

HVU-G/EA2

Safety Data Sheet

JIS Z 7253:2012

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Supersedes:

Version:1.0

SECTION 1: Chemical product and company identification

1.1. Product name

Name HVU-G/EA2
 Product code BU Anchor

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

Recommended use Adhesive anchor capsule for anchor fastening in concrete.

1.3. Details of the supplier of the safety data sheet

Supplier

日本ヒルティ株式会社
 神奈川県横浜市都筑区茅ヶ崎南2-6-20
 224-8550 〒 - 日本
 T +81 45 943 6211 - F +81 45 943 6418
hiltijapan@hilti.com

Department issuing data specification sheet

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 Hiltistraße 6
 86916 Kaufering - Deutschland
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1.4. Emergency telephone number

Emergency number Schweizerisches Toxikologisches Informationszentrum - 24h Service
 +41 44 251 51 51 (international)
 +81 45 943 6211

SECTION 2: Hazards identification

Classification of the substance or mixture

GHS classification

Physical hazards	Flammable liquids, Category 3 Organic peroxide Not classified
Health hazards	Serious eye damage/eye irritation, Category 2 Sensitisation - Skin, Category 1 Germ cell mutagenicity, Category 2 Carcinogenicity, Category 2 Reproductive toxicity, Category 1B Specific target organ toxicity - Single exposure, Category 3, Narcosis Specific target organ toxicity - Single exposure, Category 2 Specific target organ toxicity - Repeated exposure, Category 2 Hazardous to the aquatic environment - Acute Hazard, Category 2
Environmental hazards	
Full text of hazard classes and H-statements : see section 16	

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Label elements

Labelling according to the United Nations GHS (Rev. 4, 2011)

Hazard pictograms (GHS-JP)



GHS02

GHS07

GHS08

Signal word (GHS-JP)

Danger

Contains

Quartz; Styrene; dibenzoyl peroxide

Hazard statements (GHS-JP)

Flammable liquid and vapour (H226)
 May cause an allergic skin reaction (H317)
 Causes serious eye irritation (H319)
 May cause drowsiness or dizziness (H336)
 Suspected of causing genetic defects (H341)
 Suspected of causing cancer (H351)
 May damage fertility or the unborn child (H360)
 May cause damage to organs (central nervous system, Respiratory tract) (H371)
 May cause damage to organs (respiratory system, nervous system, blood, liver) through prolonged or repeated exposure (H373)
 Toxic to aquatic life (H401)

Prevention precautionary statements

Keep away from heat, hot surfaces, open flames, sparks. – No smoking (P210)
 Do not breathe vapours (P260)
 Wear eye protection, protective clothing, protective gloves (P280)

Response Precautionary Statements

If on skin and if skin irritation or rash occurs, seek medical advice and attention (P333+P313)
 If eye irritation persists: Get medical advice/attention (P337+P313)
 Wash contaminated clothing before reuse (P363)

Other hazards

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Concentration	Formula	Kanpo number	CAS No
			CSCL no	
Quartz	60 – 75%	SiO ₂	(1)-548	14808-60-7
Bisphenol A Epichlorohydrin Polymer Dimethacrylate	15 – 25%	Company secret	registered	Company secret
Styrene	8 – 10%	C ₆ H ₅ CH=CH ₂	(3)-4	100-42-5
Calcium sulfite (gypsum)	1 – 3%	CaSO ₄ .2H ₂ O	– (natural product)	13397-24-5

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dibenzoyl peroxide	1 - 2%	C14H10O4	(3)-1349	94-36-0
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Full text of H-statements: see section 16

SECTION 4: First aid measures

First aid measures

First-aid measures general	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact	Wash contaminated clothing before reuse. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	Rinse mouth. Drink plenty of water. Get medical advice/attention. Do NOT induce vomiting.

Most Important Symptoms/Effects

Symptoms/injuries	May cause drowsiness or dizziness.
Symptoms/injuries after inhalation	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/injuries after skin contact	May cause an allergic skin reaction.
Symptoms/injuries after eye contact	Direct contact with the eyes is likely to be irritating.

Other medical advice or treatment

SECTION 5: Fire fighting measures

Suitable extinguishing media	Water spray. Carbon dioxide. Dry powder. Foam. Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.
Fire hazard	Heating may cause a fire or explosion.
Explosion hazard	Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
Hazardous decomposition products in case of fire	Thermal decomposition generates :.Carbon dioxide,Carbon monoxide
Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	Self-contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.

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SECTION 6: Accidental release measures

Personal Precautions, Protective Equipment and Emergency Procedures

General measures	No flames, no sparks. Eliminate all sources of ignition. Use special care to avoid static electric charges.
For non-emergency personnel	
Emergency procedures	Evacuate unnecessary personnel.
For emergency responders	
Protective equipment	Use personal protective equipment as required. Equip cleanup crew with proper protection.
Emergency procedures	Ventilate area.

Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Methods and Equipment for Containment and Cleaning up

For containment	Collect spillage.
Methods for cleaning up	This material and its container must be disposed of in a safe way, and as per local legislation. Mechanically recover the product. Store away from other materials.
Other information	Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

Precautions for safe handling

Precautions for safe handling	Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.
Hygiene measures	Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

Storage precautionary statements

Storage conditions	Keep cool. Protect from sunlight.
Incompatible products	Strong bases. Strong acids.
Incompatible materials	Sources of ignition. Direct sunlight.
Storage temperature	5 - 25 ° C

SECTION 8: Exposure controls / Personal protection equipment

Control parameters

Quartz (14808-60-7)

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Japan	Exposure limits (ACGIH)	TWA 0.025 mg/m ³ (R), STEL -	
Styrene (100-42-5)			
Japan	Japan administration level	20ppm	
Japan	Exposure limits (JSOH)	20ppm(85mg/m ³)(皮)	
Japan	Exposure limits (ACGIH)	TWA 20 ppm, STEL 40 ppm	
dibenzoyl peroxide (94-36-0)			
Japan	Exposure limits (ACGIH)	TWA 5 mg/m ³ , STEL -	

Exposure controls

Personal protective equipment	Avoid all unnecessary exposure. Safety glasses. Gloves. Protective clothing.
Hand protection	Wear protective gloves. The permeation time is not the maximum wearing time! Generally speaking, it must be reduced. Contact with either mixtures of substances or different substances may shorten the protective function's effective duration.
Eye protection	Chemical goggles or safety glasses.
Skin and body protection	Wear suitable protective clothing.



Environmental exposure controls	Avoid release to the environment.
Consumer exposure controls	Avoid contact during pregnancy/while nursing.
Other information	Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Colour	light yellow
Odour	characteristic
Odour threshold	Not determined
pH	No data available
Relative evaporation rate (butylacetate=1)	No data available
Melting point	-30.6 ° C
Freezing point	No data available
Boiling point	145 ° C
Flash point	33.5 ° C
Auto-ignition temperature	490 ° C
Decomposition temperature	No data available

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Flammability (solid, gas)	Non flammable
Vapour pressure	0.7 kPa
Relative vapour density at 20 ° C	No data available
Relative density	No data available
Solubility	Water: Not miscible
Log Pow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	150
Explosive properties	Product is not explosive
Oxidising properties	No data available
Explosive limits	0.9 – 6.8 vol %

Other information

No additional information available

SECTION 10: Stability and reactivity

Reactivity	
Chemical stability	Stable under normal conditions
Possibility of hazardous reactions	Highly reactive material
Conditions to avoid	Direct sunlight,Extremely high or low temperatures
Incompatible materials	Strong acids,Strong bases
Hazardous decomposition products	Carbon monoxide Carbon dioxide Under normal conditions of storage and use, hazardous decomposition products should not be produced

Other properties

SECTION 11: Toxicological information

Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.
Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified

Styrene (100-42-5)	
LD50 oral rat	5000 mg/kg
LD50 oral	5000 mg/kg
LC50 inhalation rat (ppm)	2770 ppm/4h
LC50 inhalation rat (Vapours - mg/l/4h)	11.7 mg/l/4h
dibenzoyl peroxide (94-36-0)	
LD50 oral rat	> 5000 mg/kg bodyweight (Rat; Equivalent or similar to OECD 401; Weight of evidence)

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Skin corrosion/irritation	
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Suspected of causing genetic defects.
Carcinogenicity	Suspected of causing cancer.
Reproductive toxicity	May damage fertility or the unborn child.
Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness. May cause damage to organs (central nervous system, Respiratory tract).
Specific target organ toxicity (repeated exposure)	May cause damage to organs (respiratory system, nervous system, blood, liver) through prolonged or repeated exposure.
Aspiration hazard	Not classified

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Human evidence for classification	No
Not able to form a pool	No
Hydrocarbon	No
Polycyclic-aromatic hydrocarbons	No
Aliphatic, alicyclic or aromatic hydrocarbon	No

SECTION 12: Ecological information

Toxicity

Acute aquatic toxicity	Toxic to aquatic life.
Chronic aquatic toxicity	Not classified
Other information	Avoid release to the environment

Styrene (100-42-5)	
LC50 fish 1	4.02 mg/l
dibenzoyl peroxide (94-36-0)	
LC50 fish 1	2 mg/l (96 h; Poecilia reticulata)
EC50 Daphnia 1	0.07 mg/l
LC50 fish 2	0.0602 mg/l (96h; Oncorhynchus mykiss; ECHA)
NOEC (acute)	0.0316 mg/l (96h; Oncorhynchus mykiss; ECHA)

Persistence and degradability

HVU-G/EA2	
Persistence and degradability	Not established
dibenzoyl peroxide (94-36-0)	
Persistence and degradability	Readily biodegradable in water. No (test)data on mobility of the substance available

Bioaccumulative potential

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Bioaccumulative potential	Not established

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dibenzoyl peroxide (94-36-0)	
Log Pow	3.71 (QSAR; 3.2; Experimental value; OECD 117: Partition Coefficient (n-octanol/water), HPLC method; 22 ° C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4)

Mobility in soil No additional information available

Other adverse effects





Ozone	Not classified
Other adverse effects	No additional information available

SECTION 13: Disposal considerations

Waste disposal recommendations	Industrial waste, Dispose in a safe manner in accordance with local/national regulations.
Waste treatment methods	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Ecology - waste materials	Avoid release to the environment.
Contaminated container and packaging	Industrial waste, Dispose in a safe manner in accordance with local/national regulations.
Regional legislation (waste)	Disposal must be done according to official regulations.

SECTION 14: Transport information

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

ADR	IMDG	IATA	RID
14.1. UN number			
3269	3269	3269	3269
14.2. UN proper shipping name			
POLYESTER RESIN KIT	POLYESTER RESIN KIT	Polyester resin kit	POLYESTER RESIN KIT
Transport document description			
UN 3269 POLYESTER RESIN KIT, 3, III, (E)	UN 3269 POLYESTER RESIN KIT, 3, III		
14.3. Transport hazard class(es)			
3	3	3	3
			
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available			

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14.6. Special precautions for user

- Overland transport

Classification code (ADR)	F3
Special provisions (ADR)	236, 340
Limited quantities (ADR)	5I
Packing instructions (ADR)	P302, R001
Tunnel restriction code (ADR)	E

- Transport by sea

Special provisions (IMDG)	236, 340
Limited quantities (IMDG)	5 L
Packing instructions (IMDG)	P302
EmS-No. (Fire)	F-E
EmS-No. (Spillage)	S-D
Stowage category (IMDG)	A
MFAG-No	127;128

- Air transport

PCA packing instructions (IATA)	370
PCA max net quantity (IATA)	5kg
Special provisions (IATA)	A66, A163

- Rail transport

Special provisions (RID)	236, 340
Limited quantities (RID)	5L
Packing instructions (RID)	P302, R001
Carriage prohibited (RID)	No

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

Regulations in Japan

Regulatory information by sea	Conform to the provisions of the Ship Safety Law.
Regulatory information by air	Conform to the provisions of the Civil Aeronautics Law.
Other information	No supplementary information available

SECTION 15: Regulatory information

Chemical Substances Control Law	Priority Assessment Chemical Substances (Law Article 2, Para.5)
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Industrial Safety and Health Law	Class 2 Organic Solvents (Enforcement Order Attached Table No.6-2, Ordinance on Prevention of Organic Solvent Poisoning Art.1, Para.1, Item 5) Working Environment Evaluation Standards, Administrative Control Levels (Law Art.65-2, Para.1) Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57, Para.1, Enforcement Order Art.18 Item 1, Item 2, Attached Table No.9) Dangerous Substances - Explosive Substance (Enforcement Order Attached Table 1 Item 1) Dangerous Substances - Flammable Substance (Enforcement Order Attached Table 1 Item 4) Notifiable Substances (Law Art.57-2, Enforcement Order Art.18-2 Item 1, Item 2, Attached Table No.9) ジベンゾイルペルオキシド (Ordinance number : 282) (< 5%) シリカ (Ordinance number : 312) (70 - 80%) スチレン (Ordinance number : 323) (10 - 20%)
Water Pollution Prevention Law	Designated Chemical Substances (Law Article 2, Paragraph 4, Enforcement Order Article 3-3)
Fire Service Law	Group 5 - Self-reactive materials - Organic peroxides (Law Art.2 Para 7, Attached Table 1, Group 5)
Offensive Odor Control Law	Specified Offensive Odor Substances (Law Art.2-1, Enforcement Order Art.1)
Air Pollution Control Law	Hazardous Air Pollutants (Central Environment Council Report No. 9) Volatile Organic Compounds (Law Art.2 Para.4) (MOE Official Notice to Prefectures)
Law Relating to Prevention of Marine Pollution and Maritime Disasters	Flammable Substances (Law Art.3,(6)-2, Enforcement Order, Art.1-7, Attached Table No.1-4) Noxious Liquid Substances - Category Y (Law Art.3(3), Enforcement Order, Art.1-2, Attached Table No.1 Item 2) Non-hazardous Substances (Ministry of Environment Notification)
Foreign Exchange and Foreign Trade Control Act	Approval for Item 2, (Import Trade Control Order, Art.4, Para.1, Item 2) Export Trade Control Order, Attached Table 1 Para.16 (1) Export Approval (Export Trade Control Order, Attached Table 2)
Ship Safety Act	Flammable liquids
Civil Aeronautics Law	Flammable liquids
Port Regulation Law	Flammable liquids
Road Act	Restriction for Vehicle Traffic (Enforcement Order Art.19-13, Publication of Japan Highway Public Corp.)
Law for the Control of Export, Import and Others of Specified Hazardous Wastes and Other Wastes (Basel Convention)	Hazardous Substances Containing in Waste (Act Cat.2 para (1) Item (I) (a), 3 Ministry Notification No.2 of 1993)
Japanese Pollutant Release and Transfer Register Law (PRTR Law)	Class 1 Designated Chemical Substances (Act Art.2 para. 2, Enforcement Order Art.1 Appended Table No.1) スチレン (Ordinance number : 240) (12%)
Labor Standards Act	Chemical Substances Causing Occupational Illnesses (Act Art.75, Para.2, Ordinance Attached Table 1-2, Item 4-1, MHLW Notification No.36 of 1978)
Pneumoconiosis Law	Dust Work (Act Art.2, Rule for Enforcement Art.2 Attached Table)

SECTION 16: Other information

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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