

SDS Revision Date: 03/13/2024

1. Identification

1.1. Product identifier

Product Identity U-290

Alternate Names U 290

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

Intended use See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name STABOND CORPORATION

1722 W. 139th Street, GARDENA CA. 90249

Customer Service: STABOND CORPORATION (310) 380-6168 Mon. to Fri. 07:00 – 15:30 PT

Emergency Contact: CHEMTREC (800) 424-9300 24-hour

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Skin Irrit. 2;H315 Causes skin irritation.

Eye Dam. 2A;H319 Causes serious eye irritation.

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

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

Carc. 2;H351 Suspected of causing cancer.

STOT SE 3;H335 May cause respiratory irritation.

STOT RE 2;H373 May cause damage to organs through prolonged or repeated exposure. Specific Target Organs: (respiratory system)

2.2. Label elements



Danger

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H334 May cause allergic or asthmatic 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.

[Prevention]

- P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P261 Avoid breathing dust, fume, gas, mist, vapors, spray.
 P264 Wash thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P280 Wear protective gloves, eye protection, face protection.

[Response]

- P302+352 IF ON SKIN: Wash with plenty of soap and water.
 P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+313 IF exposed or concerned: Get medical advice or attention.
 P311 Call a POISON CENTER or doctor, physician.
 P312 Call a POISON CENTER, doctor or physician if you feel unwell.
 P314 Get Medical advice or attention if you feel unwell.
 P333+313 If skin irritation or a rash occurs: Get medical advice or attention.
 P337+313 If eye irritation persists: Get medical advice or attention.
 P342+311 If experiencing respiratory symptoms: Call a POISON CENTER, doctor or physician.
 P362 Take off contaminated clothing and wash before reuse.

[Storage]

- P403+233 Store in a well ventilated place. Keep container tightly closed.
 P405 Store locked up.

[Disposal]

- P501 Dispose of contents or container in accordance with local and national regulations.

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Glycerol poly(oxyethylene) poly(oxypropylene) ether CAS Number: 0009082-00-2	50 - 75	Not Classified	----
4,4'-Methylenediphenyl diisocyanate CAS Number: 0000101-68-8	10 - 25	Acute tox. 4;H332 STOT RE 2;H373 STOT SE 3;H335: C ≥ 5 % Eye Irrit. 2;H319: C ≥ 5 % Skin Irrit. 2;H315: C ≥ 5 % Resp. Sens. 1;H334: C ≥ 0,1 % Skin Sens. 1;H317 Carc. 2;H351	----

Diphenylmethanediisocyanate (isomers and homologues) CAS Number: 0009016-87-9	5 - 10	Acute Tox. 4;H332 Skin Irrit. 2;H315 Eye Irrit. 2;H319 STOT SE 3;H335 Skin Sens. 1;H317 Resp. Sens. 1;H334 STOT RE 2;H373	----
Benzene, 1-isocyanato-2-[(4-isocyanatophenyl)methyl]- CAS Number: 0005873-54-1	5 - 10	Acute tox. 4;H332 STOT RE 2;H373 STOT SE 3;H335: C ≥ 5 % Eye Irrit. 2;H319: C ≥ 5 % Skin Irrit. 2;H315: C ≥ 5 % Resp. Sens. 1;H334: C ≥ 0,1 % Skin Sens. 1;H317 Carc. 2;H351	----
2-Propanol, 1,1'-(phenylimino)bis- CAS Number: 0003077-13-2	1 - 5	Eye Irrit. 2;H319	----

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

*PBT/vPvB - PBT-substance or vPvB-substance.

The full texts of the phrases are shown in Section 16.

Section 4. First aid measures

4.1. Description of first aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

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

Overview	No specific symptom data available. Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 3 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure. Treat symptomatically. Check section 2.2 (GHS Label Elements) for further details.
Inhalation	May cause respiratory irritation. May cause allergy or asthma symptoms of breathing difficulties if inhaled.
Eyes	Causes serious eye irritation.
Skin	May cause an allergic skin reaction. Causes skin irritation.

Section 5. Fire-fighting measures

5.1. Extinguishing media

Dry chemical, foam, carbon dioxide and water fog.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Burning may produce fumes of hydrogen bromide. Chemical decomposition will produce hydrogen bromide.

Avoid breathing dust, fume, gas, mist, vapors, spray.

5.3. Advice for fire-fighters

High vapor concentrations (2-18% by volume) in air, exposed to high intensity spark or flame, can flash in confined or poorly ventilated areas. Vapors can flow along surfaces to distant ignition sources and flash back.

Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and contaminants from fire fighting to enter drains or water ways.

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Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove sources of ignition, do not turn lights or unprotected electrical equipment on or off. In case of a major spill or spillage in a confined space evacuate the area and check that solvent vapor levels are below the Lower Explosive Limit before re-entering.

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8. Contain and absorb spillage with non-combustible materials e.g. sand, earth, and vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations.

Section 7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

Precautions should be taken to minimize exposure to atmospheric humidity or water as carbon dioxide may be formed which, in closed containers can result in pressurization. Care should be taken when re-opening partly used containers.

Store in cool, well ventilated area away from any ignition sources and strong oxidizing agents. Keep containers tightly closed when not in use. Do not transfer to plastic containers.

Ground and bond metal containers when dispensing. No smoking in areas of use or storage. Use only non-sparking tools near wet adhesive or solvent vapors. Solvent vapor is much heavier than air and can collect in dangerous concentrations in floor drains or low areas.

Check section 2.2 (GHS Label Elements) for further details. - [Prevention]

7.2. Conditions for safe storage, including any incompatibilities

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used.

Examination of lung function should be carried out on a regular basis on persons applying this preparation.

Incompatible materials: Aluminum, caustic soda, caustic potash or oxidizing materials.

Check section 2.2 (GHS Label Elements) for further details. - [Storage]

7.3. Specific end use(s)

No data available.

Section 8. Exposure controls / personal protection**8.1. Control parameters**

CAS No.	Ingredient	Exposure	
		Source	Value
0000101-68-8	4,4'-Methylenediphenyl diisocyanate	OSHA	C 0.2 mg/m ³ (0.02 ppm)
		ACGIH	TWA: 0.005 ppm Ceiling: 0.01 ppm
		NIOSH	TWA 0.05 mg/m ³ (0.005 ppm) C 0.2 mg/m ³ (0.020 ppm) [10-minute]
0003077-13-2	2-Propanol, 1,1'-(phenylimino)bis-	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
0005873-54-1	Benzene, 1-isocyanato-2-[(4-isocyanatophenyl)methyl]-	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
0009016-87-9	Diphenylmethanediisocyanate (isomers and homologues)	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
0009082-00-2	Glycerol poly(oxyethylene) poly(oxypropylene) ether	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

8.2. Exposure controls**Respiratory**

Atmospheric levels should be maintained below the exposure guideline. For normal use wear an NIOSH/MSHA approved air purifying, organic vapor cartridge respirator. For higher levels of exposure use an NIOSH/MSHA approved, full-face supplied air respirator or an approved positive pressure self-contained breathing apparatus.

Eyes

Safety glasses with side shields/goggles are recommended. Do not wear contact lenses.

Skin

Overalls which cover the body, arms and legs should be worn. Skin should not be exposed. All parts of the body should be washed after contact. Nitrile, butyl or polyvinyl alcohol gloves.

Engineering Controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices

Eye wash fountain or bottles. Solvent insoluble barrier hand cream. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Check section 2.2 (GHS Label Elements) for further details.

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Translucent amber Liquid
Odor	Not Measured
Odor threshold	Not Measured
pH	Not Measured
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	DECOMPOSES @ 646 F
Flash Point	> 350 F COC
Evaporation rate (Ether = 1)	SLOWER THAN ETHER
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: NA Upper Explosive Limit: NA
Vapor pressure (Pa)	Not Measured
Vapor Density	HEAVIER THAN AIR
Specific Gravity	1.1 (H2O=1)
Solubility in Water	Nil
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured
VOC %	Not Measured
Solubility in Water	REACTS WITH WATER

9.2. Other information

No other relevant information.

Section 10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Gross water contamination can cause hydrolysis producing hydrogen bromide. Keep away from all ignition sources and heat.

10.5. Incompatible materials

Aluminum, caustic soda, caustic potash or oxidizing materials.

10.6. Hazardous decomposition products

Burning may produce fumes of hydrogen bromide. Chemical decomposition will produce hydrogen bromide.

Section 11. Toxicological information

Acute toxicity

Based on the properties of the isocyanate content of this product, respiratory exposure may cause acute irritation and/or sensitization of the respiratory system resulting in asthmatic symptoms, wheezing and a tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to airborne concentrations of isocyanates well below the occupational exposure limit. Repeated exposure may lead to permanent respiratory disability.

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Glycerol poly(oxyethylene) poly(oxypropylene) ether - (9082-00-2)	No data available.	No data available.	No data available.	No data available.	No data available.
4,4'-Methylenediphenyl diisocyanate - (101-68-8)	7,616.00, Rat - Category: NA	9,400.00, Rabbit - Category: NA	No data available.	No data available.	No data available.
Diphenylmethanediisocyanate (isomers and homologues) - (9016-87-9)	49,000.00, Rat - Category: NA	9,400.00, Rabbit - Category: NA	No data available.	No data available.	No data available.
Benzene, 1-isocyanato-2-[(4-isocyanatophenyl)methyl]- - (5873-54-1)	10,000.00, Rat - Category: NA	9,400.00, Rabbit - Category: NA	No data available.	No data available.	No data available.
2-Propanol, 1,1'-(phenylimino)bis- - (3077-13-2)	No data available.	No data available.	No data available.	No data available.	No data available.

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000101-68-8	4,4'-Methylenediphenyl diisocyanate	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
		ACGIH	No Established Limit
0003077-13-2	2-Propanol, 1,1'-(phenylimino)bis-	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
0005873-54-1	Benzene, 1-isocyanato-2-[(4-isocyanatophenyl)methyl]-	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
0009016-87-9	Diphenylmethanediisocyanate (isomers and homologues)	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
		ACGIH	No Established Limit
0009082-00-2	Glycerol poly(oxyethylene) poly(oxypropylene) ether	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	2	Causes skin irritation.
Serious eye damage/irritation	2A	Causes serious eye irritation.
Respiratory sensitization	1	May cause allergy or asthma symptoms of breathing difficulties if inhaled.
Skin sensitization	1	May cause an allergic skin reaction.
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	2	Suspected of causing cancer.
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-single exposure	3	May cause respiratory irritation.
STOT-repeated exposure	2	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	---	Not Applicable

Section 12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
Glycerol poly(oxyethylene) poly(oxypropylene) ether - (9082-00-2)	No data available.	No data available.	No data available.
4,4'-Methylenediphenyl diisocyanate - (101-68-8)	> 3,000, Fish	No data available.	1,640.00, Algae
Diphenylmethanediisocyanate (isomers and homologues) - (9016-87-9)	1,000.00, Danio rerio	1,000.00, Daphnia magna	No data available.
Benzene, 1-isocyanato-2-[[4-isocyanatophenyl)methyl]- - (5873-54-1)	> 3,000, Fish	> 1,000, Daphnia magna	1,640.00, Algae
2-Propanol, 1,1'-(phenylimino)bis- - (3077-13-2)	No data available.	No data available.	No data available.

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

Section 13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state, and local regulations when disposing of this substance.

Section 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Regulated	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3. Transport hazard class(es)	DOT Hazard Class: Not Applicable Sub Class: Not Applicable	IMDG: Not Applicable Sub Class: Not Applicable	Air Class: Not Applicable Sub Class: Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable
14.5. Environmental hazards	Marine Pollutant: No;		
14.6. Special precautions for user	Not Applicable		

Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

4,4'-Methylenediphenyl diisocyanate

Diphenylmethanediisocyanate (isomers and homologues)

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 Label Warning:

This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Section 16. Other information

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The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H334 May cause allergic or asthmatic 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.

ALL INFORMATION IS BASED UPON DATA FROM MFG'S AND/OR TECHNICAL SOURCE, & IS BELIEVED TO BE ACCURATE. CONDITIONS OF USE ARE BEYOND OUR CONTROL & THEREFORE USERS ARE RESPONSIBLE TO VERIFY THIS DATA UNDER THEIR OWN CONDITIONS TO DETERMINE SUITABILITY FOR THEIR PURPOSE, & THEY ASSUME ALL RISKS OF USE, HANDLING, & DISPOSAL, OR FROM USE OF INFORMATION CONTAINED HEREIN. THIS INFORMATION RELATES ONLY TO THE PRODUCT DESIGNATED HEREIN, AND DOES NOT RELATE TO ITS USE IN COMBINATION WITH OTHER MATERIAL OR IN ANY OTHER PROCESS.

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