

Date of last issue: 08.06.2023	Version 3.0	Print Date 10.10.2023
Revision Date: 10.10.2023		

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

1.1 Product identifier

Trade name : SikaBiresin[®] F60 (B)

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

Product use : Tooling system

1.3 Details of the supplier of the safety data sheet

Company name of supplier	:	Sika Limited
		Watchmead Welwyn Garden City
		Hertfordshire. AL7 1BQ
Telephone	:	+44 (0)1707 394444
Telefax	:	+44 (0)1707 329129
E-mail address of person	:	EHS@uk.sika.com
responsible for the SDS		0

1.4 Emergency telephone number

National Chemical Emergency Centre (NCEC) 24 Hour Emergency Telephone Number +44 870 190 6777

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4 Skin irritation, Category 2 Eye irritation, Category 2 Respiratory sensitisation, Category 1

Skin sensitisation, Category 1 Carcinogenicity, Category 2 Specific target organ toxicity - single exposure, Category 3, Respiratory system Specific target organ toxicity - repeated exposure, Category 2

0 0 1 shal share at s

H332: Harmful if inhaled.

H315: Causes skin irritation.

H319: Causes serious eye irritation. H334: May cause allergy or asthma symptoms or

breathing difficulties if inhaled.

H317: May cause an allergic skin reaction.

H351: Suspected of causing cancer.

H335: May cause respiratory irritation.

H373: May cause damage to organs through prolonged or repeated exposure if inhaled.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms





Date of last issue: 08.06.2023 Revision Date: 10.10.2023			Version 3.0	Print Date 10.10.2023
Signal word	:	Danger		
Hazard statements	:	H315 H317 H319 H332 H334 H335 H351 H373	Causes skin irritation. May cause an allergic Causes serious eye in Harmful if inhaled. May cause allergy or breathing difficulties in May cause respirator Suspected of causing May cause damage to longed or repeated ex	e skin reaction. rritation. asthma symptoms or f inhaled. y irritation. cancer. o organs through pro-
Precautionary statements	:	Prevention: P201 P260 P264 P280	Obtain special instruc Do not breathe mist o Wash skin thoroughly Wear protective glove eye protection/ face p	r vapours. after handling. es/ protective clothing/
		Response: P304 + P340 P342 + P311	air and keep comforta POISON CENTER/ d	emove person to fresh able for breathing. Call a octor if you feel unwell. atory symptoms: Call a octor.

Hazardous components which must be listed on the label:

Diphenylmethanediisocyanate, isomeres and homologues

Additional Labelling

"As from 24 August 2023 adequate training is required before industrial or professional use."

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.



Date of last issue: 08.06.2023 Revision Date: 10.10.2023 Version 3.0

Print Date 10.10.2023

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
Diphenylmethanediisocyanate, isomeres and homologues	9016-87-9 Not Assigned	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 Carc. 2; H351 STOT SE 3; H335 (Respiratory system) STOT RE 2; H373 	>=80

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in a	ttendance.
If inhaled	Move to fresh air. Consult a physician after significant exposure).
In case of skin contact	Take off contaminated clothing and shoes im Wash off with soap and plenty of water. If symptoms persist, call a physician.	mediately.
In case of eye contact	Immediately flush eye(s) with plenty of water. Remove contact lenses. Keep eye wide open while rinsing.	



Date of last issue: 08.06.2023 Revision Date: 10.10.2023	Version 3.0	Print Date 10.10.2023
	If eye irritation persists, consult a specialist.	
If swallowed :	Do not induce vomiting without medical advice Rinse mouth with water. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscio	
4.2 Most important symptoms and	effects, both acute and delayed	
Symptoms :	Asthmatic appearance Cough Respiratory disorder Allergic reactions Excessive lachrymation Erythema Headache Dermatitis See Section 11 for more detailed information of and symptoms.	on health effects
Risks :	irritant effects sensitising effects Causes skin irritation. May cause an allergic skin reaction.	
	Causes serious eye irritation. Harmful if inhaled. May cause allergy or asthma symptoms or bre ties if inhaled. May cause respiratory irritation. Suspected of causing cancer. May cause damage to organs through prolong exposure if inhaled.	-
4.3 Indication of any immediate me Treatment :	edical attention and special treatment needed Treat symptomatically.	

SECTION 5: Firefighting measures

5.1 Extinguishing media		
Suitable extinguishing media	:	In case of fire, use water/water spray/water jet/carbon diox- ide/sand/foam/alcohol resistant foam/chemical powder for extinction.
5.2 Special hazards arising from		
Hazardous combustion prod- ucts	:	No hazardous combustion products are known



Date of last issue: 08.06.2023 Revision Date: 10.10.2023		Version 3.0	Print Date 10.10.2023
5.3 Advice for firefighters			
Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing	ı apparatus.
Further information	:	Standard procedure for chemical fires.	
SECTION 6: Accidental releas	ie r	neasures	
6.1 Personal precautions, protec	tiv	e equipment and emergency procedures	
Personal precautions	:	Use personal protective equipment. Deny access to unprotected persons.	
6.2 Environmental precautions			
Environmental precautions	:	Do not flush into surface water or sanitary sewer If the product contaminates rivers and lakes or de respective authorities.	
6.3 Methods and material for con	ntai	nment and cleaning up	
Methods for cleaning up	:	Soak up with inert absorbent material (e.g. sand, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.	silica gel,
6 4 Deference to other continue			

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	:	 Avoid formation of aerosol. Avoid exceeding the given occupational exposure limits (see section 8). Do not get in eyes, on skin, or on clothing. For personal protection see section 8. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Follow standard hygiene measures when handling chemical products
Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.



Date of last issue: 08.06.2023 Revision Date: 10.10.2023	Version 3.0	Print Date 10.10.2023
Hygiene measures :	Handle in accordance with good industrial hygic practice. When using do not eat or drink. When smoke. Wash hands before breaks and at the e	using do not
7.2 Conditions for safe storage, inc	cluding any incompatibilities	
Requirements for storage : areas and containers	Keep container tightly closed in a dry and well-v place. Containers which are opened must be ca sealed and kept upright to prevent leakage. Sto ance with local regulations.	arefully re-
Further information on stor- : age stability	No decomposition if stored and applied as direc	xted.
7.3 Specific end use(s)		
Specific use(s) :	Cleaning with aprotic polar solvents must be av Consult most current local Product Data Sheet use.	

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters *	Basis *
Diphenylmethanediisocyanate, isomeres and homologues	9016-87-9	TWA	0,02 mg/m3 (NCO)	GB EH40
	Further information: Capable of causing occupational asthma.			al asthma.
		STEL	0,07 mg/m3 (NCO)	GB EH40

*The above mentioned values are in accordance with the legislation in effect at the date of the release of this safety data sheet.

Biological occupational exposure limits

Substance name	CAS-No.	Control parame- ters	Sampling time	Basis
Diphenylmethanediisocyanate, iso- meres and homologues	9016-87-9	isocyanate- derived diamine (Isocyanates): 1 µmol/mol creati- nine (Urine)	At the end of the period of expo- sure	GB EH40 BAT

8.2 Exposure controls

Engineering measures

Maintain air concentrations below occupational exposure standards. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection : Safety glasses with side-shields conforming to EN166

SAFETY DATA SHEET According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



SikaBiresin® F60 (B)

ate of last issue: 08.06.2023 evision Date: 10.10.2023	Version 3.0	Print Date 10.10.2023
Hand protection	Eye wash bottle with pure water Chemical-resistant, impervious glove proved standard must be worn at all the chemical products. Reference number facturer specifications.	times when handling
	Suitable for short time use or protecti Butyl rubber/nitrile rubber gloves (> 0 Contaminated gloves should be remo Suitable for permanent exposure: Viton gloves (0.4 mm), breakthrough time >30 min.),1 mm)
Skin and body protection	 Protective clothing (e.g. Safety shoes long-sleeved working clothing, long tr and protective boots are additionaly r and stirring work. 	rousers). Rubber aprons
Respiratory protection	 In case of inadequate ventilation weak Respirator selection must be based of exposure levels, the hazards of the p ing limits of the selected respirator. Use a properly fitted NIOSH approve respirator complying with an approve sessment indicates this is necessary. organic vapor filter (Type A) A1: < 1000 ppm; A2: < 5000 ppm; A3 Ensure adequate ventilation. This can exhaust extraction or by general vent ods for determining inhalation exposu- ticular to the mixing / stirring area. In to keep the concentrations under the limits then respiration protection mea Ensure adequate ventilation, especial 	on known or anticipated roduct and the safe work- d air-purifying or air-fed ed standard if a risk as- 3: < 10000 ppm n be achieved by local tilation. (EN 689 - Meth- ure). This applies in par- case this is not sufficent occupational exposure isures must be used.
Environmental exposure co	ontrols	
General advice	: Do not flush into surface water or sar If the product contaminates rivers and	

respective authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state Colour Odour	: : :	liquid amber characteristic
Melting point/range / Freezing point	:	No data available
Boiling point/boiling range	:	190 °C

SAFETY DATA SHEET According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



SikaBiresin® F60 (B)

Date of last issue: 08.06.2023 Revision Date: 10.10.2023		Version 3.0	Print Date 10.10.2023
Flammability (solid, gas)	:	No data available	
Upper/lower flammability or	exp	losive limits	
Upper explosion limit / Up- per flammability limit	:	No data available	
Lower explosion limit / Lower flammability limit	:	No data available	
Flash point	:	> 200 °C Method: closed cup	
Auto-ignition temperature	:	No data available	
Decomposition temperature	:	No data available	
рН	:	Not applicable substance/mixture reacts with water	
Viscosity			
Viscosity, kinematic	:	No data available	
Solubility(ies)			
Water solubility	:	insoluble	
Partition coefficient: n- octanol/water	:	No data available	
Vapour pressure	:	0,01 hPa	
Density	:	1,22 g/cm3 (20 °C)	
Relative vapour density	:	No data available	
Particle characteristics	:	No data available	
9.2 Other information			

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions



Date of last issue: 08.06.2023 Revision Date: 10.10.2023	Version 3.0	Print Date 10.10.2023
Hazardous reactions	: No hazards to be specially mentioned.	
10.4 Conditions to avoid Conditions to avoid	: No data available	
10.5 Incompatible materials		
Materials to avoid	: No data available	
10.6 Hazardous decomposition No decomposition if stored	-	
SECTION 11: Toxicological	information	
11.1 Information on hazard cla	sses as defined in Regulation (EC) No 1272	/2008
Acute toxicity Harmful if inhaled.		
Components:		
Diphenylmethanediisocya	nate, isomeres and homologues:	
Acute oral toxicity	: LD50 Oral (Rat): > 10.000 mg/kg	
Acute inhalation toxicity	: LC50: 1,5 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Expert judgement Assessment: The component/mixture is short term inhalation.	moderately toxic after
Acute dermal toxicity	: LD50 Dermal (Rabbit): > 9.400 mg/kg	
Skin corrosion/irritation Causes skin irritation.		
Serious eye damage/eye i Causes serious eye irritatio		
Respiratory or skin sensit	isation	
Skin sensitisation May cause an allergic skin i	eaction.	
Respiratory sensitisation	a symptoms or breathing difficulties if inhaled.	
Germ cell mutagenicity		

Not classified due to lack of data.



Date of last issue: 08.06.2023 Revision Date: 10.10.2023	Version 3.0	Print Date 10.10.2023
Carcinogenicity Suspected of causing cancer.		
Reproductive toxicity Not classified due to lack of data.		
STOT - single exposure May cause respiratory irritation.		
STOT - repeated exposure May cause damage to organs through	prolonged or repeated exposure	if inhaled.
Aspiration toxicity Not classified due to lack of data.		

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Diphenylmethanediisocyanate, isomeres and homologues:

Toxicity to fish	:	LC50 (Brachydanio rerio (zebrafish)): > 1.000 mg/l Exposure time: 96 h
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): > 1.640 mg/l Exposure time: 72 h

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available



Date of last issue: 08.06.2023 Revision Date: 10.10.2023		Version 3.0	Print Date 10.10.202
12.5 Results of PBT and vPvB a	sse	ssment	
Product:			
Assessment	:	This substance/mixture contains no compo- to be either persistent, bioaccumulative an very persistent and very bioaccumulative (0.1% or higher	nd toxic (PBT), or
12.6 Endocrine disrupting prop	ertie	2S	
Product:			
Assessment	:	The substance/mixture does not contain c ered to have endocrine disrupting properti REACH Article 57(f) or Commission Deleg (EU) 2017/2100 or Commission Regulation levels of 0.1% or higher.	es according to gated regulation
12.7 Other adverse effects			
Product:			
Additional ecological infor- mation	:	There is no data available for this product.	
SECTION 13: Disposal consi	der	ations	
13.1 Waste treatment methods			
Product	•	The generation of waste should be avoide	d or minimized

Product	:	The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
European Waste Catalogue	:	08 05 01* waste isocyanates
Contaminated packaging	:	15 01 10* packaging containing residues of or contaminated by dangerous substances



Date of last issue: 08.06.2023 Revision Date: 10.10.2023 Version 3.0

Print Date 10.10.2023

SECTION 14: Transport information

14.1 UN number or ID number

	ADR	:	Not regulated as a dangerous good
	IMDG	:	Not regulated as a dangerous good
	ΙΑΤΑ	:	Not regulated as a dangerous good
14.2	2 UN proper shipping name		
	ADR	:	Not regulated as a dangerous good
	IMDG	:	Not regulated as a dangerous good
	ΙΑΤΑ	:	Not regulated as a dangerous good
14.3	Transport hazard class(es)		
	ADR	:	Not regulated as a dangerous good
	IMDG	:	Not regulated as a dangerous good
	ΙΑΤΑ	:	Not regulated as a dangerous good
14.4	Packing group		
	ADR	:	Not regulated as a dangerous good
	IMDG	:	Not regulated as a dangerous good
	IATA (Cargo)	:	Not regulated as a dangerous good
	IATA (Passenger)	:	Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17)

: Conditions of restriction for the following entries should be considered: Diphenylmethanediisocyanate, isomeres and homologues (Number on list 56)



Date of last issue: 08.06.2023 Revision Date: 10.10.2023	Version 3	3.0		Print Date 10.10.2023
UK REACH Candidate list of sub- concern (SVHC) for Authorisation	, ,	:	Not applicable	
The Persistent Organic Pollutants Regulation (EU) 2019/1021 as ar ain)		:	Not applicable	
International Chemical Weapons Schedules of Toxic Chemicals ar	()	:	Not applicable	
Regulation (EC) No 1005/2009 or plete the ozone layer	n substances that de-	:	Not applicable	
UK REACH List of substances su (Annex XIV)	bject to authorisation	:	Not applicable	
GB Export and import of hazardo Informed Consent (PIC) Regulation		:	Not applicable	
Control of Major Accident Hazard 2015 (COMAH)	ls Regulations	Not	t applicable	
Volatile organic compounds :	Law on the incentive ta (VOCV) no VOC duties	ax f	or volatile organic comp	ounds
			4 November 2010 on in ution prevention and co	
If other regulatory information ap	plies that is not already r	orov	vided elsewhere in the S	Safety Data

If other regulatory information applies that is not already provided elsewhere in the Safety Data Sheet, then it is described in this subsection.

Health, safety and environ-	: Environmental Protection Act 1990 & Subsidiary Regulations
mental regulation/legislation	Health and Safety at Work Act 1974 & Subsidiary Regulations
specific for the substance or	Control of Substances Hazardous to Health Regulations
mixture:	(COSHH)
	May be subject to the Control of Major Accident Hazards
	Regulations (COMAH), and amendments.

15.2 Chemical safety assessment

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

SECTION 16: Other information

Full text of H-Statements

H315: Causes skin irritation.H317: May cause an allergic skin reaction.H319: Causes serious eye irritation.



Date of last issue: 08.06.2023 Revision Date: 10.10.2023		Version 3.0	Print Date 10.10.2023	
H332		Harmful if inhaled.		
H334	:	May cause allergy or asthma symptoms or breathing difficul- ties if inhaled.		
H335		May cause respiratory irritation.		
H351	:	Suspected of causing cancer.		
H373	:	May cause damage to organs through prolonged or repeated		
11373	•	exposure if inhaled.	Tolonged of Tepealed	
Full text of other abbreviation	ons			
Acute Tox.	:	Acute toxicity		
Carc.	:	Carcinogenicity		
Eye Irrit.	:	Eye irritation		
Resp. Sens.	:	Respiratory sensitisation		
Skin Irrit.	:	Skin irritation		
Skin Sens.	:	Skin sensitisation		
STOT RE	:	Specific target organ toxicity - repeated	exposure	
STOT SE	:	Specific target organ toxicity - single exp		
GB EH40	:	UK. EH40 WEL - Workplace Exposure L		
GB EH40 BAT	:	UK. Biological monitoring guidance value		
GB EH40 / TWA	:	Long-term exposure limit (8-hour TWA r	eference period)	
GB EH40 / STEL	:	Short-term exposure limit (15-minute ref	erence period)	
ADR	:	European Agreement concerning the Int	ernational Carriage of	
		Dangerous Goods by Road	_	
CAS	:	Chemical Abstracts Service		
DNEL	:	Derived no-effect level		
EC50	:	Half maximal effective concentration		
GHS	:	Globally Harmonized System		
ΙΑΤΑ	:	International Air Transport Association		
IMDG	:	International Maritime Code for Dangero		
LD50	:	Median lethal dosis (the amount of a ma		
		once, which causes the death of 50% (o	ne half) of a group of	
		test animals)		
LC50	:	Median lethal concentration (concentration		
		air that kills 50% of the test animals duri	ng the observation	
		period)		
MARPOL	:	International Convention for the Prevent		
		Ships, 1973 as modified by the Protocol	of 1978	
OEL	:	Occupational Exposure Limit		
PBT	:	Persistent, bioaccumulative and toxic		
PNEC	:	Predicted no effect concentration		
REACH	:	Regulation (EC) No 1907/2006 of the Eu		
		and of the Council of 18 December 2006		
		istration, Evaluation, Authorisation and F		
		cals (REACH), establishing a European	Chemicals Agency	
SVHC	:	Substances of Very High Concern		
vPvB	:	Very persistent and very bioaccumulativ	e	
Eurther information				

Further information

Classification of the mixture:

Classification procedure:



Date of last issue: 08.06.2023 Revision Date: 10.10.2023		Version 3.0	Print Date 10.10.2023
Acute Tox. 4	H332	Calculation method	
Skin Irrit. 2	H315	Calculation method	
Eye Irrit. 2	H319	Calculation method	
Resp. Sens. 1	H334	Calculation method	
Skin Sens. 1	H317	Calculation method	
Carc. 2	H351	Calculation method	
STOT SE 3	H335	Calculation method	
STOT RE 2	H373	Calculation method	

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.

Changes as compared to previous version !

GB / EN