

Safety Data Sheet

according to 29 CFR 1910.1200(g)

GEIST Crosslinker

Revision date: 09/07/2022

Product code: KK102

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1. Identification

Product identifier

GEIST Crosslinker

Recommended use of the chemical and restrictions on use

Use of the substance/mixture

Hardener

Details of the supplier of the safety data sheet

Company name: Westhill Trading Limited
Street: Unit 8, Enterprise House, 44-46 Terrace Road
Place: GB-KT12 2SD Walton on Thames, Surrey, UK
Telephone: +44 7739 579 694
e-mail: info@leathercare.com
Internet: www.leathercare.com

Emergency phone number: +44 7739 579 694

Further Information

As from 24 August 2023 adequate training is required before industrial or professional use. Restricted to professional users.

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200

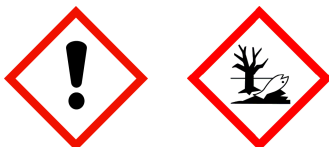
Flammable liquids: Flam. Liq. 4
Acute toxicity: Acute Tox. 4 (inhalation)
Respiratory or skin sensitization: Skin Sens. 1
Specific target organ toxicity single exposure: STOT SE 3 (respiratory tract irritation)
Hazardous to the aquatic environment: Aquatic Chronic 1
Hazardous to the aquatic environment: Aquatic Acute 2
Contains isocyanates. May produce an allergic reaction.

Label elements

29 CFR Part 1910.1200

Signal word: Warning

Pictograms:



Hazard statements

Combustible liquid
Harmful if inhaled
May cause an allergic skin reaction
May cause respiratory irritation
Very toxic to aquatic life
Very toxic to aquatic life with long lasting effects

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.

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If on skin: Wash with plenty of water.
 If skin irritation or rash occurs: Get medical advice/attention.
 Wash contaminated clothing before reuse.
 If inhaled: Remove person to fresh air and keep comfortable for breathing.
 Call a poison center/doctor if you feel unwell.
 Store in a well-ventilated place. Keep container tightly closed.
 Store locked up.
 Dispose of contents/container to an appropriate recycling or disposal facility.

Hazards not otherwise classified

No information available.

3. Composition/information on ingredients**Mixtures****Hazardous components**

CAS No	Components	Quantity
28182-81-2	HDI oligomers, isocyanurate	60 %
822-06-0	hexamethylene-di-isocyanate	0.15 %

4. First-aid measures**Description of first aid measures****After inhalation**

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Medical treatment necessary.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink 1 glass of water.

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures**Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

Specific hazards arising from the chemical

Non-flammable. Vapors may form explosive mixtures with air.

Special protective equipment and precautions for fire-fighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Use water spray/stream to protect personnel and to cool endangered containers. Suppress gases/vapors/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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6. Accidental release measures**Personal precautions, protective equipment and emergency procedures****General advice**

Provide adequate ventilation. Do not breathe gas/fume/vapor/spray. Avoid contact with skin, eyes and clothes.
Use personal protection equipment.

Environmental precautions

Do not allow to enter into surface water or drains.

Methods and material for containment and cleaning up**For cleaning up**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Reference to other sections

Safe handling: see section 7
Personal protection equipment (PPE): see section 8
Disposal: see section 13

7. Handling and storage**Precautions for safe handling****Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fume/vapor/spray.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.
Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations.

Hints on joint storage

No special measures are necessary.

8. Exposure controls/personal protection**Control parameters****Exposure limits**

CAS No	Substance	ppm	mg/m ³	f/cc	Category	Origin
822-06-0	Hexamethylene diisocyanate	0.005	0.035		TWA (8 h)	REL
		C 0.020	C 0.140		Ceiling	REL
822-06-0	Hexamethylene diisocyanate	0.005			TWA (8 h)	ACGIH-2022

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Biological Exposure Indices (BEI-ACGIH)

CAS No	Substance	Determinant	Value	Test material	Sampling time
822-06-0	1,6-HEXAMETHYLENE DIISOCYANATE	1,6-Hexamethylene diamine (with hydrolysis, creatinine)	15 µg/g	urine	End of shift

Exposure controls**Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fume/vapor/spray.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

9. Physical and chemical properties**Information on basic physical and chemical properties**

Physical state:	(
Color:	white	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		175 °C
Flammability		
Solid/liquid:		not applicable
Gas:		not applicable
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		65 °C
Auto-ignition temperature:		not determined
Decomposition temperature:		not determined
pH-Value (at 20 °C):		7,2
Water solubility:		easily soluble
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:		not determined
Vapor pressure:		not determined
Density (at 20 °C):		1,11 g/cm ³

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Relative vapour density: not determined

Other information**Information with regard to physical hazard classes**

Explosive properties

The product is not: Explosive.

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

Evaporation rate:

not determined

Solid content:

not determined

Viscosity / dynamic:

11000-14000 mPa·s

(at 20 °C)

10. Stability and reactivity**Reactivity**

No hazardous reaction when handled and stored according to provisions.

Chemical stability

Stability: Stable

Unstabilized product can polymerize spontaneously.

Possibility of hazardous reactions

Hazardous reactions: Will not occur

Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.

Conditions to avoid

none

Incompatible materials

Keep away from: Radical former, Peroxides, Reducing agent

Hazardous decomposition products

Hydrogen cyanide (hydrocyanic acid).

11. Toxicological information**Information on toxicological effects****ATEmix calculated**

ATE (oral) 4166,7 mg/kg; ATE (dermal) 4166,7 mg/kg; ATE (inhalation vapour) 18,33 mg/l; ATE (inhalation dust/mist) 2,500 mg/l

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Acute toxicity

CAS No	Components				
	Exposure route	Dose	Species	Source	Method
28182-81-2	HDI oligomers, isocyanurate				
	oral	LD50 >2500 mg/kg	Rat		423 Acute Oral toxicity - Acute Toxic Cl
	dermal	LD50 >2000 mg/kg	Rat		402 Acute Dermal Toxicity
	inhalation vapour	ATE 11 mg/l			
	inhalation (1 h) dust/mist	ATE 1,5 mg/l			
822-06-0	hexamethylene-di-isocyanate				
	inhalation vapour	ATE 3 mg/l			
	inhalation dust/mist	ATE 0,5 mg/l			

Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

12. Ecological information**Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

CAS No	Components					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
28182-81-2	HDI oligomers, isocyanurate					
	Acute crustacea toxicity	EC50 125 mg/l	48 h	Daphnia		

Persistence and degradability

The product has not been tested.

Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Components	Log Pow
28182-81-2	HDI oligomers, isocyanurate	5,54

BCF

CAS No	Components	BCF	Species	Source
28182-81-2	HDI oligomers, isocyanurate	367,70		

Mobility in soil

The product has not been tested.

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

13. Disposal considerations

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Waste treatment methods**Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

14. Transport information**U.S. DOT 49 CFR 172.101****UN number or ID number:**

UN 3082

Proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Transport hazard class(es):

9

Packing group:

III

Hazard label:

9

**Marine transport (IMDG)****UN number or ID number:**

UN 3082

UN proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (HDI oligomers, isocyanurate)

Transport hazard class(es):

9

Packing group:

III

Hazard label:

9



Special Provisions:

274, 335, 969

Limited quantity:

5 L

Excepted quantity:

E1

EmS:

F-A, S-F

Air transport (ICAO-TI/IATA-DGR)**UN number or ID number:**

UN 3082

UN proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (HDI oligomers, isocyanurate)

Transport hazard class(es):

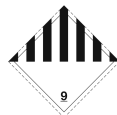
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Packing group:

III

Hazard label:

9



Special Provisions:

A97 A158 A197 A215

Limited quantity Passenger:

30 kg G

Passenger LQ:

Y964

Excepted quantity:

E1

IATA-packing instructions - Passenger:

964

IATA-max. quantity - Passenger:

450 L

IATA-packing instructions - Cargo:

964

IATA-max. quantity - Cargo:

450 L

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Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes

**Special precautions for user**

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No dangerous good in sense of this transport regulation.

15. Regulatory information**U.S. Regulations****National regulatory information**

SARA Section 304 CERCLA:

Hexamethylene-1,6-diisocyanate (822-06-0): Reportable quantity = 100 (45.4) lbs. (kg)

SARA Section 311/312 Hazards:

HDI oligomers, isocyanurate (28182-81-2): Immediate (acute) health hazard

Hexamethylene-1,6-diisocyanate (822-06-0): Immediate (acute) health hazard

SARA Section 313 Toxic release inventory:

Hexamethylene-1,6-diisocyanate (822-06-0): De minimis limit = 1.0 %, Reportable threshold = Standard

Clean Air Act Section 112(b):

Hexamethylene-1,6-diisocyanate (822-06-0)

State Regulations**Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)**

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other information**Hazardous Materials Information Label (HMIS)**

Health: 2

Flammability: 0

Physical Hazard: 0

NFPA Hazard Ratings

Health: 2

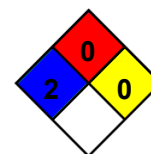
Flammability: 0

Reactivity: 0

Unique Hazard:

Revision date: 07.09.2022

Revision No: 1,4

**Abbreviations and acronyms**

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

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ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation
intérieures)
IMDG: International Maritime Code for Dangerous Goods
EmS: Emergency Schedules
MFAAG: Medical First Aid Guide
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
SVHC: Substance of Very High Concern
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety
assessment, chapter R.20 (Table of terms and abbreviations).

Other data

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)