

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

### 1.1 Product identifier

Trade name: Polyol (component B) Foam Pack/ Can Foam  
UFI: YON4-U2AX-W002-VS3G

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

Relevant identified uses: a component of polyurethane, two-component foam for muff joints of pre-insulated pipes.

Uses advised against: not determined.

### 1.3 Details of the supplier of the safety data sheet

Supplier: Logstor International Sp. z o.o.  
Address: ul. Handlowa 1, 41-807 Zabrze, Poland  
Telephone/Fax number: +48 32 248 91 00/ +48 32 373 81 80  
E-mail address for a competent person responsible for SDS: logstor.product-safety@kingspan.com

### 1.4 Emergency telephone number

112

## Section 2: Hazards identification

### 2.1 Classification of the substance or mixture

Flam. Liq. 2 H225  
Highly flammable liquid and vapour.

### 2.2 Label elements

#### Hazard pictograms and signal words



DANGER

#### Names of substances that should be mentioned on the label

None.

#### Hazard statements

H225 Highly flammable liquid and vapour.

#### Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P240 Ground and bond container and receiving equipment.

P280 Wear protective gloves/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container to properly labelled waste containers according to national law.

### 2.3 Other hazards

Substances contained in the mixture do not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation.

The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1% by weight.

## Section 3: Composition/information on ingredients

### 3.1 Substances

Not applicable.

### 3.2. Mixture

CAS number: 25322-69-4 EC number: 657-256-7 Index number: - REACH number: -	<u>polypropylene glycol</u> Acute Tox. 4 H302	15 - 20 %
CAS number: 287-92-3 EC number: 206-016-6 Index number: 601-030-00-2 REACH number: 01-2119463053-47-XXXX	<u>cyclopentane</u> Flam. Liq. 2 H225, Aquatic Chronic 3 H412	4 – 5 %
CAS number: 98-94-2 EC number: 202-715-5 Index number: - REACH number: 01-2119533030-60-XXXX	<u>N,N-dimethylcyclohexanamine</u> Flam. Liq. 3 H226, Acute Tox. 3 H301, Acute Tox. 3 H311, Acute Tox. 3 H331, Skin Corr. 1B H314, Aquatic Chronic 2 H411	0,1 -< 1 %

Full text of each relevant H phrase is given in section 16 of SDS.

## Section 4: First aid measures

### 4.1 Description of first aid measures

Skin contact: wash out contaminated skin with water and soap. Consult a doctor if disturbing symptoms occur.

Eye contact: rinse the contaminated eyes thoroughly with water for about 15 minutes. Avoid strong stream of water - the risk of corneal damage. Protect non-irritated eye, remove contact lenses. Contact an ophthalmologist if disturbing symptoms occur.

Ingestion: do not induce vomiting. Rinse mouth with water. Never give anything by mouth to an unconscious person. Call a doctor if necessary, show container or label.

Inhalation: remove the victim to fresh air, keep warm and calm. Consult a doctor if disturbing symptoms occur.

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

Eye contact: possible redness, tearing, burning sensation, slight irritation.

Skin contact: prolonged contact may cause dryness, redness, slight irritation.

Ingestion: after ingestion of large amounts possible gastrointestinal problems.

Inhalation: high vapours concentration may cause headache and dizziness.

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

Physician makes a decision regarding further medical treatment after thorough examination of the injured. Symptomatic treatment.

## Section 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media: water spray, alcohol-resistant foam, carbon dioxide, extinguishing powder.

Unsuitable extinguishing media: water jet – risk of the propagation of the flame.

## 5.2 Special hazards arising from the substance or mixture

During the combustion toxic fumes of e.g. carbon oxides, nitrogen oxides and other unidentified products of pyrolysis may be produced. Do not inhale combustion products, it may cause health risk.

## 5.3 Advice for firefighters

Highly flammable liquid and vapour. Vapours may form explosive mixtures with air. Personal protection typical in case of fire. Do not stay in the fire zone without self-contained breathing apparatus and protective clothing resistant to chemicals. In case of fire, cool endangered containers with water spray from a safe distance. Vapours are heavier than air, may travel considerable distance along the floor/ ground to sources of ignition and may flash back.

## Section 6: Accidental release measures

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

Limit the access for the outsiders into the breakdown area, until the suitable cleaning operations are completed. In case of release of large amounts of the product, isolate the exposed area. Ensure that only the trained personnel removes the effects of the accident. Eliminate all sources of ignition - do not use an open flame, do not smoke, do not use sparking tools, etc. Ensure adequate ventilation. Avoid skin and eyes contamination.

### 6.2 Environmental precautions

In case of release of large amounts of the product, it is necessary to take appropriate steps to prevent it from spreading into the environment. Notify the appropriate emergency services.

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

Collect damaged packages mechanically. Collect leakages using non-flammable binding materials (e.g. sand, earth, vermiculite) and place it in correctly labelled containers. Treat collected material as waste. Clean and ventilate contaminated place. Do not use sparking tools.

### 6.4 Reference to other sections

Appropriate conduct with waste product – see section 13. Personal protective equipment – see section 8.

## Section 7: Handling and storage

### 7.1 Precautions for safe handling

Handle in accordance with good occupational hygiene and safety practices. Ensure adequate ventilation. Wash hands carefully before breaks and after work. Avoid eyes contamination. Do not use open flame while using the product. Do not eat, drink or smoke while handling the product. Prevent accumulation of electrostatic charges.

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

Keep only in original, tightly closed containers. Keep away from food and feed for animals. Avoid sources of heat and fire. Protect from direct sunlight. Do not store with incompatible materials (see subsection 10.5). Recommended container material: carbon steel (Iron), high density polyethylene (HDPE), low density polyethylene (LDPE), tinsplate carbon steel (Tinsplate), 1.4301 stainless steel (V2). Not recommended material for containers: paper, fibreboard.

### 7.3 Specific end use(s)

No information about applications other than those specified in section 1.2.

## Section 8: Exposure controls/personal protection

### 8.1 Control parameters

Product does not contain components with occupational exposure limit values established on the European Union level

Legal Basis: Commission Directive 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, 2019/1831/EU.

Please check also any national occupational exposure limit values in your country.

DNEL for N,N-dimethylcyclohexanamine [CAS 98-94-2]

Exposure route	Exposure scenario	DNEL (workers)
inhalation	Long-term, local effects	35 mg/m <sup>3</sup>
	Acute, local effects	35 mg/m <sup>3</sup>

DNEL for cyclopentane [CAS 287-92-3]

Exposure route	Exposure scenario	DNEL (workers)
inhalation	Long-term, systemic effects	3000 mg/m <sup>3</sup>
dermal	Long-term, systemic effects	432 mg/kg
Exposure route	Exposure scenario	DNEL (consumer)
inhalation	Long-term, systemic effects	643 mg/m <sup>3</sup>
dermal	Long-term, systemic effects	214 mg/kg
oral	Long-term, systemic effects	214 mg/kg

PNEC for N,N-dimethylcyclohexanamine [CAS 98-94-2]

fresh water	0,002 mg/l
marine water	0,0002 mg/l
intermittent release	0,02 mg/l
soil	0,00305 mg/kg

## 8.2 Exposure controls

### Appropriate engineering controls

Use the product in accordance with good occupational hygiene and safety practices. Do not eat, drink or smoke while working with the product. Before breaks and after work wash hands carefully. In the workplace, general and / or local ventilation should be provided. If there is a risk of fire on the employee's clothing during work processes, safety showers and eye washers should be installed near the workstation.

### Personal protective equipment

The necessity to use and selection of appropriate personal protective equipment should take into account the type of risk created by the product, conditions at the workplace and the manner of handling the product. The personal protective equipment used must meet the requirements of Regulation (EU) 2016/425 and the relevant standards. The employer is obliged to ensure protection measures appropriate to the activities performed and meeting all quality requirements, including their maintenance and cleansing. Any contaminated or damaged personal protective equipment must be replaced immediately.

### Hand protection

Not required under normal conditions. Use appropriate protective gloves in accordance with EN ISO 374 standard in case of a failure. Recommended glove material: 0,7 mm butyl rubber; 0,4 mm nitrile rubber; 0,5 mm chloroprene rubber. In case of long term contact use protective gloves with effectiveness level 6 (permeation time > 480 minutes).

When using protective gloves during work with chemical products, it should be noted that the efficacy levels and corresponding breakthrough times do not indicate actual times of protection at a particular workplace, because the protection can be affected by many factors, e.g. temperature, other substances etc. If there are any signs of degradation, damage or change in appearance (colour, flexibility, shape), it is recommended to replace the gloves with a new pair. Please follow the manufacturer's instructions, not only in terms of gloves' usage, but also in terms of their cleaning, maintenance and storage. It is also important to know how to take off the gloves in order to avoid hands contamination.

### Body protection

Depending on the task being performed, protective clothing appropriate to the potential risk should be used, in accordance with the EN ISO 13688 standard.

### Eyes protection

Not required under normal working conditions. If there is a risk of eye contamination, use safety glasses in accordance with EN 166 standard.

## Respiratory protection

In cases where the risk assessment shows that it is necessary, respiratory protective equipment compliant with EN 143 or EN 149, type P2 or FFP2 should be used.

## Thermal hazards

Do not occur.

## Environmental exposure controls

Avoid runoff to the environment, do not empty into sewers. Possible emissions from the ventilation systems and processing equipment should be controlled in order to determinate their compatibility with environmental protection regulations.

## Section 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state:	liquid
Colour:	yellowish
Odour:	characteristic
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	> 140 °C (1013 hPa)
Flammability:	flammable
Lower and upper explosion limit:	1,4% vol./8,0 % vol. (cyclopentane)
Flash point:	18 °C (DIN 51755)
Auto-ignition temperature:	> 250 °C
Decomposition temperature:	not determined
pH:	7 - 9
Kinematic viscosity:	not determined
Solubility:	slightly soluble in water
Partition coefficient n-octanol/water (log value):	not applicable
Vapour pressure :	< 350 mbar (20 °C) < 800 mbar (50 °C)
Density and/or relative density:	1,05 g/cm <sup>3</sup> (DIN 51757)
Relative vapour density:	not determined
Particle characteristics:	not applicable

### 9.2 Other information

Dynamic viscosity:	1400 mPa·s
Flow time:	100 s (23°C; DIN EN ISO 2431; 4 mm)

## Section 10: Stability and reactivity

### 10.1 Reactivity

Product is reactive. Product vapours may form explosive mixtures with air. See also subsections 10.3 – 10.5.

### 10.2 Chemical stability

The product is stable under normal conditions of use and storage.

### 10.3 Possibility of hazardous reactions

The product reacts with isocyanates with release of heat.

### 10.4 Conditions to avoid

Heating, sources of warmth and fire, direct sunlight,. Avoid temperature below 0 °C.

- 10.5 Incompatible materials  
Strong oxidants, acids, bases, isocyanates.
- 10.6 Hazardous decomposition products  
Not known.

## Section 11: Toxicological information

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

#### Acute toxicity

Based on available data, the classification criteria are not met.

#### Skin corrosion/irritation

Based on available data, the classification criteria are not met.

#### Serious eye damage/irritation

Based on available data, the classification criteria are not met.

#### Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

#### Germ cell mutagenicity

Based on available data, the classification criteria are not met.

#### Carcinogenicity

Based on available data, the classification criteria are not met.

#### Reproductive toxicity

Based on available data, the classification criteria are not met.

#### STOT-single exposure

Based on available data, the classification criteria are not met.

#### STOT-repeated exposure

Based on available data, the classification criteria are not met.

#### Aspiration hazard

Based on available data, the classification criteria are not met.

#### Information on likely routes of exposure

Routes of exposure: skin contact, eye contact, inhalation. For more information on the impact of each possible route of exposure, see subsection 4.2.

#### Symptoms related to the physical, chemical and toxicological characteristics

See subsection 4.2.

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

See subsection 4.2

### 11.2 Information on other hazards

#### Endocrine disrupting properties

The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 % by weight.

#### Other information

Not known.

## Section 12: Ecological information

### 12.1 Toxicity

The product is not classified as hazardous for the aquatic environment.

### 12.2 Persistence and degradability

Poorly biodegradable product.

### 12.3 Bioaccumulative potential

Bioaccumulation should not be expected.

### 12.4 Mobility in soil

Mobility of components of the mixture depends on the hydrophilic and hydrophobic properties and biotic and abiotic conditions of soil, including its structure, climatic conditions, seasons and soil organisms.

### 12.5 Results of PBT and vPvB assessment

Substances contained in the product are not assessed as PBT or vPvB.

### 12.6 Endocrine disrupting properties

The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1% by weight.

### 12.7 Other adverse effects

The mixture is not classified as hazardous to the ozone layer. Consider other harmful effects of individual components of the mixture on the environment (eg. global warming potential).

## Section 13: Disposal considerations

### 13.1 Waste treatment methods

Disposal methods for the product: hand over the waste product to a company that has a permit for waste collection / transport. Store residues in original containers. Waste code should be given in the place of waste formation. Recommended waste code: 07 02 08\* (other still bottoms and reaction residues).

Disposal methods for used packing reuse / recycle / eliminate empty containers in accordance with the local legislation. Single use containers should be handed over for disposal.

Legal basis: Directive 2008/98/EC as amended and 94/62/EC as amended.

## Section 14: Transport information

### 14.1 UN number or ID number

UN 1866

### 14.2 UN proper shipping name

ADR: RESIN SOLUTION, flammable

IMDG: RESIN SOLUTION, flammable

IATA: RESIN SOLUTION, flammable



### 14.3 Transport hazard class(es)

3

### 14.4 Packing group

II

### 14.5 Environmental hazards

The product is not classified as hazardous for the environment according to transportation regulations.

## 14.6 Special precautions for user

Eliminate all sources of ignition. Wear personal protective equipment in accordance with section 8.

## 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

### Other informations

ADR	Hazard identification number:	33
	Transport category:	2
	Tunnel restriction code:	D/E
IMDG	Marine pollutant	no

## Section 15: Regulatory information

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

ADR Agreement Concerning the International Carriage of Dangerous Goods by Road.

IMDG Code International Maritime Dangerous Goods Code.

IATA The International Air Transport Association regulations.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC as amended.

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 as amended.

Commission Regulation (EU) No 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives as amended.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste as amended.

Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC.

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC.

Commission Directive 2009/161/EU of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.

Commission Directive 2017/164/EU of 31 January 2017 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU.

Commission Directive 2019/1831/EU of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.

### 15.2 Chemical safety assessment

Chemical safety assessment is not required for mixture.



## Section 16: Other information

### Full text of indicated H phrases mentioned in section 3

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H331	Toxic if inhaled.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

### Clarification of aberrations and acronyms

PBT	Persistent, Bioaccumulative and Toxic substance
vPvB	very Persistent, very Bioaccumulative substance
Acute Tox. 3,4	Acute toxicity - category 3, 4
Aquatic Chronic 2,3	Hazardous to the aquatic environment - Chronic - category 2,3
Flam. Liq. 2,3	Flammable liquid - category 2, 3
Skin Corr. 1B	Corrosive, category 1B

### Trainings

Before commencing working with the product, the user should learn the Health & Safety regulations, regarding handling chemicals, and in particular, undergo a proper workplace training. People associated with transport of hazardous materials in accordance with ADR should be adequately trained for their job responsibilities (general training, bench and safety).

### Key literature references and sources of data

This SDS was prepared on the basis of producer's safety data sheet, literature data, online databases (e.g. ECHA, TOXNET, COSING), our knowledge and experience, taking into account the current legislation.

### Procedures used for the mixture classification according with Regulation 1272/2008/EC (CLP) as amended

Flam. Liq. 2 H225 based on the flash point tests

### Additional information

Changes: section 1-16  
Version: 2.0/EN

The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are to be treated as aid to safety in transport, storage and usage of the product. That does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field.