

## SAFETY DATA SHEET

According to EC directive 1272/2008 and 2020/878

# **ARC POLYURETHANE PU-40**

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

1.1. Product identifier

Product form : Mixture

Trade name : Arc Polyurethane PU-40

Product code : SIPG003, SIPG004, SIPG005, SIPG006

Type of product : Adhesives, Sealants

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Construction materials and sealing applications.

### 1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

### Manufacturer

**Arc Building Products** 

IDA Business & Tech Park, Ballynattin

Arklow, Co. Wicklow Ireland. Y14 A370

T: +353 (0)402 32370

E: sales@arcbuildingproducts.ie

1.4. Emergency telephone number

Emergency number : +353 (0)402 32370 (Office Hours Only)

#### **SECTION 2: Hazards identification**

2.1. Classification of the substance or mixture

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

[CLP] Respiratory sensitisation, Category 1

H334 Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

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

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS08

Signal word (CLP) : Danger

Hazardous ingredients : 4-isocyanatosulphonyltoluene; tosyl isocyanate; 4,4'-methylenediphenyl

diisocyanate; diphenylmethane-4,4'-diisocyanate

Hazard statements (CLP) : H334 - May cause allergy or asthma symptoms or breathing difficulties if

inhaled.



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Precautionary statements (CLP) : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P304+P340 - IF INHALED: Remove person to fresh air and keep

comfortable for breathing.

P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER

or doctor.

EUH-statements : EUH204 - Contains isocyanates. May produce an allergic reaction.

EUH211 - Warning! Hazardous respirable droplets may be formed when

sprayed. Do not breathe spray or mist.

Extra phrases : Persons already sensitised to diisocyanates may develop allergic

reactions when using this product.

Persons suffering from asthma, eczema or skin problems should avoid

contact, including dermal contact, with this product.

This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1

according to standard EN 14387) is used.

As from 24 August 2023 adequate training is required before industrial

or professional use.

#### 2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

### SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
xylene substance with a Community workplace exposure limit (Note C)	(CAS-No.) 1330-20-7 (EC-No.) 215-535-7 (EC Index-No.) 601-022-00-9	≥5-<6	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315
Titanium Dioxide (Note 10)	(CAS-No.) 13463-67-7 (EC-No.) 236-675-5 (EC Index-No.) 022-006-00-2 (REACH-no) 01-2119489379-17- 0005 01-2119489379-17-0006 01-2119489379-17-0018	≥ 3 - < 4	Carc. 2, H351



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(5 ≤C ≤ 100) STOT SE 3, H335

(5 ≤ C ≤ 100) Eye Irrit. 2, H319

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ethylbenzene substance with a Community workplace exposure limit	(CAS-No.) 100-41-4 (EC-No.) 202-849-4 (EC Index-No.) 601-023-00-4	≥1-<2	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 STOT RE 2, H373 Asp. Tox. 1, H304
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate (Note C)(Note 2)	(CAS-No.) 101-68-8 (EC-No.) 202-966-0 (EC Index-No.) 615-005-00-9	≥ 0.7 - < 1	Carc. 2, H351 Acute Tox. 4 (Inhalation), H332 STOT RE 2, H373 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Resp. Sens. 1, H334 Skin Sens. 1, H317
4-isocyanatosulphonyltoluene; tosyl isocyanate	(CAS-No.) 4083-64-1 (EC-No.) 223-810-8 (EC Index-No.) 615-012-00-7 (REACH-no) 01-2119980050-47	≥ 0.1 - < 0.4	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 STOT SE 3, H335
Specific concentration limits:			
Name	Product identifier	Specific co	ncentration limits
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	(CAS-No.) 101-68-8 (EC-No.) 202-966-0 (EC Index-No.) 615-005-00-9	(5 ≤C ≤ 100 (5 ≤C ≤ 100	00) Resp. Sens. 1, H334 ) STOT SE 3, H335 ) Skin Irrit. 2, H315 ) Eye Irrit. 2, H319
4-isocyanatosulphonyltoluene; tosyl	(CAS-No.) 4083-64-1	(5 ≤C ≤ 100	) Skin Irrit. 2, H315

Note 10 - The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1% or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter  $\leq$  10  $\mu$ m.

(EC Index-No.) 615-012-00-7 (REACH-no) 01-2119980050-47

(EC-No.) 223-810-8

Note 2 - The concentration of isocyanate stated is the percentage by weight of the free monomer calculated with reference to the total weight of the mixture.

Note C - Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

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

## **SECTION 4: First aid measures**

isocyanate

4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.



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First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If

experiencing respiratory symptoms: Call a poison center or a doctor.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation : May cause allergy or asthma symptoms or breathing difficulties if

inhaled

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

Treat symptomatically.

## **SECTION 5: Firefighting measures**

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in : Toxic fumes may be released.

case of fire

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

Self-contained breathing apparatus. Complete protective clothing.

#### **SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid breathing

dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment.

For further information refer to section 8: "Exposure controls/personal

protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

**6.4.** Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective

equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.



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Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands

after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

xylene (1330-20-7)		
EU	Local name	Xylene, mixed isomers, pure
EU	IOEL TWA	221 mg/m³
EU	IOEL STEL	442 mg/m³
EU	IOEL STEL [ppm]	100 ppm
EU	Remark	Skin
EU	Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Germany	Notes	

ethylbenzene (100-41-4)		
EU	Local name	Ethylbenzene
EU	IOEL TWA	442 mg/m³
EU	IOEL STEL	884 mg/m³
EU	IOEL STEL [ppm]	200 ppm
EU	Remark	Skin
EU	Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
France	VME (OEL TWA)	88.4 mg/m³
France	VME (OEL TWA) [ppm]	20 ppm
France	VLE (OEL C/STEL)	442 mg/m³
France	VLE (OEL C/STEL) [ppm]	100 ppm
Germany	Notes	



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Titanium Dioxide (13463-67-7)		
France	VME (OEL TWA)	10 mg/m³
Germany	Notes	

### 8.2. Exposure controls

### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### Personal protective equipment:

Dust formation: dust mask.

Hand protection:
Protective gloves

## Eye protection:

Safety glasses

### Skin and body protection:

Wear suitable protective clothing

### Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

### Personal protective equipment symbol(s):









#### **Environmental exposure controls:**

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Paste.

Colour : White, Black, Grey and various colors.

Odour : characteristic.

Odour threshold : No data available

pH : No data available

Relative evaporation rate : No data available

(butylacetate=1)

Melting point : Not applicable



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Freezing point : No data available Boiling point : No data available : No data available Flash point Auto-ignition temperature : No data available : No data available Decomposition temperature Flammability : No data available Vapour pressure : No data available Relative vapour density at 20°C : No data available Relative density : No data available Density : 1.16 g/cm<sup>3</sup> ±0,03 Solubility : insoluble in water.

Partition coefficient n-octanol/water

(Log Pow)

Viscosity, kinematic : > 1724137.931 mm<sup>2</sup>/s

Viscosity, dynamic : > 2000000 cP
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

9.2. Other information

No additional information available

# SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

: No data available

### SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified



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4-isocyanatosulphonyltoluene; tosyl isocyanate (4083-64-1)		
LD50 oral rat	2330 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male/female, Read-across, Oral)	
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Read-across, Skin)	
xylene (1330-20-7)		
LD50 dermal rabbit	12126 mg/kg bodyweight Animal: rabbit, Animal sex: male	
ethylbenzene (100-41-4)	·	
LD50 oral rat	3500 mg/kg (Rat, Male / female, Experimental value, Oral, 14 day(s))	
LD50 dermal rabbit	15433 mg/kg bodyweight (24 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))	
LC50 Inhalation - Rat	17.8 mg/l (4 h, Rat, Male, Experimental value, Inhalation (vapours), 14 day(s))	
Titanium Dioxide (13463-67-7)	·	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male/female, Experimental value, Oral, 14 day(s))	
LC50 Inhalation - Rat	> 5.09 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male, Experimental value, Inhalation (dust), 14 day(s))	
Skin corrosion/irritation	: Not classified	
ethylbenzene (100-41-4)		
рН	Not applicable (non-soluble in water)	
Titanium Dioxide (13463-67-7)		
рН	7 – 8.5	
Serious eye damage/irritation	: Not classified	
ethylbenzene (100-41-4)		
рН	Not applicable (non-soluble in water)	
Titanium Dioxide (13463-67-7)		
рН	7 – 8.5	
Respiratory or skin sensitisation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified.	



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xylene (1330-20-7)		
IARC group	3 - Not classifiable	
ethylbenzene (100-41-4)		
IARC group	2B - Possibly carcinogenic to humans	
4,4'-methylenediphenyl diisocyanate;	diphenylmethane-4,4'-diisocyanate (101-68-8)	
IARC group	3 - Not classifiable	
Titanium Dioxide (13463-67-7)		
IARC group	2B - Possibly carcinogenic to humans	
Reproductive toxicity	: Not classified	
STOT-single exposure	: Not classified	
4-isocyanatosulphonyltoluene; tosyl	isocyanate (4083-64-1)	
STOT-single exposure	May cause respiratory irritation.	
4,4'-methylenediphenyl diisocyanate;	diphenylmethane-4,4'-diisocyanate (101-68-8)	
STOT-single exposure	May cause respiratory irritation.	
STOT-repeated exposure	: Not classified	
xylene (1330-20-7)		
LOAEL (oral, rat, 90 days)	150 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EPA OPP 82-1 (90-Day Oral Toxicity)	
ethylbenzene (100-41-4)		
NOAEL (oral, rat, 90 days)	75 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)	
STOT-repeated exposure	May cause damage to organs (hearing organs) through prolonged or repeated exposure.	
4,4'-methylenediphenyl diisocyanate;	diphenylmethane-4,4'-diisocyanate (101-68-8)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.	
Aspiration hazard	: Not classified	



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Selsil PU Sealant 25/40 Shore A		
Viscosity, kinematic	> 1724137.931 mm <sup>2</sup> /s	
4-isocyanatosulphonyltoluene; tosyl isocyanate (4083-64-1)		
Viscosity, kinematic	3.988 mm²/s	
ethylbenzene (100-41-4)		
Viscosity, kinematic	0.773 mm²/s (20 °C, OECD 114: Viscosity of Liquids)	
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate (101-68-8)		
Viscosity, kinematic	Not applicable	
Titanium Dioxide (13463-67-7)		
Viscosity, kinematic	Not applicable (solid)	

11.2. Information on other hazards No additional information available

## SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to

cause long-term adverse effects in the environment.

Hazardous to the aquatic environment,

short-term (acute)

: Not classified

Hazardous to the aquatic environment,

long-term (chronic)

: Not classified



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4-isocyanatosulphonyltoluene; tosyl isocyanate (4083-64-1)		
LC50 - Fish [1]	> 45 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value)	
EC50 - Crustacea [1]	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)	
EC50 72h - Algae [1]	30 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
EC50 72h - Algae [2]	25 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
ErC50 algae	30 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value)	
xylene (1330-20-7)		
LC50 - Fish [1]	2.6 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)	
EC50 - Crustacea [1]	> 3.4 mg/l Test organisms (species): Ceriodaphnia dubia	
NOEC chronic fish	> 1.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 d'	
ethylbenzene (100-41-4)		
LC50 - Fish [1]	5.1 mg/l (ASTM, 96 h, Menidia menidia, Flow-through system, Salt water, Experimental value, Lethal)	
EC50 - Crustacea [1]	1.8 – 2.4 mg/l (US EPA, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)	
EC50 72h - Algae [1]	5.4 mg/l (US EPA, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Cell numbers)	
EC50 72h - Algae [2]	5.4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
EC50 96h - Algae [1]	7.7 mg/l Test organisms (species): Skeletonema costatum	
EC50 96h - Algae [2]	3.6 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
LOEC (chronic)	1.7 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'	



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ethylbenzene (100-41-4)		
NOEC (chronic)	o.96 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'	
Titanium Dioxide (13463-67-7)		
LC50 - Fish [1]	> 100 mg/l (Equivalent or similar to OECD 203, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Nominal concentration)	
EC50 - Crustacea [1]	19.3 mg/l Test organisms (species): Daphnia magna	
EC50 - Crustacea [2]	27.8 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
ErC50 algae	61 mg/l (EPA 600/9-78-018, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)	
NOEC (chronic)	≥ 2.92 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	

# 12.2. Persistence and degradability

4-isocyanatosulphonyltoluene; tosyl isocyanate (4083-64-1)		
Persistence and degradability	Readily biodegradable in water.	
ethylbenzene (100-41-4)		
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.	
Biochemical oxygen demand (BOD)	1.44 g O <sub>1</sub> /g substance	
Chemical oxygen demand (COD)	2.1 g O₂/g substance	
ThOD	3.17 g O₂/g substance	
Titanium Dioxide (13463-67-7)		
Persistence and degradability	Biodegradability: not applicable.	
Chemical oxygen demand (COD)	Not applicable (inorganic)	
ThOD	Not applicable (inorganic)	

# 12.3. Bioaccumulative potential

4-isocyanatosulphonyltoluene; tosyl isocyanate (4083-64-1)	
Partition coefficient n-octanol/water (Log Pow)  o.6 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).



4-isocyanatosulphonyltoluene; tosyl

isocyanate (4083-64-1)

ethylbenzene (100-41-4)

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ethylbenzene (100-41-4)	
BCF - Fish [1]	1 (6 week(s), Oncorhynchus kisutch, Flow-through system, Salt water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	3.6 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
4,4'-methylenediphenyl diisocyanate; diphen	ylmethane-4,4'-diisocyanate (101-68-8)
Partition coefficient n-octanol/water (Log Pow)	≈ 4.51 (n–octanol/su) 20 °C
Titanium Dioxide (13463-67-7)	
Bioaccumulative potential	Not bioaccumulative.
12.4. Mobility in soil	
4-isocyanatosulphonyltoluene; tosyl isocyan	ate (4083-64-1)
Ecology - soil	No (test)data on mobility of the substance available.
ethylbenzene (100-41-4)	
Surface tension	71.2 mN/m (23 °C, 0.058 g/l, EU Method A.5: Surface tension)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.71 (log Koc, PCKOCWIN v1.66, QSAR)
Ecology - soil	Low potential for adsorption in soil. Toxic to soil organisms.
Titanium Dioxide (13463-67-7)	1
Surface tension	No data available in the literature
Ecology - soil	Low potential for mobility in soil.
12.5. Results of PBT and vPvB assessme	ent
Component	

regulation, annex XIII

regulation, annex XIII

regulation, annex XIII

This substance/mixture does not meet the PBT criteria of REACH

This substance/mixture does not meet the vPvB criteria of REACH

This substance/mixture does not meet the PBT criteria of REACH



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Component	
Titanium Dioxide (13463-67-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties No additional information available

12.7. Other adverse effects
No additional information available

## SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's

sorting instructions.

Sewage disposal recommendations : Disposal must be done according to official regulations.

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : 08 04 09\* - waste adhesives and sealants containing organic solvents or

other dangerous substances

15 of 10\* - packaging containing residues of or contaminated by

dangerous substances

R code/ D code : R12 - Exchange of waste for submission to any of the operations

numbered R 1 to R 11

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

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



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ADR	IMDG	IATA	ADN	RID
14.1. UN number			•	
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shippin	14.2. UN proper shipping name			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary info	ormation available	,		

## 14.6. Special precautions for user

## **Overland transport**

Not applicable

## Transport by sea

Not applicable

## Air transport

Not applicable

### Inland waterway transport

Not applicable

### Rail transport

Not applicable

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

## 15.1.1. EU-Regulations

Listed on REACH Annex XVII (Restriction Conditions). The following restrictions are applicable:		
56. Methylenediphenyl diisocyanate (MDI)  4,4'-methylenediphenyl diisocyanate; diphenylmeth 4,4'-diisocyanate		
56(a) Methylenediphenyl diisocyanate (MDI) isomers: 4,4'-Methylenediphenyl diisocyanate	4,4'-methylenediphenyl diisocyanate; diphenylmethane- 4,4'-diisocyanate	



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74. Diisocyanates, O = C=N-R-N = C=O, with R an aliphatic or aromatic hydrocarbon unit of unspecified length

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate

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

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

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

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

### 15.1.2. National regulations

#### Germany

Regulatory reference : WGK 3, Highly hazardous to water (Classification according to AwSV,

Annex 1)

Hazardous Incident Ordinance (12.

BImSchV)

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

#### Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the

product

Pregnant/breastfeeding women working with the product must not be

in direct contact with the product

Persons suffering from asthma or eczema and persons who have

chronic lung diseases, skin or respiratory allergies to isocyanates should

not work with the material

The requirements from the Danish Working Environment Authorities

regarding work with epoxy resins and isocyanates must be observed

during use and disposal

The requirements from the Danish Working Environment Authorities

regarding work with carcinogens must be followed during use and

disposal

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

#### SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate



# SAFETY DATA SHEET

According to EC directive 1272/2008 and 2020/878

BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
РВТ	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds



# SAFETY DATA SHEET

According to EC directive 1272/2008 and 2020/878

CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:		
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4	
Asp. Tox. 1	Aspiration hazard, Category 1	
Carc. 2	Carcinogenicity, Category 2	
EUH204	Contains isocyanates. May produce an allergic reaction.	
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 2	Flammable liquids, Category 2	
Flam. Liq. 3	Flammable liquids, Category 3	
H225	Highly flammable liquid and vapour.	
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.	
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.	
Resp. Sens. 1	Respiratory sensitisation, Category 1	
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# SAFETY DATA SHEET

According to EC directive 1272/2008 and 2020/878

# **ARC POLYURETHANE PU-40**

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

## SDS EU\_FINAL(07.2023)

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.