SAFETY DATA SHEETS

This SDS packet was issued with item: 078488421

N/A

Material Safety Data Sheet

FORTIFY

1. Identification of Substance/Preparation and Company/Undertaking

Product Name:	FORTIFY
Manufacturer:	Bisco, Inc. 1100 W Irving Park Road, Schaumburg, IL 60193 USA Emergency Telephone: 1-847-534-6000
CE Administrator:	Bisico France, B.P. 60, 'L-Opera'-13680 Lancon de Provence Emergency Telephone: (33)490.42.92.92

2. Composition/Information on Ingredients

Ingredient	Concentration Range (%)		Symbol/Risk Classification		ACGIH (mg/m3)	LD50 (mg/kg, rat/oral)
Urethane dimethacrylate Ethoxylated Bisphenol A dimethacrylate	20-50 10-40	74389- 53-0 56744- 60-6	Xi; R36/38- 43 Xi; R36/38- 43	N/D N/D	N/D N/D	N/D N/D

3. Hazards Identification

Irritates the eye. May cause allergic reaction on skin.,

4. First Aid Measures

Inhalation:	Provide fresh air and rest.
Skin Contact:	Wash with soap and water.
Eye Contact:	Flush with running water for at least 15 minutes while keeping eye lids open; seek medical attention.
Ingestion:	Drink two glasses of water or milk. Seek medical attention if a substantial amount has been ingested.
Firefighting Measures	

5.

Firefighting media:	Dry chemical powder,	foam or carbon dioxide.
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Fire and explosion risks: Upon combustion, irritating gases may form.

6. Accidental Release Measures

Personal Precautions:	Prevent skin/eye contact,
Environmental Precautions:	Avoid ground water contamination,

Methods for Cleaning Up: Wipe with damp paper towel. Discard properly,

7. Handling and Storage

Store in ventilated cool dry place (<22C; 72F); avoid high light intensity >1000 lux; this product is used exclusively for dental purposes by trained personnel;

8. Exposure Controls/Personal Protection

Eye Protection:	Use protective eyewear;
Hand Protection:	Use protective gloves;

Respiratory Protection: Skin Protection:

Avoid prolonged breathing of vapors of uncured material;

Use Any necessary hygiene measures;

9. Physical/Chemical Properties

Appearance	Clear liquid	Vapor Pressure @ 20C/68F	N/A
Color	Straw colored	Miscibility	N/A
Odor	Acrylic odor	Vapor Density	N/A
Solubility (H2O, fat)	immiscible	pН	N/A
Boiling Point/Range	>100C/212F	Evaporation Rate	N/A
Melting Point/Range	N/A	Viscosity	N/A
Flash Point	N/A	Partition Coefficient	N/A
Conductivity	N/A	Autoflammability	N/A
Explosive Properties	N/A	Flammability	N/A
Oxidizing Properties	N/A	Relative Density	N/A

10. Stability and Reactivity

Avoid high temperatures;

11. Toxicological Information

Eye Contact:	Irritates the eyes;
Skin Contact:	May irritate the skin;
Sensitization:	May cause allergic reaction on contact with the skin;
Other:	N/A,

12. Ecological Information

N/A

13. Disposal Considerations

Refer to any Community provisions relating to waste. In their absence, refer to National or Regional provisions relating to waste.

14. Transport Information

No special precautions.

15. Regulatory Information

Classification:	R36 Irritating to eyes., R38 Irritating to skin., R43 May cause sensitization by skin contact., Xi; Irritant,
Safety:	Refer to any applicable National laws,
16. Other Information	
Revision Date: 6/3/2004	Replaces MSDS dated: 4/13/00
Revision Number: 2	Product: FORTIFY

NOTE: This information is believed to be correct as of the date of this MSDS. The manufacturer makes no representation as to the completeness or accuracy of this information and supplies it on the condition that the person receiving it will make their own determination as to its suitability for their purposes prior to use. In no



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SECTION 1: Identification of the s	substance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Mixture
Product name	: Fortify
1.2. Relevant identified uses of the s	ubstance or mixture and uses advised against
Use of the substance/mixture	: For professional use only.
1.3. Details of the supplier of the safe	ety data sheet
Bisco, Inc. 1100 W. Irving Park Rd. Schaumburg, IL 60193 T 847.534.6000 - F 847.891.5049 <u>sales@bisco.com</u> - <u>www.bisco.com</u> 1.4. Emergency telephone number	
Emergency number	: 1-703-527-3887
SECTION 2: Hazards identification	n
2.1. Classification of the substance of	
Classification (GHS-US) Skin Irrit. 2 H315 Resp. Sens. 1 H334	
Full text of H-phrases: see section 16	
·	
2.2. Label elements	
GHS-US labeling	
Hazard pictograms (GHS-US)	: CHS07 CHS08
Signal word (GHS-US)	: Irritant ; Sensitizer
Hazard statements (GHS-US)	 H315 - Causes skin irritation H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
Precautionary statements (GHS-US)	 P333+P313 - If skin irritation or rash occurs: Get medical advice/attention P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P403+P235 - Store in a well-ventilated place. Keep cool P264 - Wash hands thoroughly after handling P332+P313 - If skin irritation occurs: Get medical advice/attention P501 - Dispose in a safe manner in accordance with local/national regulations.
2.3. Other hazards	
No additional information available	
2.4. Unknown acute toxicity (GHS-US	3)
Not applicable	
SECTION 3: Composition/informa	tion on ingredients
3.1. Substance	

3.1.

Not applicable

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Name		Product identifier	%	Classification (GHS-US)
Urethane Dimethacrylate		(CAS No) 72869-86-4	30 - 50	Skin Irrit. 2, H315
Full tout of LL phrance, and an time 10				Resp. Sens. 1, H334
Full text of H-phrases: see section 16				
SECTION 4: First aid measures				
4.1. Description of first aid measures				
First-aid measures general	advi	er give anything by mouth to an u ce (show the label where possible	e).	
First-aid measures after inhalation	brea	thing. If experiencing respiratory	symptoms: Call a PO	at rest in a position comfortable for ISON CENTER or doctor/physician.
First-aid measures after skin contact	OCCL	irs: Get medical advice/attention.	Specific treatment (se	lothing before reuse. If skin irritation ee First aid measures on this label).
First-aid measures after eye contact	pers			
First-aid measures after ingestion	: Rins	e mouth. Do NOT induce vomitin	g. Obtain emergency	medical attention.
4.2. Most important symptoms and effect	t <mark>s, bot</mark> h	acute and delayed		
Symptoms/injuries after inhalation	: May	cause allergy or asthma symptor	ms or breathing difficu	Ilties if inhaled.
Symptoms/injuries after skin contact	: Cau	ses skin irritation.		
4.3. Indication of any immediate medica	attenti	on and special treatment neede	ed	
No additional information available				
SECTION 5: Firefighting measures				
5.1. Extinguishing media				
Suitable extinguishing media	: Foar	m. Dry powder. Carbon dioxide. V	Vater spray. Sand.	
Insuitable extinguishing media	: Dor	not use a heavy water stream.		
5.2. Special hazards arising from the su	ostance	or mixture		
No additional information available				
5.3. Advice for firefighters				
Firefighting instructions		water spray or fog for cooling exp nical fire. Avoid (reject) fire-fightir		
Protection during firefighting	: Do r	not enter fire area without proper	protective equipment,	including respiratory protection.
SECTION 6: Accidental release mea	sures			
6.1. Personal precautions, protective eq		t and emergency procedures		
6.1.1. For non-emergency personnel				
Emergency procedures	: Eva	cuate unnecessary personnel.		
	va			
6.1.2. For emergency responders	_			
Protective equipment		p cleanup crew with proper prote	ction.	
Emergency procedures	: Ven	tilate area.		
6.2. Environmental precautions				
Prevent entry to sewers and public waters. Notif	/ authori	ties if liquid enters sewers or pub	lic waters.	
6.3. Methods and material for containme	nt and	cleaning up		
Methods for cleaning up		k up spills with inert solids, such a age. Store away from other mater		us earth as soon as possible. Collec
6.4. Reference to other sections				
See Heading 8. Exposure controls and personal	protectio	on.		
SECTION 7: Handling and storage				
7.1. Precautions for safe handling				
Precautions for safe handling				water before eat, drink or smoke and a to prevent formation of vapor.
		d breathing mist, vapors.		
Hygiene measures	Avoi		g.	

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7.2.	Conditions for safe stor	age, including any incompatibilities
1.2.	Conditions for sale stor	ige, including any incompatibilities
Storage	e conditions	: Keep container closed when not in use.
Incomp	atible products	: Strong bases. strong acids.
Incomp	atible materials	: Sources of ignition. Direct sunlight.
7 2	Specific end use(s)	

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Contro	ol parameters	
Fortify		
ACGIH	Not applicable	
OSHA	Not applicable	
Urethane Dim	ethacrylate (72869-86-4)	
ACGIH	Not applicable	
OSHA	Not applicable	

8.2. Exposure controls

Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of inadequate ventilation wear respiratory protection.
Other information	: When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical an	d chemical properties
Physical state	: Liquid
Appearance	: Clear liquid.
Color	: Straw
Odor	: acrylic
Odor threshold	: No data available
рН	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: > 100 °C
Flash point	: > 55 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Immiscible
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available
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9.2.	Other information
No add	itional information available
OFOT	
SECT	ION 10: Stability and reactivity
10.1.	Reactivity
No add	itional information available
10.2.	Chemical stability
Not esta	ablished.
10.3.	Possibility of hazardous reactions
Not esta	ablished.
10.4.	Conditions to avoid
Direct s	unlight. Extremely high or low temperatures.
10.5.	Incompatible materials
strong a	acids. Strong bases.
10.6.	Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

: Not classified

Urethane Dimethacrylate	(72869-86-4)	
LD50 oral rat		N/A
LD50 dermal rat		N/A
LD50 dermal rabbit		N/A
LC50 inhalation rat (ppm)		N/A
Skin corrosion/irritation	:	Causes skin irritation.
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitization	:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Urethane Dimethacrylate	(72869-86-4)	

IARC group	4 - Probably Not Carcinogenic
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (single exposure)	: Not classified

Urethane Dimethacrylate (72869-86-4)	
LOAEL (oral,rat)	N/A mg/kg body weight
LOAEL (dermal,rat/rabbit)	N/A mg/kg body weight
LOAEL (inhalation,rat,gas)	N/A ppmV/4h
LOAEL (inhalation,rat,vapour)	N/A mg/l/4h
LOAEL (inhalation,rat,dust/mist/fume)	N/A mg/l/4h
Specific target organ toxicity (repeated :	Not classified

exposure)

Acute toxicity

Urethane Dimethacrylate (72869-86-4)	
LOAEL (oral,rat,90 days)	N/A mg/kg bodyweight/day
LOAEL (dermal,rat/rabbit,90 days)	N/A mg/kg bodyweight/day
LOAEL (inhalation,rat,gas,90 days)	N/A ppmV/6h/day
LOAEL (inhalation,rat,vapour,90 days)	N/A mg/l/6h/day
LOAEL (inhalation,rat,dust/mist/fume,90 days)	N/A mg/l/6h/day
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	Based on available data, the classification criteria are not met.

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Symptoms/injuries after inhalation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/injuries after skin contact	: Causes skin irritation.
SECTION 12: Ecological informa	tion
12.1. Toxicity	

No additional information available

Not established.
Not established.

12.4. Mobility in soil

No additional information available

12.5.Other adverse effectsEffect on ozone layer	· · · · · · · · · · · · · · · · · · ·
Effect on the global warming	: No known ecological damage caused by this product.
Other information	: Avoid release to the environment.
SECTION 13: Disposal consideration	ns
13.1. Waste treatment methods	
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment.
SECTION 14: Transport information	
In accordance with DOT	
Not regulated for transport	

Additional information

Other information

: No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information 15.1. US Federal regulations No additional information available

15.2. International regulations

CANADA No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

 Skin Irrit. 2
 H315

 Eye Irrit. 2
 H319

 Resp. Sens. 1
 H334

 Skin Sens. 1
 H317

 STOT SE 3
 H335

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Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

15.2.2. National regulations

15.3. US State regulations

SECTION 16: Other infor	mation	
Revision date	: 02/19/2015	
Other information	: None.	

Full text of H-phrases:

Resp. Sens. 1	Respiratory sensitisation Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
H315	Causes skin irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled

SDS US (GHS HazCom 2012)

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



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SECTION 1: Identification	
1.1. Identification	
	: Mixture
	: Fortify
1.2. Recommended use and restrictions o	
	: For RX only
1.3. Supplier	
Manufacturer Bisco, Inc. 1100 W. Irving Park Rd. Schaumburg, IL 60193 T 1.847.534.6000 - F 1.847.891.5049 sales@bisco.com - www.bisco.com	
1.4. Emergency telephone number	
Emergency number	: CHEMTREC - 24-Hour Hazmat Emergency Communications Center Domestic: 1-800-424-9300 Outside the U.S.: 1-703-527-3887, collect calls accepted
SECTION 2: Hazard(s) identification	
2.1. Classification of the substance or mix	tture
GHS-US classification	
Flammable liquids H227	Combustible liquid
Category 4 Skin corrosion/irritation H315 Category 2	Causes skin irritation
Serious eye damage/eye H319	Causes serious eye irritation
irritation Category 2 Specific target organ H336 toxicity (single exposure)	May cause drowsiness or dizziness
Category 3	
Full text of H statements : see section 16	
2.2. GHS Label elements, including precau	utionary statements
GHS-US labeling	
Hazard pictograms (GHS-US)	
Hazard statements (GHS-US)	H227 - Combustible liquid H315 - Causes skin irritation H319 - Causes serious eye irritation H336 - May cause drowsiness or dizziness
Precautionary statements (GHS-US)	 P210 - Keep away from heat/sparks/open flames/hot surfaces No smoking P261 - Avoid breathing mist, vapors P264 - Wash hands thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves, eye protection P302+P352 - If on skin: Wash with plenty of water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P312 - Call a poison center/doctor if you feel unwell P321 - Specific treatment (see First aid measures on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse P370+P378 - In case of fire: Use carbon dioxide (CO2), dry chemical powder, foam to extinguish P403+P233 - Store in a well-ventilated place. Keep container tightly closed

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P403+P235 - Store in a well-ventilated place. Keep cool

P405 - Store locked up

P501 - Dispose in a safe manner in accordance with local/national regulations

2.3. Other hazards which do not result in classification

No additional information available

Unknown acute toxicity (GHS US) 2.4.

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

- Not applicable
- 3.2. **Mixtures**

Name	Product identifier	%	GHS-US classification
Urethane Dimethacrylate	(CAS-No.) Proprietary	30 - 50	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H336
Tetrahydrofurfuryl Methacrylate	(CAS-No.) 2455-24-5	5 - 10	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 3, H402
Bisphenol A Dimethacrylate	(CAS-No.) 3253-39-2	5 - 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.
4.2. Most important symptoms and effe	ects (acute and delayed)
Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Eye irritation.
4.3. Immediate medical attention and s	pecial treatment, if necessary
Treat symptomatically.	
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguis	shing media
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Specific hazards arising from the o	chemical
Fire hazard	: Combustible liquid.
Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
5.3. Special protective equipment and	precautions for fire-fighters
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release mea	asures
6.1. Personal precautions, protective e	quipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing mist, vapors. Avoid contact with skin and eyes.
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	-	
6.1.2.	For emergency responders	
Protectiv	e equipment	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2.	Environmental precautions	
Avoid rel	ease to the environment.	
6.3.	Methods and material for containmen	t and cleaning up
Methods	for cleaning up	 Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other inf	ormation	Dispose of materials or solid residues at an authorized site.
6.4.	Reference to other sections	
For furth	er information refer to section 13.	
SECTI	ON 7: Handling and storage	
7.1.	Precautions for safe handling	
Precautio	ons for safe handling	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing mist, vapors. Avoid contact with skin and eyes.
Hygiene	measures	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2.	Conditions for safe storage, including	any incompatibilities
Storage	conditions	Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed.
SECTI	ON 8: Exposure controls/perso	nal protection
SECTI 8.1.	ON 8: Exposure controls/perso Control parameters	nal protection
8.1.	Control parameters	nal protection
8.1.	Control parameters ne Dimethacrylate (Proprietary)	nal protection

Tetrahydrofurfuryl Methacrylate (2455-24-5)
Not applicable
Bisphenol A Dimethacrylate (3253-39-2)
Not applicable

- : Ensure good ventilation of the work station.
- Appropriate engineering controls Environmental exposure controls
- : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Protective goggles

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical p	properties	
9.1. Information on basic physical and c	hemical properties	
Physical state	: Liquid	
Appearance	: Clear liquid.	
Color	: Straw	
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Odor	: Acrylic
Odor threshold	: No data available
рН	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity	
10.1. Reactivity	
The product is non-reactive under normal condition	ns of use, storage and transport.
10.2. Chemical stability	
Stable under normal conditions.	
10.3. Possibility of hazardous reactions	
No dangerous reactions known under normal con-	ditions of use.
10.4. Conditions to avoid	
Avoid contact with hot surfaces. Heat. No flames,	no sparks. Eliminate all sources of ignition.
10.5. Incompatible materials	
No additional information available	
10.6. Hazardous decomposition products	
Under normal conditions of storage and use, haza	ardous decomposition products should not be produced.
SECTION 11: Toxicological information	on
11.1. Information on toxicological effects	
Acute toxicity	: Not classified
Urethane Dimethacrylate (Proprietary)	
LD50 oral rat	N/A
LD50 dermal rat	N/A
LD50 dermal rabbit	N/A
LC50 inhalation rat (ppm)	N/A

LC50 inhalation rat (ppm)	N/A
Bisphenol A Dimethacrylate (3253-39-2)	
LD50 oral rat	> 5000 mg/kg (Rat)
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitization	Not classified

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Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Urethane Dimethacrylate (Proprietary)	
IARC group	4 - Probably not carcinogenic to humans
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: May cause drowsiness or dizziness.
Urethane Dimethacrylate (Proprietary)	
LOAEL (oral,rat)	N/A mg/kg body weight
LOAEL (dermal,rat/rabbit)	N/A mg/kg body weight
LOAEC (inhalation,rat,gas)	N/A ppmV/4h
LOAEC (inhalation,rat,vapour)	N/A mg/l/4h
LOAEC (inhalation,rat,dust/mist/fume)	N/A mg/l/4h
Specific target organ toxicity – repeated exposure	N/A mg/l/4h : Not classified
Specific target organ toxicity – repeated	
Specific target organ toxicity – repeated exposure	
Specific target organ toxicity – repeated exposure Urethane Dimethacrylate (Proprietary)	: Not classified
Specific target organ toxicity – repeated exposure Urethane Dimethacrylate (Proprietary) LOAEL (oral,rat,90 days)	N/A mg/kg bodyweight/day
Specific target organ toxicity – repeated exposure Urethane Dimethacrylate (Proprietary) LOAEL (oral,rat,90 days) LOAEL (dermal,rat/rabbit,90 days)	 Not classified N/A mg/kg bodyweight/day N/A mg/kg bodyweight/day
Specific target organ toxicity – repeated exposure Urethane Dimethacrylate (Proprietary) LOAEL (oral,rat,90 days) LOAEL (dermal,rat/rabbit,90 days) LOAEC (inhalation,rat,gas,90 days)	 Not classified N/A mg/kg bodyweight/day N/A mg/kg bodyweight/day N/A ppmV/6h/day
Specific target organ toxicity – repeated exposure Urethane Dimethacrylate (Proprietary) LOAEL (oral,rat,90 days) LOAEL (dermal,rat/rabbit,90 days) LOAEC (inhalation,rat,gas,90 days) LOAEC (inhalation,rat,vapour,90 days) LOAEC (inhalation,rat,dust/mist/fume,90 days)	: Not classified N/A mg/kg bodyweight/day N/A mg/kg bodyweight/day N/A ppmV/6h/day N/A mg/l/6h/day
Specific target organ toxicity – repeated exposure Urethane Dimethacrylate (Proprietary) LOAEL (oral,rat,90 days) LOAEL (dermal,rat/rabbit,90 days) LOAEC (inhalation,rat,gas,90 days) LOAEC (inhalation,rat,vapour,90 days) LOAEC (inhalation,rat,dust/mist/fume,90 days)	 Not classified N/A mg/kg bodyweight/day N/A mg/kg bodyweight/day N/A mg/kg bodyweight/day N/A mg/l/6h/day N/A mg/l/6h/day
Specific target organ toxicity – repeated exposure Urethane Dimethacrylate (Proprietary) LOAEL (oral,rat,90 days) LOAEL (dermal,rat/rabbit,90 days) LOAEC (inhalation,rat,gas,90 days) LOAEC (inhalation,rat,vapour,90 days) LOAEC (inhalation,rat,dust/mist/fume,90 days) Aspiration hazard	 Not classified N/A mg/kg bodyweight/day N/A mg/kg bodyweight/day N/A mg/kg bodyweight/day N/A ppmV/6h/day N/A mg/l/6h/day N/A mg/l/6h/day Not classified
Specific target organ toxicity – repeated exposure Urethane Dimethacrylate (Proprietary) LOAEL (oral,rat,90 days) LOAEL (dermal,rat/rabbit,90 days) LOAEC (inhalation,rat,gas,90 days) LOAEC (inhalation,rat,vapour,90 days) LOAEC (inhalation,rat,dust/mist/fume,90 days) LOAEC (inhalation,rat,dust/mist/fume,90 days) Aspiration hazard Symptoms/effects Symptoms/effects after skin contact	 Not classified N/A mg/kg bodyweight/day N/A mg/kg bodyweight/day N/A mg/kg bodyweight/day N/A mg/l/6h/day N/A mg/l/6h/day N/A mg/l/6h/day Not classified May cause drowsiness or dizziness.

SECTION 12: Ecological Information				
12.1. Toxi	city			
Ecology - gene	ral	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.		

Tetrahydrofurfuryl Methacrylate (2455-24-5)					
LC50 fish 1		34.7 mg/l (LC50; 96 h; Pimephales promelas)			
12.2.	Persistence and degradability				
12.2.	r ersistence and degradability				
Tetra	Tetrahydrofurfuryl Methacrylate (2455-24-5)				
D ·					

Persistence and degradability	Biodegradability in water: no data available. No (test)data on mobility of the substance available.	
Bisphenol A Dimethacrylate (3253-39-2)		
Persistence and degradability	Biodegradability in soil: no data available.	

12.3. Bioaccumulative potential

Tetrahydrofurfuryl Methacrylate (2455-24-5)				
Log Pow	1.3			
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).			
Bisphenol A Dimethacrylate (3253-39-2)				
Log Pow	5.3 (QSAR)			
Bioaccumulative potential	No bioaccumulation data available.			

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Effect on the global warming	:	No known effects from this product.
GWPmix comment	:	No known effects from this product.

SECTION 13: Disposal considerat	ions		
13.1. Disposal methods Waste treatment methods Image: Comparison of the second secon	: Dispose of contents/container in accordance with licensed collector's sorting instructions.		
SECTION 14: Transport information	on		
Department of Transportation (DOT) In accordance with DOT			
Other information	: No supplementary information available.		
TDG			
Transport by sea			
Air transport			
SECTION 15: Regulatory information 15.1. US Federal regulations Tetrahydrofurfuryl Methacrylate (2455-24-5)			
Listed on the United States TSCA (Toxic Su			
15.2. International regulations			
CANADA No additional information available			
EU-Regulations No additional information available			
National regulations No additional information available			
15.3. US State regulations			
No additional information available			
SECTION 16: Other information			
Revision date	: 02/19/2018		

Full text of H-phrases:

H227	Combustible liquid	
H315	Causes skin irritation	
H319	Causes serious eye irritation	
H320	Causes eye irritation	
H335	May cause respiratory irritation	
H336	May cause drowsiness or dizziness	
H402	Harmful to aquatic life	
	H227 H315 H319 H320 H335 H336	

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SDS US (GHS HazCom 2012)

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