 7.2.

10.5 Incompatible materials

Oxidizing agent

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product
ATE-mix, inhalativ (mist), > 5 mg/L 4h.
ATE-mix, dermal, > 2000 mg/kg.
ATE-mix, oral, > 2000 mg/kg.

Substance
Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9
LD50, dermal, Rabbit: > 9400 mg/kg (OECD 402).
LD50, oral, Rat: > 10000 mg/kg (OECD 401).
LC50, inhalativ (mist), Rat: 0,31 mg/l/4h (OECD 403).
NOAEL, inhalative, Rat: 0,2 mg/m³ (OECD 453).
LOAEL, inhalative, Rat: 1 mg/m³ (OECD 453).
iso-Butane, CAS: 75-28-5
LC50, inhalative, Rat: 570000 ppm (IUCLID).
Tris(2-chloro-1-methylethyl) phosphate, CAS: 13674-84-5
LD50, oral, Rat: > 500 -2000 mg/kg.
LD50, dermal, Rat: > 2000 mg/kg.
LC0, inhalative, Rat: > 7 mg/l 4h.
Propane, CAS: 74-98-6
LC50, inhalative, Rat: 658 mg/L (IUCLID).
Dimethyl ether, CAS: 115-10-6
LC50, inhalative, Rat: 164000 ppm (4 h).

Serious eye damage/irritation
Irritant
Based on the available information, the classification criteria are fulfilled.
Toxicological data of complete product are not available.
Calculation method

Skin corrosion/irritation
Irritant
Based on the available information, the classification criteria are fulfilled.
Toxicological data of complete product are not available.
Calculation method

Respiratory or skin sensitisation
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
Based on the available information, the classification criteria are fulfilled.
Toxicological data of complete product are not available.
Calculation method

Specific target organ toxicity — single exposure
May cause respiratory irritation.
Based on the available information, the classification criteria are fulfilled.
Toxicological data of complete product are not available.
Classification was carried out based on substance-specific concentration limits.

Specific target organ toxicity — repeated exposure
May cause damage to organs through prolonged or repeated exposure through inhalation.
Based on the available information, the classification criteria are fulfilled.
Toxicological data of complete product are not available.
Calculation method

Mutagenicity
Does not contain a relevant substance that meets the classification criteria.
Based on the available information, the classification criteria are not fulfilled.
Toxicological data of complete product are not available.

Reproduction toxicity
Does not contain a relevant substance that meets the classification criteria.
Based on the available information, the classification criteria are not fulfilled.
Toxicological data of complete product are not available.

Carcinogenicity
Suspected of causing cancer.
Based on the available information, the classification criteria are fulfilled.
Toxicological data of complete product are not available.
Calculation method

Aspiration hazard Does not contain a relevant substance that meets the classification criteria. Based on the available information, the classification criteria are not fulfilled.

General remarks

The determination of properties hazardous to health does not take the propellant or carrier material into account.

SECTION 12: Ecological information

12.1 Toxicity

Substance
Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9
LC50, (96h), Danio rerio: > 1000 mg/l (OECD 203).
EC50, (3h), Bacteria: > 100 mg/l (OECD 209).
EC50, (24h), Daphnia magna: > 1000 mg/l (OECD 202).
NOEC, (21d), Daphnia magna: > 10 mg/l (OECD 202).
ErC50, (72h), Scenedesmus subspicatus: > 1640 mg/l (OECD 201).
Tris(2-chloro-1-methylethyl) phosphate, CAS: 13674-84-5
LC50, (96h), Pimephales promelas: 51 mg/l.
EC50, (48h), Daphnia magna: 131 mg/l.
EC50, (3h), Bacteria: 784 mg/l.
IC50, (72h), Algae: 82 mg/l.
Dimethyl ether, CAS: 115-10-6
LC50, (96h), fish: 4100 mg/L.
EC50, (72h), Algae: 155 mg/L.
EC50, (48h), Crustacea: 4400 mg/L.
NOEC, (48h), Crustacea: 4400 mg/L.
NOEC, (96h), fish: 4100 mg/L.

12.2 Persistence and degradability

Behaviour in environment compartments not determined

Behaviour in sewage plant not determined

Biological degradability not determined

12.3 Bioaccumulative potential

Accumulation in organisms is not expected.

12.4 Mobility in soil

Released product polymerize immediately withoutpenetrating into the ground.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.

Waste no. (recommended) 160504* gases in pressure containers (including halons) containing dangerous substances
080501*

Contaminated packaging

Uncontaminated packaging may be taken for recycling.

Waste no. (recommended) 150110*
150104

SECTION 14: Transport information

14.1 UN number

Transport by land according to ADR/RID	3501
Inland navigation (ADN)	3501
Marine transport in accordance with IMDG	3501
Air transport in accordance with IATA	3501

14.2 UN proper shipping name

Transport by land according to ADR/RID	Chemical under pressure, flammable, n.o.s. (Dimethyl ether, iso-Butane)
- Classification Code	8F
- Label	
- ADR LQ	0 l
- ADR 1.1.3.6 (8.6)	Transport category (tunnel restriction code) 2 (B/D)
Inland navigation (ADN)	Chemical under pressure, flammable, n.o.s. (Dimethyl ether, iso-Butane)
- Classification Code	8F
- Label	
Marine transport in accordance with IMDG	Chemical under pressure, flammable, n.o.s. (Dimethyl ether, iso-Butane)
- EMS	F-D, S-U
- Label	
- IMDG LQ	0 l
Air transport in accordance with IATA	Chemical under pressure, flammable, n.o.s. (Dimethyl ether, iso-Butane)
- Label	

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	2
Inland navigation (ADN)	2
Marine transport in accordance with IMDG	2.1
Air transport in accordance with IATA	2.1

14.4 Packing group

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.5 Environmental hazards

Transport by land according to ADR/RID	no
Inland navigation (ADN)	no
Marine transport in accordance with IMDG	no
Air transport in accordance with IATA	no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

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

not applicable

SECTION 15: Regulatory information

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

EEC-REGULATIONS	1991/689 (2001/118); 2010/75; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEC (2008/47/EC); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	DOT-Classification, ADR (2017); IMDG-Code (2017, 38. Amdt.); IATA-DGR (2017).
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011).
- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.
- VOC (2010/75/CE)	17 %

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Hazard statements (SECTION 03)

H280 Contains gas under pressure; may explode if heated.
H220 Extremely flammable gas.
H373 May cause damage to organs through prolonged or repeated exposure through inhalation.
H351 Suspected of causing cancer.
H335 May cause respiratory irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H332 Harmful if inhaled.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H315 Causes skin irritation.
H302 Harmful if swallowed.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
ELINCS = European List of Notified Chemical Substances
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure

Flam. Gas 1: H220 Extremely flammable gas. (Expert judgement)
Press. Gas (Compressed gas): H280 Contains gas under pressure; may explode if heated. (Expert judgement)
Carc. 2: H351 Suspected of causing cancer. (Calculation method)
Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)
Resp. Sens. 1: H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. (Calculation method)
Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)
Skin Irrit. 2: H315 Causes skin irritation. (Calculation method)
STOT SE 3: H335 May cause respiratory irritation. (Calculation method)
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure through inhalation. (Calculation method)

Modified position	SECTION 2 been added: P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	SECTION 4 been added: Take off contaminated clothing and wash before reuse.
	SECTION 7 been added: Propellant can form an explosive mixture with air.
	SECTION 8 been added: Protect the environment by applying appropriate control measures to prevent or limit emissions.
	SECTION 8 been added: Protective clothing.
	SECTION 8 been added: Nitrile rubber, >480 min (EN 374-1/-2/-3).
	SECTION 8 been added: Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
	SECTION 10 been added: In case of proper use the intended polymerisationsreaction takes place.
	SECTION 10 been added: Oxidizing agent
	SECTION 12 been added: Released product polymerize immediately withoutpenetrating into the ground.
	SECTION 12 been added: None known.