

Safety Data Sheet

U 444

STABOND

SDS Revision: Version 1.3
SDS Revision Date: 12/27/2018

1. Identification

1.1. Product identifier

Product Identity U 444
Alternate Names U 444

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

Intended use See Technical Data Sheet.
Application Method 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

Flam. Liq. 2;H225	Highly Flammable liquid and vapor.
Eye Irrit. 2;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;H336	May cause drowsiness or dizziness.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



Danger

H225 Highly flammable liquid and vapor.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.
H336 May cause drowsiness and dizziness.

H351 Suspected of causing cancer.

[Prevention]:

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.
- P235 Keep cool.
- P240 Ground / bond container and receiving equipment.
- P241 Use explosion-proof electrical / ventilating / light / equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- 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.
- P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.
- P304+312 IF INHALED: Call a POISON CENTER or doctor / physician if you feel unwell.
- P305+351+338 IF IN EYES: Rinse continuously 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 / attention.
- P321 Specific treatment (see information on this label).
- P333+313 If skin irritation or a rash occurs: Get medical advice / attention.
- P337+313 If eye irritation persists: Get medical advice / attention.
- P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P341 If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P342+311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor / physician.
- P363 Wash contaminated clothing before reuse.
- P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

[Storage]:

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

[Disposal]:

- P501 Dispose of contents / container in accordance with local / 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
Oxirane,methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'-methylenebis[4-isocyanatob CAS Number: 0059675-67-1	50 - 75	Skin Sens. 1;H317 Resp. Sens. 1;H334	[1]
Acetone CAS Number: 0000067-64-1	25 - 50	Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336	[1][2]
Amorphous silica, hydrophobic CAS Number: 0067762-90-7	1.0 - 10	Not Classified	[1]
Diphenylmethanediisocyanate CAS Number: 0000101-68-8	0.10 - 1.0	Carc. 2;H351 Acute tox. 4;H332 STOT RE 2;H373 Eye Irrit. 2;H319 STOT SE 3;H335 Skin Irrit. 2;H315 Resp. Sens. 1;H334 Skin Sens. 1;H317	[1][2]

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

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

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	Do not induce vomiting and get medical attention. If vomiting should occur spontaneously keep victims head below knees to prevent aspiration into the lungs.

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

Overview	<p>INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE High concentrations, or prolonged exposure to lower concentrations, may be irritating to mucous membranes and may cause CNS depression. May cause respiratory sensitization.</p> <p>SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE SKIN-Prolonged or repeated exposure may result in drying of the skin which can cause skin irritation or dermatitis. EYES-Liquid or high vapor concentrations can be severely irritating to the eyes.</p> <p>SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE Skin contact may lead to the absorption of harmful chemical components and/or respiratory sensitization to MDI. Protective rubber gloves should be worn at all times when working</p>
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with this product.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Moderate CNS depression may be shown by giddiness, headache, dizziness and nausea. If vomiting occurs, keep head below hips to prevent aspiration of liquid into lungs. Aspiration pneumonitis may be evidenced by coughing and cyanosis.

HEALTH HAZARDS (ACUTE AND CHRONIC)

Eye: May cause irritation with tearing.

Skin: May cause skin irritation and dermatitis.

Ingestion: May cause irritation and corrosion on the mouth and stomach tissue.

Inhalation: May cause irritation to upper respiratory tract and at higher concentrations narcosis or CNS depression.

Both inhalation and skin contact may cause allergic sensitivity.

CARCINOGENICITY: NTP? NO, IARC MONOGRAPHS? NO, OSHA REGULATED? NO

This product contains chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Skin contact may aggravate an existing dermatitis. Preexisting eye, kidney, lung and respiratory disorders may be aggravated.

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.

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. See section 2 for further details.

Inhalation

May cause drowsiness or dizziness. May cause allergy or asthma symptoms of breathing difficulties if inhaled.

Eyes

Causes serious eye irritation.

Skin

May cause an allergic skin reaction.

5. Fire-fighting measures

5.1. Extinguishing media

Carbon Dioxide, Dry Chemicals, Foam

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Burning may produce fumes of isocyanate, carbon dioxide, carbon monoxide, hydrogen cyanide, phenols and nitrous oxides.

Keep away from heat / sparks / open flames / hot surfaces - No smoking.

Keep cool.

Ground / bond container and receiving equipment.
Use explosion-proof electrical / ventilating / light / equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust / fume / gas / mist / vapors / spray.

5.3. Advice for fire-fighters

Volatile solvent constituent can readily form explosive or flammable mixtures in air. Vapors can flow along surfaces to distant ignition sources and flash back.
Wear self-contained breathing apparatus and full protective clothing.

ERG Guide No. 127

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

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

Handle as a flammable liquid. Remove all ignition sources. Soak up wet material on a non-combustible absorbent and place in a closed metal container.

7. Handling and storage

7.1. Precautions for safe handling

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.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Store in accordance with the National Fire Protection Association's publication NFPA 30, Flammable and Combustible Liquids Code. 29 CFR 1910.106 applies to the handling, storage, and use of flammable and combustible liquids.

Incompatible materials: Water, acid, base, alcohols, metal compounds, surface-active materials. Strong oxidizing agents can cause spontaneous combustion.

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.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0000067-64-1	Acetone	OSHA	TWA 1000 ppm (2400 mg/m ³) STEL 2400 mg/m ³
		ACGIH	TWA: 250 ppm STEL: 500 ppm Skin
		NIOSH	250 ppm (590 mg/m ³) TWA
		Supplier	No Established Limit
0000101-68-8	Diphenylmethanediisocyanate	OSHA	C 0.2 mg/m ³ (0.02 ppm)
		ACGIH	TWA: 0.005 ppm Ceiling: 0.01 ppm Skin, S
		NIOSH	TWA 0.05 mg/m ³ (0.005 ppm) C 0.2 mg/m ³ (0.020 ppm) [10-minute]
		Supplier	No Established Limit
0059675-67-1	Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'-methylenebis[4-isocyanatob	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0067762-90-7	Amorphous silica, hydrophobic	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000067-64-1	Acetone	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0000101-68-8	Diphenylmethanediisocyanate	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
0059675-67-1	Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'-methylenebis[4-isocyanatob	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0067762-90-7	Amorphous silica, hydrophobic	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

8.2. Exposure controls

Respiratory

If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

Eyes

Use safety glasses with side shields or chemical goggles. If exposure causes eye discomfort, use a full-face respirator.

Skin

Use Neoprene, vinyl or nitrile rubber 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.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

Appearance	Liquid
Odor	Acetone
Odor threshold	Not Measured
pH	Not Measured
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	133F
Flash Point	-4F (TCC)
Evaporation rate (Ether = 1)	Slower than ether
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: 2.2% Upper Explosive Limit: 13%
Vapor pressure (Pa)	Not Measured
Vapor Density	Heavier than air
Specific Gravity	1.0
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

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

HAZARDOUS POLYMERIZATION: MAY OCCUR

In presence of strong bases, water and elevated temperatures. Water contamination will produce carbon dioxide that may rupture containers.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid contact with open flame, sparks or hot surfaces.

10.5. Incompatible materials

Water, acid, base, alcohols, metal compounds, surface-active materials. Strong oxidizing agents can cause spontaneous combustion.

10.6. Hazardous decomposition products

Burning may produce fumes of isocyanate, carbon dioxide, carbon monoxide, hydrogen cyanide, phenols and nitrous oxides.

11. Toxicological information

Acute toxicity

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr	Inhalation Gas LD50, ppm
Oxirane,methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'-methylenebis[4-isocyanatob - (59675-67-1)	No data available	No data available	No data available	No data available	No data available
Acetone - (67-64-1)	5,800.00, Rat - Category: NA	7,426.00, Guinea Pig - Category: NA	76.00, Rat - Category: NA	50.10, Rat - Category: NA	No data available
Amorphous silica, hydrophobic - (67762-90-7)	1,000.00, Rat - Category: 4	2,000.00, Rat - Category: 4	No data available	No data available	No data available
Diphenylmethanediisocyanate - (101-68-8)	4,700.00, Rat - Category: 5	No data available	No data available	No data available	No data available

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).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	2	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	3	May cause drowsiness or dizziness.
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

12. Ecological information

12.1. Toxicity

Toxic to aquatic life

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Oxirane,methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'-methylenebis[4-isocyanatob - (59675-67-1)	Not Available	Not Available	Not Available
Acetone - (67-64-1)	100.00, Pimephales promelas	10.00, Daphnia magna	20.565 (72 hr), Ulva pertusa
Amorphous silica, hydrophobic - (67762-90-7)	Not Available	Not Available	Not Available
Diphenylmethanediisocyanate - (101-68-8)	Not Available	129.70, Daphnia magna	Not 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.

13. Disposal considerations

13.1. Waste treatment methods

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

14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	UN1133	UN1133	UN1133
14.2. UN proper shipping name	UN1133, Adhesives, containing a flammable liquid, 3, II	Adhesives, containing a flammable liquid	Adhesives, containing a flammable liquid
14.3. Transport hazard class(es)	DOT Hazard Class: 3	IMDG: 3 Sub Class: Not Applicable	Air Class: 3
14.4. Packing group	II	II	II
14.5. Environmental hazards			
IMDG	Marine Pollutant: No		
14.6. Special precautions for user	No further information		

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.
WHMIS Classification	B2 D2A
US EPA Tier II Hazards	Fire: Yes Sudden Release of Pressure: No Reactive: No Immediate (Acute): Yes Delayed (Chronic): Yes
EPCRA 311/312 Chemicals and RQs (lbs):	Acetone (5,000.00)
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:	Diphenylmethanediisocyanate
Proposition 65 - Carcinogens (>0.0%):	Benzene
Proposition 65 - Developmental Toxins (>0.0%):	Benzene
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%):	Benzene
New Jersey RTK Substances (>1%):	Acetone
Pennsylvania RTK Substances (>1%):	Acetone

16. Other information

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.

INTENTIONAL MISUSE BY DELIBERATE INHALATION OF TOLUENE HAS BEEN ASSOCIATED WITH LIVER, KIDNEY, AND BRAIN DAMAGE IN HUMANS. OVEREXPOSURE TO TOLUENE HAS BEEN FOUND TO CAUSE LIVER, KIDNEY, NASAL, AND BRAIN DAMAGE IN LABORATORY ANIMALS. REPEATED OVEREXPOSURE TO HIGH VAPOR CONCENTRATIONS (1000ppm) OF N-HEXANE CAN CAUSE IRREVERSIBLE NERVE DAMAGE. THIS NEUROTOXICITY CAN BE ENHANCED BY THE PRESENCE OF METHYL ETHYL KETONE.

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

H225 Highly flammable liquid and vapor.

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.

H336 May cause drowsiness and dizziness.

H351 Suspected of causing cancer.

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

SDS Revision History

Version 1.1	Initial SDS issued	3/06/2015
Version 1.2	Section 1.3 Change to Emergency Tele. Number	6/17/2015
Version 1.3	Section 1.3 Update to Emergency Tele. Number	12/27/2018

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