

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 6/19/2023 Supersedes: 1/2/2018 Version: 3.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : One-Step Plus

1.2. Recommended use and restrictions on use

Use of the substance/mixture : For Rx Only

1.3. Supplier

Manufacturer

BISCO, Inc.

1100 W. Irving Park Rd. Schaumburg, IL , 60193

U.S.A.

T 1-800-247-3368 or 1-847-534-6000 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 mixture

GHS US classification

Flammable liquids Category 2

Skin corrosion/irritation Category 2

H315

Serious eye damage/eye irritation Category 2

H319

Causes skin irritation

Causes serious eye irritation

Skin sensitization, Category 1

H317

May cause an allergic skin reaction

Specific target organ toxicity - Single exposure, Category 3, Narcosis

H336

May cause drowsiness or dizziness

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)





Signal word (GHS US) : Danger

Hazard statements (GHS US) : H225 - Highly flammable liquid and vapor

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation H336 - May cause drowsiness or dizziness

Precautionary statements (GHS US) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P233 - Keep container tightly closed.

P240 - Ground/Bond container and receiving equipment.

P241 - Use explosion-proof electrical, ventilating, lighting equipment.

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P242 - Use only non-sparking tools.

P261 - Avoid breathing fume, mist, vapors, spray.

P264 - Wash hands thoroughly after handling

P272 - Contaminated work clothing must not be allowed out of the workplace.

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P302+P352 - If on skin: Wash with plenty of water and soap

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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/a 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.

P337+P313 - If eye irritation persists: 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 extinguishing powder, foam to

extinguish

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

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

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

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Acetone	CAS-No.: 67-64-1	30 - 50	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
2-Hydroxyethyl Methacrylate	CAS-No.: 868-77-9	10 - 30	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
BisGMA	CAS-No.: 1565-94-2	10 - 30	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335
4-Dimethylaminobenzoic Acid	CAS-No.: 619-84-1	1 - 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

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

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SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Wash skin with plenty of water. Remove/Take off immediately all

contaminated clothing. If skin irritation or rash 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 effects (acute and delayed)

Symptoms/effects after skin contact : May cause an allergic skin reaction.

Symptoms/effects after eye contact : May cause eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapor. Hazardous decomposition products in case of fire : Toxic fumes may be released.

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 measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and

eyes. Avoid breathing fume, mist, vapors, spray.

6.1.2. For emergency responders

Protective 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 release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public

waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open

flames and other ignition sources. No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and

eyes. Avoid breathing fume, mist, vapors, spray.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed

out of the workplace. 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

Technical measures : Use only non-sparking tools.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):







SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Yellow liquid.
Color : Straw

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Odor : Slight Acetone
Odor threshold : No data available

pH : 4-5

Melting point : Not applicable Freezing point : No data available

Boiling point : $56 \, ^{\circ}\mathrm{C}$ Flash point : $20 \, ^{\circ}\mathrm{C}$

Relative evaporation rate (butyl acetate=1) : No data available

Flammability (solid, gas) : Flammable liquid and vapor.

Vapor pressure No data available Relative vapor density at 20°C No data available No data available Relative density : No data available Solubility Partition coefficient n-octanol/water (Log Pow) : No data available Auto-ignition temperature : No data available Decomposition temperature : No data available Viscosity, kinematic : No data available No data available Viscosity, dynamic **Explosion limits** : 2.6 - 12.8 vol % 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

Highly flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions 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, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

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2-Hydroxyethyl Methacrylate (868-77-9)	
LD50 oral rat	5564 mg/kg body weight (Rat, Experimental value, Oral)
LD50 dermal rabbit	> 5000 mg/kg (24 h, Rabbit, Male, Experimental value, Dermal)
ATE US (oral)	5564 mg/kg body weight
Acetone (67-64-1)	
LD50 oral rat	5800 mg/kg (Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 15800 mg/kg body weight (24 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	132 mg/l (3 h, Rat, Male, Experimental value, Inhalation (vapours))
LC50 Inhalation - Rat [ppm]	> 16000 ppm/4h
LC50 Inhalation - Rat (Vapours)	76 mg/l Source: ECHA
4-Dimethylaminobenzoic Acid (619-84-1)	
LD50 oral rat	> 5000 mg/kg (Rat, Oral)
	Causes skin irritation. pH: 4 - 5
2-Hydroxyethyl Methacrylate (868-77-9)	
рН	No data available in the literature
Acetone (67-64-1)	
рН	5 - 6 (20 °C)
	Causes serious eye irritation. pH: 4 - 5
2-Hydroxyethyl Methacrylate (868-77-9)	
рН	No data available in the literature
Acetone (67-64-1)	
рН	5 - 6 (20 °C)
	May cause an allergic skin reaction.
3	Not classified Not classified
Acetone (67-64-1)	NUL Classified
IARC group	4 - Probably not carcinogenic to humans
	Not classified
STOT-single exposure :	May cause drowsiness or dizziness.
Acetone (67-64-1)	
STOT-single exposure	May cause drowsiness or dizziness.
4-Dimethylaminobenzoic Acid (619-84-1)	
STOT-single exposure	May cause respiratory irritation.
BisGMA (1565-94-2)	
STOT-single exposure	May cause respiratory irritation.
	Not classified
•	Not classified No data available

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2-Hydroxyethyl Methacrylate (868-77-9)		
Viscosity, kinematic	6.4 mm²/s (20 °C)	
Acetone (67-64-1)		
Viscosity, kinematic	No data available in the literature	
4-Dimethylaminobenzoic Acid (619-84-1)		
Viscosity, kinematic	Not applicable	
, ·	May cause an allergic skin reaction. May cause eye irritation.	

SECTION 12: Ecological information

12 1 T	Coxicity		

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

	effects in the environment.
2-Hydroxyethyl Methacrylate (868-77-9)	
LC50 - Fish [1]	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oryzias latipes, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	380 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 algae	836 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
Acetone (67-64-1)	
LC50 - Fish [1]	6210 - 8120 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Measured concentration)
LC50 - Fish [2]	8300 mg/l
LOEC (chronic)	> 79 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	≥ 79 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
4-Dimethylaminobenzoic Acid (619-84-1)	
LC50 - Fish [1]	1098.988 mg/l Source: Ecological Structure Activity Relationships
EC50 96h - Algae [1]	740.871 mg/l Source: Quantitative Structure Activity Relation
BisGMA (1565-94-2)	
LC50 - Fish [1]	0.537 mg/l Source: ECOSAR

12.2. Persistence and degradability

2-Hydroxyethyl Methacrylate (868-77-9)		
Persistence and degradability	Biodegradability in soil: no data available. Readily biodegradable in water.	
Acetone (67-64-1)		
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.	
Biochemical oxygen demand (BOD)	1.43 g O□/g substance	
Chemical oxygen demand (COD)	1.92 g O□/g substance	

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Acetone (67-64-1)		
ThOD	2.2 g O□/g substance	
4-Dimethylaminobenzoic Acid (619-84-1)		
Persistence and degradability Biodegradability in water: no data available.		
BisGMA (1565-94-2)		
Persistence and degradability Biodegradability in water: no data available.		

12.3. Bioaccumulative potential

2-Hydroxyethyl Methacrylate (868-77-9)		
Partition coefficient n-octanol/water (Log Pow)	0.42 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)	
Bioaccumulative potential	Not bioaccumulative.	
Acetone (67-64-1)		
BCF - Fish [1]	0.69 (Pisces, Literature study)	
Partition coefficient n-octanol/water (Log Pow)	-0.23 (Test data)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
4-Dimethylaminobenzoic Acid (619-84-1)		
Partition coefficient n-octanol/water (Log Pow)	1.28 Source: National Library of Medicine	
Bioaccumulative potential	No bioaccumulation data available.	
BisGMA (1565-94-2)		
Partition coefficient n-octanol/water (Log Pow)	4.94 (Estimated value)	
Bioaccumulative potential	No bioaccumulation data available.	

12.4. Mobility in soil

2-Hydroxyethyl Methacrylate (868-77-9)		
Surface tension	No data available in the literature	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.164 - 0.708 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	
Ecology - soil	Adsorbs into the soil.	
Acetone (67-64-1)		
Surface tension	23.3 mN/m (20 °C)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.374 - 0.988 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	
Ecology - soil	Highly mobile in soil.	

12.5. Other adverse effects

No additional information available

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SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Additional information : Flammable vapors may accumulate in the container.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

DOT NA No : UN1090
UN-No. (TDG) : Not applicable
UN-No. (IMDG) : 1090
UN-No. (IATA) : 1090

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Acetone
Proper Shipping Name (TDG) : Not applicable
Proper Shipping Name (IMDG) : ACETONE
Proper Shipping Name (IATA) : Acetone

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 3
Hazard labels (DOT) : 3



TDG

Transport hazard class(es) (TDG) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : 3
Hazard labels (IMDG) : 3



IATA

Transport hazard class(es) (IATA) : 3
Hazard labels (IATA) : 3



14.4. Packing group

Packing group (DOT) : II

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Packing group (TDG) : Not applicable

Packing group (IMDG) : II
Packing group (IATA) : II

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

UN-No.(DOT) : UN1090

DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite

(31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110

kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.

T4 - 2.65 178.274(d)(2) Normal...... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature

during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242
DOT Quantity Limitations Passenger aircraft/rail (49 : 5 L

CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49

CFR 175.75)

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this

section is exceeded.

: 60 L

TDG

Emergency Response Guide (ERG) Number : 127

IMDG

Limited quantities (IMDG) : 1 L

Excepted quantities (IMDG) : E2

Packing instructions (IMDG) : P001

IBC packing instructions (IMDG) : IBC02

Tank instructions (IMDG) : T4

Tank special provisions (IMDG) : TP1

EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS

EmS-No. (Spillage) : S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS

Stowage category (IMDG) : E

Flash point (IMDG) : -20°C to -18°C c.c.

Properties and observations (IMDG) : Colourless, clear liquid, with a characteristic mint-like odour. Flashpoint: -20°C to -18°C

c.c. Explosive limits: 2.5% to 13% Miscible with water.

IATA

PCA Excepted quantities (IATA) : E2 Y341 PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) : 1L PCA packing instructions (IATA) 353 : 5L PCA max net quantity (IATA) CAO packing instructions (IATA) : 364 CAO max net quantity (IATA) 60L ERG code (IATA) 3H

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

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Acetone	CAS-No. 67-64-1	30 - 50%
4-Dimethylaminobenzoic Acid	CAS-No. 619-84-1	1 - 5%

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

2-Hydroxyethyl Methacrylate (868-77-9)

Listed on the Canadian DSL (Domestic Substances List)

BisGMA (1565-94-2)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

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Full text of H-phrases		
H225	Highly flammable liquid and vapor	
H315	Causes skin irritation	
H317	May cause an allergic skin reaction	
H319	Causes serious eye irritation	
H335	May cause respiratory irritation	
H336	May cause drowsiness or dizziness	

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Indication of	Indication of changes:			
Section	Changed item	Change	Comments	
	Revision date	Added		
	Signal word (GHS US)	Added		
	Precautionary statements (GHS US)	Modified		
	Hazard statements (GHS US)	Modified		
	Issue date	Removed		
	Supersedes	Added		
2.1	GHS-US classification	Modified		
5.1	Suitable extinguishing media	Modified		
6	Emergency procedures	Modified		
7.1	Precautions for safe handling	Modified		
7.2	Technical measures	Modified		
14	Transport information	Modified		

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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.