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# SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

Product name

#### 5050 PowerFix component B

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

Relevant identified uses

PU adhezive

Uses advised against

No information.

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

#### Manufacturer

SILCO, D.O.O.

Address: Šentrupert 5 a, 3303 Gomilsko, Slovenia

Phone: +386 3 703 3180 Fax: +386 3 703 3188

E-mail: n.cvilak@silco-automotive.com Point of contact for safety info: Nejc Cvilak

#### 1.4. Emergency telephone number

**Emergency** 

112

Supplier

+386 3 703 3180

## **SECTION 2. HAZARDS IDENTIFICATION**

#### 2.1 Classification of the substance or mixture

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

Skin Irrit. 2; H315 Causes skin irritation.

Skin Sens. 1; H317 May cause an allergic skin reaction.

Eye Irrit. 2; H319 Causes serious eye irritation.

Acute Tox. 4; H332 Harmful if inhaled.

Resp. Sens. 1; H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

STOT SE 3; H335 May cause respiratory irritation.

Carc. 2; H351 Suspected of causing cancer.

STOT RE 2; H373 May cause damage to organs through prolonged or repeated exposure.

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#### 2.2 Label elements

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





#### Signal word: Danger

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.

P102 Keep out of reach of children.

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

P284 Wear respiratory protection.

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

P362 + P364 Take off contaminated clothing and wash it before reuse.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

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

## 2.2.2. Contains:

Modified MDI (CAS: 155662-82-1)

'4,4'-methylenediphenyl diisocyanate (CAS: 101-68-8, EC: 202-966-0, Index: 615-005-00-9)

Diphenylmethane diisocyanate, isomers and homologues (CAS: 9016-87-9, EC: 202-966-0)

diphenylmethane-2,4'-diisocyanate (CAS: 5873-54-1, EC: 227-534-9, Index: 615-005-00-9)

#### 2.2.3. Special provisions

#### MDI notice

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.

#### 2.3. Other hazards

No information.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substances

For mixtures see 3.2.

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#### 3.2. Mixtures

Name	CAS EC Index	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Conc. Limits	REACH Registration No.	
Modified MDI	155662-82-1	24-47	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		-	
'4,4'-methylenediphenyl diisocyanate [C]	101-68-8 202-966-0 615-005-00-9	24-47	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	Skin Irrit. 2; H315: $C \ge 5\%$ Eye Irrit. 2; H319: $C \ge 5\%$ Resp. Sens. 1; H334: $C \ge 0,1\%$ STOT SE 3; H335: $C \ge 5\%$	-	
Diphenylmethane diisocyanate, isomers and homologues	9016-87-9 202-966-0 -	10-24	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 STOT SE 3; H335 Carc. 2; H351 STOT RE 2; H373		-	
diphenylmethane-2,4'-diisocyanate <sup>[C</sup>	5873-54-1 227-534-9 615-005-00-9	2-6	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	Skin Irrit. 2; H315: C ≥ 5 % Eye Irrit. 2; H319: C ≥ 5 % Resp. Sens. 1; H334: C ≥ 0,1 % STOT SE 3; H335: C ≥ 5 %	-	

#### Notes for substances:

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.

#### **SECTION 4. FIRST AID MEASURES**

## 4.1. Description of first aid measures

#### General notes

When in doubt or if feeling unwell seek medical assistance.

#### Following inhalation

Remove patient to fresh air - move out of dangerous area. If victim is not breathing give artificial respiration. If symptoms develop and persist, seek medical attention.

#### Following skin contact

Immediately remove contaminated clothing. Wash affected skin areas thoroughly with plenty of water and soap. If symptoms develop and persist, seek medical attention.

#### Following eye contact

If substance has got into eyes, immediately wash out with plenty of water for several minutes. Seek medical advice.

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#### Following ingestion

Do not induce vomiting! Rinse mouth with water and drink a glass of water by sips! Immediately consult a doctor.

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

**Inhalation** 

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Skin contact

No data available.

Eye contact

-

Ingestion

-

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

-

#### **SECTION 5. FIREFIGHTING MEASURES**

#### 5.1. Extinguishing media

Suitable extinguishing media

Foam.

Fire extinguishing powder.

Carbon dioxide (CO<sub>2</sub>).

Water spray.

#### Unsuitable extinguishing media

Full water jet.

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

#### Hazardous combustion products

Risk of formation of toxic pyrolysis products. In the event of fire the following is released: nitrogen oxides (NOx).

#### 5.3. Advice for firefighters

#### Protective actions

In case of fire or heating do not breathe fumes/vapours.

## Special protective equipment for firefighters

self-contained breathing apparatus

## Additional information

Contaminated firefighting water must be disposed of in accordance with the regulations; do not allow to reach the sewage system.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

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

## 6.1.1. For non-emergency personnel

#### Protective equipment

Use personal protective equipment (Section 8). Do not breathe vapours/smoke!

#### **Emergency procedures**

-

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#### 6.1.2. For emergency responders

High risk of slipping due to leakage/spillage of product.

#### 6.2. Environmental precautions

Do not allow product to reach water/drains/sewage systems and ground water. In case of spillage prevent environment contamination with appropriate dam.

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

#### 6.3.1. For containment

#### 6.3.2. For cleaning up

Absorb with inert material (sand, flinstone (diatomite soil), universal binder, sawdust). Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor.

### 6.3.3. Other information

-

#### 6.4. Reference to other sections

See also Sections 8 and 13.

## **SECTION 7. HANDLING AND STORAGE**

## 7.1. Precautions for safe handling

## 7.1.1. Protective measures

#### Measures to prevent fire

Ensure adequate ventilation. Special safety precautions are not necessary; handle according to work instructions.

### Measures to prevent aerosol and dust generation

-

## Measures to protect the environment

-

## 7.1.2. Advice on general occupational hygiene

-

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

## 7.2.1. Technical measures and storage conditions

Keep in cool and well ventilated area. Keep away from food, drink and animal feeding stuffs. Store between +10°C to 25°C.

## 7.2.2. Packaging materials

-

#### 7.2.3. Requirements for storage rooms and vessels

Keep in tightly closed vessels.

#### 7.2.4. Storage class

## 7.2.5. Further information on storage conditions

-

#### 7.3. Specific end use(s)

#### Recommendations

-

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Industrial sector specific solutions

-

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1. Control parameters

#### 8.1.1. Occupational exposure limit values

No information.

## 8.1.2. Information on monitoring procedures

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 482:2012+A1:2015 Workplace exposure. General requirements for the performance of procedures for the measurement of chemical agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values.

#### 8.1.3. DNEL/DMEL values

No information.

#### 8.1.4. PNEC values

No information.

#### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering control

#### Substance/mixture related measures to prevent exposure during identified uses

Avoid contact with eyes and skin. Do not breathe vapours/aerosols. Use good personal hygiene practices – wash hands at breaks and when done working with material.

#### Organisational measures to prevent exposure

Do not eat, drink or smoke while working. Remove all contaminated clothes immediately and wash them before reuse.

#### Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration.

#### 8.2.2. Personal protective equipment

#### Eye and face protection

Safety googles (EN 166).

#### Hand protection

Protective gloves (EN 374).

#### Appropriate materials

Material	Thickness	Penetration Time	Remark
Butyl rubber		120 min	

#### Skin protection

Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345).

#### Respiratory protection

Not needed under normal use and adequate ventilation.

#### Thermal hazards

\_

## 8.2.3. Environmental exposure controls

\_

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## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

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

-	Physical state:	liquid
-	Colour:	black
-	Odour:	characteristic

## Important health, safety and environmental information

-	рН	No information.
-	Melting point/freezing point	No information.
-	Initial boiling point/boiling range	> 200 °C
-	Flash point	230 °C
-	Evaporation rate	No information.
-	Flammability (solid, gas)	> 600 °C
-	Explosion limits (vol%)	No information.
-	Vapour pressure	No information.
-	Vapour density	No information.
-	Density	Density: 1,2 g/cm <sup>3</sup>
-	Solubility	Water: Insoluble
-	Partition coefficient	No information.
-	Auto-ignition temperature	No information.
-	Decomposition temperature	No information.
-	Viscosity	No information.
-	Explosive properties	No information.
-	Oxidising properties	No information.

#### 9.2. Other information

- Remarks:

## **SECTION 10. STABILITY AND REACTIVITY**

## 10.1. Reactivity

-

#### 10.2. Chemical stability

Product is stable under normal conditions of use, recommended handling and storage conditions.

## 10.3. Possibility of hazardous reactions

-

#### 10.4. Conditions to avoid

No special precautions required. Consider the directions for use and storage.

#### 10.5. Incompatible materials

Acids. Strong oxidising agents.

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#### 10.6. Hazardous decomposition products

Under normal use conditions no hazardous decomposition products are expected.

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

#### 11.1. Information on toxicological effects

(a) Acute toxicity

Name	Exposure route	Туре	Species	Time	Value	Method	Remark
diphenylmethane-2,4'-diisocyanate (5873-54-1)	oral	LD <sub>50</sub>	rat		5000 mg/kg		
diphenylmethane-2,4'-diisocyanate (5873-54-1)	dermal	LD <sub>50</sub>	rabbit		5000 mg/kg		
diphenylmethane-2,4'-diisocyanate (5873-54-1)	inhalation	LC <sub>50</sub>	rat	4 h	0,49 mg/l		vapour

#### (b) Skin corrosion/irritation

No information.

## (c) Serious eye damage/irritation

No information.

#### (d) Respiratory or skin sensitisation

No information.

#### (e) (Germ cell) mutagenicity

No information.

#### (f) Carcinogenicity

No information.

## (g) Reproductive toxicity

No information.

#### Summary of evaluation of the CMR properties

Suspected of causing cancer.

## (h) STOT-single exposure

No information.

#### (i) STOT-repeated exposure

No information.

#### (i) Aspiration hazard

No information.

## **SECTION 12. ECOLOGICAL INFORMATION**

#### 12.1. Toxicity

## 12.1.1. Acute (short-term) toxicity

## For components

Substance (CAS Nr.)	Туре	Value	Exposure time	Species	Organism	Method	Remark
diphenylmethane-2,4'-diisocyanate (5873-54-1)	LC <sub>50</sub>	1000 mg/L	96 h	fish			
	EC <sub>50</sub>	1000 mg/L	48 h	crustacea			

## 12.1.2. Chronic (long-term) toxicity

No information.

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#### 12.2. Persistence and degradability

12.2.1. Abiotic degradation, physical- and photo-chemical elimination

No information.

12.2.2. Biodegradation

No information.

### 12.3. Bioaccumulative potential

12.3.1. Partition coefficient

No information.

12.3.2. Bioconcentration factor (BCF)

No information.

#### 12.4. Mobility in soil

12.4.1. Known or predicted distribution to environmental compartments

No information.

12.4.2. Surface tension

No information.

12.4.3. Adsorption/Desorption

No information.

#### 12.5. Results of PBT and vPvB assessment

No evaluation.

#### 12.6. Other adverse effects

No information.

#### 12.7. Additional information

### For product

No ecotoxicological data available.

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

#### 13.1. Waste treatment methods

#### 13.1.1. Product / Packaging disposal

#### Waste chemical

Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste.

#### Waste codes / waste designations according to LoW

08 04 09\* - waste adhesives and sealants containing organic solvents or other dangerous substances

#### Packaging

Uncleaned containers are classified as hazardous waste - they should be handled in the same manner as the contents. Completely emptied and cleaned containers leave to approved waste disposal authorities in charge.

13.1.2. Waste treatment-relevant information

-

13.1.3. Sewage disposal-relevant information

-

13.1.4. Other disposal recommendations

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#### **SECTION 14. TRANSPORT INFORMATION**

#### 14.1. UN number

Not applicable.

#### 14.2. UN proper shipping name

ADR, RID, IMDG, ADN, IATA: Not dangerous according to transport regulations.

#### 14.3. Transport hazard class(es)

Not applicable.

#### 14.4. Packing group

Not applicable.

#### 14.5. Environmental hazards

NO.

#### 14.6. Special precautions for user

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

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2015/830)
- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

# 15.1.1. Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)

Not applicable.

#### 15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

#### **SECTION 16. OTHER INFORMATION**

## Indication of changes

-

## Abbreviations and acronyms

ATE - Acute Toxicity Estimate

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

CEN - European Committee for Standardisation

C&L - Classification and Labelling

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

CAS# - Chemical Abstracts Service number

CMR - Carcinogen, Mutagen, or Reproductive Toxicant

CSA - Chemical Safety Assessment

CSR - Chemical Safety Report

DMEL - Derived Minimal Effect Level

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DNEL - Derived No Effect Level

DPD - Dangerous Preparations Directive 1999/45/EC

DSD - Dangerous Substances Directive 67/548/EEC

DU - Downstream User

EC - European Community

ECHA - European Chemicals Agency

EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)

EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)

EEC - European Economic Community

EINECS - European Inventory of Existing Commercial Substances

ELINCS - European List of notified Chemical Substances

EN - European Standard

EQS - Environmental Quality Standard

EU - European Union

Euphrac - European Phrase Catalogue

EWC - European Waste Catalogue (replaced by LoW - see below)

GES - Generic Exposure Scenario

GHS - Globally Harmonized System

IATA - International Air Transport Association

ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air

IMDG - International Maritime Dangerous Goods

IMSBC - International Maritime Solid Bulk Cargoes

IT - Information Technology

IUCLID - International Uniform Chemical Information Database

IUPAC - International Union for Pure Applied Chemistry

JRC - Joint Research Centre

Kow - octanol-water partition coefficient

LC<sub>50</sub> - Lethal Concentration to 50 % of a test population

LD<sub>50</sub> - Lethal Dose to 50% of a test population (Median Lethal Dose)

LE - Legal Entity

LoW - List of Wastes (see http://ec.europa.eu/environment/waste/framework/list.htm)

LR - Lead Registrant

M/I - Manufacturer / Importer

MS - Member States

MSDS - Material Safety Data Sheet

OC - Operational Conditions

OECD - Organization for Economic Co-operation and Development

OEL - Occupational Exposure Limit

OJ - Official Journal

OR - Only Representative

OSHA - European Agency for Safety and Health at work

PBT - Persistent, Bioaccumulative and Toxic substance

PEC - Predicted Effect Concentration

PNEC(s) - Predicted No Effect Concentration(s)

PPE - Personal Protection Equipment

(Q)SAR - Qualitative Structure Activity Relationship

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

RIP - REACH Implementation Project

RMM - Risk Management Measure

SCBA - Self-Contained Breathing Apparatus

SDS - Safety data sheet

SIEF - Substance Information Exchange Forum

SME - Small and Medium sized Enterprises

STOT - Specific Target Organ Toxicity

(STOT) RE - Repeated Exposure

(STOT) SE - Single Exposure

SVHC - Substances of Very High Concern

**UN - United Nations** 

vPvB - Very Persistent and Very Bioaccumulative

Key literature references and sources for data

-

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#### List of relevant H phrases

- 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 .



- ☑ Provided correct labelling of the product
- ☑ Compliance with the local legislation
- ☑ Provided correct classification of the product
- ☑ Provided adequate transport data

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The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under Section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.

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