

HERBERTS LF129W Revision Number 1

Revision date 17-Dec-2019 Supersedes Date: 17-Dec-2019

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Name HERBERTS LF129W

Pure substance/mixture Mixture

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

Recommended use Adhesives.

No information available. Uses advised against

1.3. Details of the supplier of the safety data sheet

Company Name

Bostik (Shanghai) Management Co., Ltd

Building 1, No.968 Guanghua Road, Minhang District

Shanghai, China Tel: 021-60763101

Fax: 021-60763133

Manufacturer

Jiangsu Bostik Adhesive Co., Ltd Wanfu Road, Changshu Economic Development Zone, Jiangsu

Province, China 215536 Tel: 86-512-5226600

See section 16 for more information.

1.4. Emergency telephone number

Emergency Telephone 0532-8388 9090 (China only)

E-mail address SDS.AP@Bostik.com

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Skin corrosion/irritation	Category 3 (6.3B)
Respiratory sensitization	Category 1A
Skin sensitization	Category 1A
Carcinogenicity	Category 2 (6.7B)

2.2. Label Elements



Signal word Danger

Hazard statements

H316 - Causes mild skin irritation

H351 - Suspected of causing cancer

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H317 - May cause an allergic skin reaction

Prevention

P201 - Obtain special instructions before use

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

P281 - Use personal protective equipment as required

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P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P284 - In case of inadequate ventilation wear respiratory protection

P272 - Contaminated work clothing should not be allowed out of the workplace

P280 - Wear protective gloves

Inhalation

P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing

P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

Skin

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P363 - Wash contaminated clothing before reuse

Storage

P405 - Store locked up

Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

2.3. Other Hazards

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Mixture

3.2 Mixtures

Chemical name	CAS No.	Weight-%
4,4'-Methylenediphenyl diisocyanate	101-68-8	1 - 5

^{***} Any remaining ingredients are not hazardous

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation Immediate medical attention is required. Move victim to fresh air. Administer oxygen if

breathing is difficult. If breathing is irregular or stopped, administer artificial respiration.

Skin contact Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If

symptoms persist, call a physician.

Eye contact Call a physician immediately. Immediately flush with plenty of water. After initial flushing,

remove any contact lenses and continue flushing for at least 15 minutes. If symptoms

persist, call a physician.

Ingestion Call a physician or poison control center immediately. Do NOT induce vomiting. Drink

plenty of water. Never give anything by mouth to an unconscious person.

precautions to protect themselves

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

Symptoms None known.

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

Note to physiciansMay cause sensitization by inhalation and skin contact. Treat symptomatically.

4.4. Reference to Other Sections

Reference to other sections Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Section 11: TOXICOLOGY INFORMATION

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Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

surrounding environment.

Unsuitable extinguishing media No information available.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the Thermal decomposition can lead to release of irritating and toxic gases and vapors.

chemical

5.3. Advice for firefighters

Special protective equipment for Wear self-contained breathing apparatus and protective suit.

fire-fighters

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Do not touch or walk through spilled material. Use

personal protective equipment as required.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment If possible, turn leaking containers so that gas escapes rather than liquid. Absorb spill

with inert material (e.g. dry sand or earth), then place in a chemical waste container. Transport to well ventilated area and treat with neutralizing solution: mixture of 80% water and 20% non-ionic surfactant Tergitol TMN-10; or 90% water, 3-8% concentrated ammonia and 2% detergent. Add about 10 parts of neutralizer per part of isocyanate,

with mixing. Allow substance to evaporate.

Methods for cleaning up Use personal protective equipment as required. Dam up. Cover liquid spill with sand,

earth or other non-combustible absorbent material. Take up mechanically, placing in

appropriate containers for disposal. Clean contaminated surface thoroughly.

6.4. Reference to other sections

Reference to other sections Section 7: HANDLING AND STORAGE

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Section 13: DISPOSAL CONSIDERATIONS

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in

confined areas. Avoid breathing vapors or mists.

7.2. Conditions for safe storage, including any incompatibilities

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Storage Conditions Keep containers tightly closed in a cool, well-ventilated place. Keep from freezing.

Incompatible materials Water Alcohols Strong bases Strong oxidizing agents Finely powdered metals

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7.3. Specific end use(s)

Specific Use(s) Adhesives.

Other information No information available.

7.4. References to Other Sections

Reference to other sections Section 13: DISPOSAL CONSIDERATIONS

Section 10: STABILITY AND REACTIVITY

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits

Chemical name	China	Japan	Korea	New Zealand	Australia
4,4'-Methylenediphenyl	TWA: 0.05 mg/m ³	TWA: 0.05 mg/m ³	TWA: 0.005 ppm	TWA: 0.02 mg/m ³	0.02 mg/m ³ TWA
diisocyanate	STEL: 0.1 mg/m ³			STEL: 0.07 mg/m ³	0.07 mg/m ³ STEL
101-68-8	_			_	_

Chemical name	European Union	ACGIH TLV	NIOSH IDLH	OSHA PEL
4,4'-Methylenediphenyl	-	TWA: 0.005 ppm	IDLH: 75 mg/m ³	Ceiling: 0.02 ppm
diisocyanate			Ceiling: 0.020 ppm 10	Ceiling: 0.2 mg/m ³
101-68-8			min	
			Ceiling: 0.2 mg/m ³ 10 min	
			TWA: 0.005 ppm	
			TWA: 0.05 mg/m ³	

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration No information available

(PNEC)

Color

OTHER INFORMATION No information available

8.2. Exposure controls

Engineering controlsEnsure adequate ventilation, especially in confined areas. Vapors/aerosols must be

exhausted directly at the point of origin.

PPE - Personal Protection Equipment

Respiratory protection

Eve/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear suitable protective clothing. No special technical protective measures are

necessary under normal conditions.

Hand protection Wear suitable chemical resistant gloves. The selection of suitable gloves does not only

depend on the material, but also on further marks of quality and various manufacturers. No protective equipment is needed under normal use conditions. Respiratory protection required in insufficiently ventilated working areas and during spraying. An air-fed mask,

or for short periods of work, a combination of professional filter is recommended.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands thoroughly after

handling. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and

wash before reuse.

Environmental exposure controls No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance Very viscous

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Light yellow

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Odor Aromatic

Odor threshold No information available

Property Values Remarks • Method

pH No data available
Melting point / freezing point
Boiling point / boiling range
Flash point > 200 °C
Evaporation rate No data available
Flammability (solid, gas)
No data available
No data available
No data available
Not applicable for liquids .

Flammability Limit in Air

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Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapor pressure No data available Vapor density No data available Relative density No data available Water solubility No data available Solubility(ies) No data available No data available Partition coefficient Autoignition temperature No data available **Decomposition temperature** No data available Kinematic viscosity No data available Dynamic viscosity No data available **Explosive properties** No information available Oxidizing properties No information available

9.2. Other information

Softening Point
Molecular weight
Solvent content (%)
Solid content (%)
No information available
No information available
No information available
No information available

Density No information available

Bulk density

No information available

VOC Content (%)

No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity None under normal use conditions.

10.2. Chemical stability

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Hazardous polymerization Hazardous polymerization may occur.

10.4. Conditions to avoid

Conditions to avoid Keep from any possible contact with water. Extremes of temperature and direct sunlight.

Storage near to reactive materials.

10.5. Incompatible materials

Incompatible materials Water. Alcohols. Strong bases. Strong oxidizing agents. Finely powdered metals.

10.6. Hazardous decomposition products

Hazardous decomposition

products

Carbon monoxide. Carbon dioxide (CO2). Nitrogen oxides (NOx). Hydrogen cyanide. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

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Section 11: TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

Acute Toxicity

Product Information Product does not present an acute toxicity hazard based on known or supplied

information.

InhalationNo data available.Eye contactNo data available.Skin contactNo data available.IngestionNo data available.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
4,4'-Methylenediphenyl	=31600 mg/kg (Rattus)	LD 50 > 9400 mg/kg (Oryctolagus	=1.5 mg/L (Rattus) 4 h
diisocyanate	= 9200 mg/kg (Rattus)	cuniculus)	
101-68-8		OECD 402	

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

No information available. Skin corrosion/irritation Serious eye damage/eye irritation No information available. Sensitization No information available. Germ cell mutagenicity No information available. Reproductive toxicity No information available. STOT - single exposure No information available. No information available. STOT - repeated exposure retina, Eyes, Skin, liver. Target organ effects

Aspiration hazard No information available.

Carcinogenicity The following substance(s) are classified in Annex VI CLP (1272/2008) as carcinogenic.

Chemical name	IARC	China	Japan
4,4'-Methylenediphenyl	Group 3	-	-
diisocyanate			

IARC (International Agency for

Research on Cancer)

Group 3 - Not Classifiable as to Carcinogenicity in Humans

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity

Product Information

None known.

Component Information

Data obtained on the component(s) include

Chemical name	Algae/aquatic plants	Fish	Crustacea
4,4'-Methylenediphenyl	ErC50 (72h) >1640 mg/L Algae	>1000 mg/l (Danio rerio)	EC50 (24H) >1000 mg/L Daphnia
diisocyanate	(scenedesmus subspicatus)		magna
101-68-8	(OFCD 201)		_

12.2. Persistence and degradability

No information available.

Component Information

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4,4'-Methylenediphenyl diisocyanate (101-68-8)			
Method	Exposure time	Value	Results
OECD Test No. 302C: Inherent	28 days	0% biodegradation	Not readily biodegradable
Biodegradability: Modified MITI Test	_	_	_
(II)			

12.3. Bioaccumulative potential

No information available.

Chemical name	Partition coefficient	Bioconcentration factor (BCF)
4,4'-Methylenediphenyl diisocyanate	4.51	200
101-68-8		

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

Chemical name	PBT and vPvB assessment
4,4'-Methylenediphenyl diisocyanate	The substance is not PBT / vPvB
101-68-8	

12.6. Other adverse effects

No information available.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused

products

Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Section 14: TRANSPORT INFORMATION

IMDGNot regulatedIATANot regulatedADRNot regulated

Section 15: REGULATORY INFORMATION

X - Present

National Regulations

China

This product contains the following substance(s)

Chemical name	Weight-%	China - Catalog of Hazardous Chemicals - Hazardous Chemicals
4,4'-Methylenediphenyl diisocyanate 101-68-8	1 - 5	X

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Japan

Pollutant Release and Transfer Registry (PRTR)

This product contains the following Class 1 and Class 2 Designated Chemical Substances per Japan PRTR Law.

Chemical name	Weight-%	Japan - Pollutant Release Transfer Register (PRTR) - Class 1 Substances
4,4'-Methylenediphenyl diisocyanate 101-68-8	1 - 5	Х

Korea

Chemicals Control Act (CCA)

This product contains the following substance(s)

	Chemical name	Weight-%	Toxic substance	Prohibited substance	Restricted substance	Chemicals Control Act (CCA) - Accident Precaution Chemicals	Existing substances subject to registration
4	,4'-Methylenediphenyl diisocyanate 101-68-8	1 - 5	X				Х

Industrial Safety and Health Law

Not applicable

Safety Control of Dangerous Substances Act

Not applicable

Korea - MOE - Waste Control Act - Hazardous Substances in Controlled Waste

Not applicable

International Regulations

Europe

Restrictions of Use of Hazardous Substances (RoHS) Directive 2011/65/EU

This product does not contain Lead (7439-92-1), Cadmium (7440-43-9), Mercury (7439-97-6), Hexavalent chromium (7440-47-3), Polybrominated biphenyls (PBB), and Polybrominated diphenyl ethers (PBDE) above the regulated limit mentioned in this regulation

SVHC: Substances of Very High Concern for Authorization:

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Section 16: OTHER INFORMATION

Local Contacts

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Chronic Hazard Star Legend * = Chronic Health Hazard

Key or legend to abbreviations and acronyms used in the safety data sheet

TWA (time-weighted average) STEL (Short Term Exposure Limit) LD50 (lethal dose) EC50 (effective concentration)

Key Literature References and Sources for Data

No information available

Product Safety & Regulatory Affairs **Prepared By**

17-Dec-2019 **Revision date Revision note** Not applicable.

Training Advice No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in

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any process, unless specified in the text.

End of Safety Data Sheet