

## Safety Data Sheet

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

Date of issue: 5/28/2015 Version: 8

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

### **Product identifier**

Product form : Mixture

Product name : Plastic Conditioner

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

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

### 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

### **Emergency telephone number**

: 1-703-527-3887 **Emergency number** 

### **SECTION 2: Hazards identification**

### Classification of the substance or mixture

### Classification (GHS-US)

Flam. Liq. 2 H225 Skin Irrit. 2 H315 Skin Sens. 1 H317 STOT SE 3 H335 Aquatic Acute 3 H402

Full text of H-phrases: see section 16

### **Label elements** 2.2.

### **GHS-US** labeling

Hazard pictograms (GHS-US)





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 H335 - May cause respiratory irritation

H402 - Harmful to aquatic life

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

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

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

No additional information available

### Unknown acute toxicity (GHS-US)

Not applicable

### **SECTION 3: Composition/information on ingredients**

### Substance

Not applicable

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### 3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
methylmethacrylate, monomer, inhibited	(CAS No) 80-62-6	50 - 75	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 3, H402

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 : Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON

CENTER/doctor/physician if you feel unwell.

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. Specific treatment (see First aid measures on this label).

If skin irritation or rash occurs:

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persist.

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 an allergic skin reaction. May cause respiratory irritation.

Symptoms/injuries after skin contact : Causes skin 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.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

### 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.

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### **SECTION 7: Handling and storage**

### 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.

### Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond

container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/...

Storage conditions Keep only in the original container in a cool, well ventilated place away from : Keep in fireproof

place. Keep container tightly closed.

Incompatible products Strong bases, strong acids.

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

### Specific end use(s)

No additional information available

### **SECTION 8: Exposure controls/personal protection**

### **Control parameters**

Plastic Conditioner		
ACGIH	Not applicable	
OSHA	Not applicable	
methylmethacrylate, monomer, inhibited (80-62-6)		
ACGIH	ACGIH TWA (ppm)	50 ppm
ACGIH	ACGIH STEL (ppm)	50 ppm
OSHA	Not applicable	

### **Exposure controls**

Physical state

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 Wear approved mask.

Other information When using, do not eat, drink or smoke.

: Liquid

### **SECTION 9: Physical and chemical properties**

### Information on basic physical and chemical properties

Color Colorless. Odor No data available Odor threshold : No data available рΗ : No data available Relative evaporation rate (butyl acetate=1) No data available Melting point : No data available Freezing point No data available : No data available Boiling point Flash point : No data available Auto-ignition temperature : No data available Decomposition temperature No data available Flammability (solid, gas) : No data available

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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 :

•: 1.5 g/100ml •: 0.2 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

methylmethacrylate, monomer, inhibited (80-62-6)		
LD50 oral rat	> 6000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; 7900 mg/kg bodyweight; Rat; Equivalent or similar to OECD 401; Weight of evidence; 8400 mg/kg bodyweight; Rat; Weight of evidence)	
LD50 dermal rabbit	> 7550 mg/kg (Rabbit; Literature study; Equivalent or similar to OECD 402; >5000 mg/kg bodyweight; Rabbit; Experimental value)	
LC50 inhalation rat (mg/l)	27.5 mg/l/4h (Rat; Literature study)	
ATE US (vapors)	27.500 mg/l/4h	
ATE US (dust, mist)	27.500 mg/l/4h	

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

methylmethacrylate, monomer, inhibited (80-6	ethylmethacrylate, monomer, inhibited (80-62-6)	
IARC group	3 - Not Classifiable	
Reproductive toxicity :	Not classified	

Specific target organ toxicity (single exposure) : May cause respiratory irritation.

Specific target organ toxicity (repeated : Not classified

exposure)

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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 an allergic skin reaction. May cause respiratory irritation.

Symptoms/injuries after skin contact : Causes skin irritation.

### **SECTION 12: Ecological information**

### 12.1. Toxicity

Ecology - water : Harmful to aquatic life.

methylmethacrylate, monomer, inhibited (80-62-6)	
LC50 fish 1	130 mg/l (96 h; Pimephales promelas; Lethal)
EC50 Daphnia 1	69 mg/l (48 h; Daphnia magna; GLP)
LC50 fish 2	191 mg/l (96 h; Lepomis macrochirus)
EC50 Daphnia 2	502 mg/l (24 h; Daphnia magna)
TLM fish 1	159 mg/l (96 h; Pimephales promelas)
Threshold limit other aquatic organisms 1	100 mg/l (16 h; Pseudomonas putida)
Threshold limit algae 1	37 mg/l (168 h; Scenedesmus quadricauda; Toxicity test)
Threshold limit algae 2	120 mg/l (192 h; Microcystis aeruginosa)

### Persistence and degradability 12.2.

Plastic Conditioner		
Persistence and degradability	Not established.	
methylmethacrylate, monomer, inhibited (80-62-6)		
Persistence and degradability	Readily biodegradable in water. No (test)data on mobility of the substance available. Photolysis in the air.	
Biochemical oxygen demand (BOD)	0.14 g O₂/g substance	
ThOD	1.9 g O₂/g substance	
BOD (% of ThOD)	0.073 % ThOD	

### **Bioaccumulative potential** 12.3.

Plastic Conditioner		
Bioaccumulative potential	Not established.	
methylmethacrylate, monomer, inhibited (80-62-6)		
BCF fish 1	2.97 - 3.5 (Pisces)	
Log Pow	1.32 - 1.38 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 20 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	

### **Mobility in soil** 12.4.

methylmethacrylate, monomer, inhibited (80-62-6)	
Surface tension	0.028 N/m (20 °C)

### 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**

### 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.

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### **SECTION 14: Transport information**

In accordance with DOT

Hazard labels (DOT)

Transport document description : UN1247 Methyl methacrylate monomer, stabilized, 3, II

UN-No.(DOT) : UN1247

Proper Shipping Name (DOT) : Methyl methacrylate monomer, stabilized

Department of Transportation (DOT) Hazard

Classes

: 3 - Flammable liquid

3

Packing group (DOT) : II - Medium Danger

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)

: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

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 : 5 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L

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.

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

### **Additional information**

Other information : No supplementary information available.

**ADR** 

Transport document description : UN 1247, 3, II, (D/E)

Packing group (ADR) : II

Class (ADR) : 3 - Flammable liquid

Hazard identification number (Kemler No.) : 339
Classification code (ADR) : F1

Danger labels (ADR) : 3 - Flammable liquids

3

Orange plates :

339 1247

Tunnel restriction code (ADR) : D/E LQ : 1L Excepted quantities (ADR) : E2

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### Transport by sea

No additional information available

Air transport

UN-No.(IATA) : 1247

Class (IATA) : 3 - Flammable Liquids

## **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 H315 Skin Irrit. 2 Eye Irrit. 2 H319 Skin Sens. 1 H317 STOT SE 3 H335 Aquatic Acute 1 H400

Full text of H-phrases: see section 16

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

National regulations

### 15.3. US State regulations

### **SECTION 16: Other information**

### Full text of H-phrases:

skt of 11 priladed.	
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Flam. Liq. 2	Flammable liquids Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H335	May cause respiratory irritation
H402	Harmful to aquatic life

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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