

# Enhance LC

## Safety Data Sheet

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

Date of issue: 5/21/2015

Version: 6

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : Enhance LC

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

Use of the substance/mixture : For professional use only.

#### 1.3. Details of the supplier of the safety data sheet

##### Manufacturer:

Reliance Orthodontic Products Inc. 1540 West Thorndale Ave. Itasca, IL 60143 USA  
630-773-4009, during normal business hours

##### EC Representative:

Emergo Europe, Molenstraat 15, 2513 BH, The Hague, The Netherlands

#### 1.4. Emergency telephone number

Emergency number : 1-703-527-3887

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (GHS-US)

Flam. Liq. 2 H225  
Skin Irrit. 2 H315  
Eye Irrit. 2A H319  
Resp. Sens. 1 H334  
Skin Sens. 1 H317

Full text of H-phrases: see section 16

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



GHS02



GHS08

Signal word (GHS-US) :

Warning

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  
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  
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
P233 - Keep container tightly closed  
P264 - Wash hands thoroughly after handling  
P332+P313 - If skin irritation occurs: Get medical advice/attention  
P337+P313 - If eye irritation persists: 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)

Not applicable

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Ethanol/Denatured 190 PROOF	(CAS No) 64-17-5	50 - 75	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Resp. Sens. 1, H334
2-hydroxyethyl methacrylate, stabilized	(CAS No) 868-77-9	10 - 30	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317

Full text of H-phrases: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. Remove to fresh air and keep at rest in a position comfortable for breathing
- First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. 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 : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

- Symptoms/injuries after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause respiratory irritation.
- Symptoms/injuries after skin contact : Causes skin irritation.
- Symptoms/injuries after eye contact : Causes serious eye irritation.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Highly flammable liquid and vapor.
- Explosion hazard : May form flammable/explosive vapor-air mixture.

#### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

##### 6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

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### 6.2. Environmental precautions

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

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No naked lights. No smoking. Use only non-sparking tools. Avoid breathing mist, vapors. Use only outdoors or in a well-ventilated area.

Hygiene measures : Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep in fireproof place. Keep container tightly closed.

Incompatible products : Strong bases. strong acids.

Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Enhance LC	
ACGIH	Not applicable
OSHA	Not applicable
2-hydroxyethyl methacrylate, stabilized (868-77-9)	
ACGIH	Not applicable
OSHA	Not applicable
Ethanol/Denatured 190 PROOF (64-17-5)	
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 and chemical properties

Physical state : Liquid

Color : Colorless.

Odor : No data available

Odor threshold : No data available

pH : No data available

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

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Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
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	: Water: Solubility in water of component(s) of the mixture : • : > 10 g/100ml
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

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

### 10.5. Incompatible materials

strong acids. Strong bases.

### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

2-hydroxyethyl methacrylate, stabilized (868-77-9)	
LD50 oral rat	> 5000 mg/kg (Rat)
LD50 dermal rabbit	> 3000 mg/kg (Rabbit)
Ethanol/Denatured 190 PROOF (64-17-5)	
LD50 oral rat	7060 mg/kg
LD50 dermal rat	N/A
LD50 dermal rabbit	N/A
LC50 inhalation rat (ppm)	20000 ppm
ATE US (oral)	7060.000 mg/kg body weight

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

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Respiratory or skin sensitization	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified

### Ethanol/Denatured 190 PROOF (64-17-5)

IARC group	4 - Probably Not Carcinogenic
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified

### Ethanol/Denatured 190 PROOF (64-17-5)

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 exposure)	: Not classified

### Ethanol/Denatured 190 PROOF (64-17-5)

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.
Symptoms/injuries after inhalation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause respiratory irritation.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### 2-hydroxyethyl methacrylate, stabilized (868-77-9)

LC50 fish 1	227 mg/l (96 h; Pimephales promelas; Measured concentration)
LC50 fish 2	360 mg/l (48 h; Leuciscus idus)

#### Ethanol/Denatured 190 PROOF (64-17-5)

LC50 fish 1	14000 mg/l
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### 12.2. Persistence and degradability

#### Enhance LC

Persistence and degradability	Not established.
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#### 2-hydroxyethyl methacrylate, stabilized (868-77-9)

Persistence and degradability	Readily biodegradable in water. Biodegradability in soil: no data available. Adsorbs into the soil.
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### 12.3. Bioaccumulative potential

#### Enhance LC

Bioaccumulative potential	Not established.
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#### 2-hydroxyethyl methacrylate, stabilized (868-77-9)

BCF fish 1	1.3 - 1.5 (Pisces; Calculated value)
Log Pow	-0.55 - 0.49
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

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### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect 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 considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose in a safe manner in accordance with local/national regulations.  
Additional information : Handle empty containers with care because residual vapors are flammable.  
Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with DOT  
Transport document description : UN1170 Ethanol, 3, II  
UN-No.(DOT) : UN1170  
Proper Shipping Name (DOT) : Ethanol  
Department of Transportation (DOT) Hazard Classes : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120  
Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : II - Medium Danger  
DOT Special Provisions (49 CFR 172.102) : 24 - Alcoholic beverages containing more than 70 percent alcohol by volume must be transported as materials in Packing Group II. Alcoholic beverages containing more than 24 percent but not more than 70 percent alcohol by volume must be transported as materials in Packing Group III.  
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) : 4b;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 CFR 173.27) : 5 L  
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L  
DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

### Additional information

Other information : No supplementary information available.

### ADR

No additional information available

### Transport by sea

No additional information available

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### 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]

Flam. Liq. 2 H225

Skin Irrit. 2 H315

Eye Irrit. 2 H319

Resp. Sens. 1 H334

Skin Sens. 1 H317

STOT SE 3 H335

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 information

Revision date : 12/29/2014

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H-phrases:

Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Flam. Liq. 2	Flammable liquids Category 2
Resp. Sens. 1	Respiratory sensitisation Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
H225	Highly flammable liquid and vapor
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H320	Causes eye 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*