SECTION 1: IDENTIFICATION

Identification of the Substance / Mixture and of the Company / Undertaking

1.1. Product identifier

PRODUCT NAME: UV Adhesives
PRODUCT CODE: UV604L10, UV604L1K, UV604L25, UV604L30

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

Identified Uses

PC1	Adhesives, sealants

1.3. Details of the supplier of the safety data sheet

Name/Address: C.R. Laurence Co., Inc.
2503 E. Vernon Ave,
Los Angeles, CA 90058

Telephone Number: 1.800.421.6144

1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER: CHEMTREC 1-800-424-9300 (US and Canada)
Number: INTERNATIONAL +1-703-527-3887

SECTION 2: HAZARDS INDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to OSHA Hazard Communication Standard 29 CFR 1910:1200

Classification according to OSHA Hazard Communication Standard 29 CFR 1910:1200

Skin Irrit. 2	H315
Eye Irrit. 2	H319
Skin Sens. 1	H317
Repr. 2	H361f
STOT SE 3	H335

2.2. Label elements

Labelling according to OSHA Hazard Communication Standard 29 CFR 1910:1200

Hazard pictograms ***

Signal word ***

Warning

Hazard statements ***

H317	May cause an allergic skin reaction.
H361f	Suspected of damaging fertility.
H335	May cause respiratory irritation.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

Precautionary statements

Prevention

P201	Obtain special instructions before use.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264.1	Wash hands 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/protective clothing/eye protection/face protection.

Response ***

P302+P352	IF ON SKIN: Wash with plenty of soap and 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.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER/doctor/. if you feel unwell.
P332	If skin irritation occurs:
P333	If skin irritation or rash occurs:
P337	If eye irritation persists:
P362+P364	Take off contaminated clothing and wash it before reuse.

Storage/Disposal

P405	Store locked up.
P501.1	Dispose of contents/container to industrial incineration plant.

2.3. Other hazards

No special hazards have to be mentioned.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous ingredients according to OSHA Hazard Communication Standard 29 CFR 1910:1200 ***

Hydroxypropylmethacrylate

CAS No.	27813-02-1				
Concentration	>=	25	<	50	%

Isobornyl acrylate

CAS No.	5888-33-5				
Concentration	>=	10	<	20	%

Acrylic acid

CAS No.	79-10-7				
Concentration	>=	3	<	5	%

Additional remarks:

CLP	Regulation (EC) No 1272/2008, Annex VI, Note D
DSD	Directive 67/548/EEC, Annex I, Note D

tert-Butylperbenzoate

CAS No.	614-45-9				
Concentration	>=	1	<	2.7	%

2-Hydroxy-2-methylpropiophenone

CAS No.	7473-98-5				
Concentration	>=	1	<	6.9	%

Diphenyl(2,4,6 trimethylbenzoyl)phosphine oxide

CAS No.	75980-60-8				
Concentration	>=	1	<	3	%

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

Remove contaminated, soaked clothing immediately and dispose of safely. Adhere to personal protective measures when giving first aid. In any case show the physician the Safety Data Sheet.

After inhalation

Ensure supply of fresh air. When vapours are intensively inhaled, seek medical help immediately.

After skin contact

Wash off immediately with soap and water. Consult a doctor if skin irritation persists.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Summon a doctor immediately.

After ingestion

If swallowed, seek medical advice immediately and show this container or label. Rinse mouth thoroughly with water. Let plenty of water be drunk in small gulps. Do not induce vomiting.

Adhere to personal protective measures when giving first aid

First aider: Pay attention to self-protection!

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

Until now no symptoms known so far.

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

Hints for the physician / hazards

In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Dry powder, Carbon dioxide, Foam

Non suitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of combustion evolution of dangerous gases possible.

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Do not inhale explosion and/or combustion gases. In case of combustion use a suitable breathing apparatus.

Other information

Collect contaminated fire-fighting water separately, must not be discharged into the drains. Fire residues and contaminated fire-fighting water must be disposed of in accordance with the local regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing. Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers). Do not discharge into the drains/surface waters/groundwater. In case the product spills into sewage waters, immediately inform the authorities.

6.3. Methods and material for containment and cleaning up

Pick up with absorbent material. Dispose of absorbed material in accordance with the regulations.

6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

SECTION 7:HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling

Avoid formation of aerosols. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep container tightly closed. Observe the usual precautions for handling chemicals.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in original packaging, tightly closed. Storage rooms must be properly ventilated. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Provide solvent-resistant and impermeable floor.

Further information on storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight.

SECTION 8:EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Other information

Contains no substances with occupational exposure limit values.

8.2. Exposure controls

General protective and hygiene measures

Hold eye wash fountain available. Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes. Do not eat, drink or smoke during work time. Wash hands before breaks and after work. Clean skin thoroughly after work; apply skin cream.

Respiratory protection

Use NIOSH approved respirator if there is potential to exceed exposure limits. If this material is handled at elevated temperatures, or under mist-forming conditions without engineering controls, a NIOSH approved respirator must be used.

Hand protection

Chemical resistant gloves

Use	Short-term hand contact	
Appropriate Material	nitrile	
Material thickness	>=	0,4
Breakthrough time	>	480

Eye protection

Safety glasses with side protection shield

Body protection

Clothing as usual in the chemical industry.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Form Liquid

Colour colourless

Odour characteristic

Odour threshold

Remarks not determined

pH value

Remarks not determined

Melting point

Remarks not determined

Freezing point

Remarks not determined

Initial boiling point and boiling range

Remarks not determined

Flash point

Value > 100 °C

Evaporation rate (ether = 1) :

Remarks not determined

Flammability (solid, gas)

not determined

Upper/lower flammability or explosive limits

Remarks not determined

Vapour pressure

Remarks not determined

Vapour density

Remarks not determined

Density

Remarks not determined

Solubility in water

Remarks not determined

Solubility(ies)

Remarks not determined

Partition coefficient: n-octanol/water

Remarks not determined

Ignition temperature

Remarks not determined

Decomposition temperature

Remarks not determined

Viscosity

Remarks not determined

Explosive properties

evaluation not determined

Oxidising properties

Remarks not determined

9.2. Other information

Other information

None known

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
No hazardous reactions when stored and handled according to prescribed instructions.

10.2. Chemical stability
No hazardous reactions known.

10.3. Possibility of hazardous reactions
No hazardous reactions known.

10.4. Conditions to avoid
No hazardous reactions known.

Decomposition temperature

Remarks	not determined

10.5. Incompatible materials
None known

10.6. Hazardous decomposition products
Irritant gases/vapours

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

National Toxicology Program (NTP) ***

Components: tert-Butylperbenzoate; Methacrylic acid

International Agency for research on Cancer (IARC)

Components: Acrylic acid

Acute oral toxicity

ATE	>	10,000	mg/kg
Method	calculated value according to GHS (e.g see UN GHS)		

Acute oral toxicity (Components)

2-Hydroxy-2-methylpropiophenone

Species	rat		
LD50		1694	mg/kg

Acrylic acid

Species	rat		
LD50	=	1500	mg/kg

tert-Butylperbenzoate

Species	rat		
LD50		4828	mg/kg

Acute dermal toxicity

ATE	>	10,000	mg/kg
Method	calculated value according to GHS (e.g see UN GHS)		

Acute dermal toxicity (Components)

2-Hydroxy-2-methylpropiophenone

Species	rat		
LD50		6929	mg/kg

Acrylic acid

Species	rabbit		
LD50	>=	2000	mg/kg

tert-Butylperbenzoate

Species	rabbit		
LD50		3817	mg/kg

Acute inhalational toxicity

ATE		34.0022	mg/l
Administration/Form	Vapors		
Method	calculated value according to GHS (e.g see UN GHS)		
ATE	>	20	mg/l
Administration/Form	Dust/Mist		
Method	calculated value according to GHS (e.g see UN GHS)		

Acute inhalative toxicity (Components)

Acrylic acid

Species	rat			
LC50	>=	5,1		mg/l
Duration of exposure		4	h	
Administration/Form	Vapors			

tert-Butylperbenzoate

Species	rat			
LC50	>	1,01		mg/l
Duration of exposure		4	h	
Administration/Form	Vapors			

Skin corrosion/irritation

Remarks: not determined

Serious eye damage/irritation

Remarks: not determined

Sensitization

Remarks: not determined

Sensitization (Components)

2-Hydroxy-2-methylpropiophenone

Route of exposure	dermal
Species	guinea pig
evaluation	non-sensitizing

Acrylic acid

evaluation: non-sensitizing

Subacute, subchronic, chronic toxicity

Remarks: not determined

Mutagenicity

Remarks: not determined

Reproductive toxicity

Remarks: not determined

Carcinogenicity

Remarks: not determined

Specific Target Organ Toxicity (STOT)

Remarks: not determined

Experience in practice

Inhalation may lead to irritation of the respiratory tract.

Other information

No toxicological data are available.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

General information

not determined

Fish toxicity (Components)

2-Hydroxy-2-methylpropiophenone

Species	golden orfe (Leuciscus idus)				
LC50		160			mg/l
Duration of exposure		48	h		

Acrylic acid

Species	rainbow trout (Oncorhynchus mykiss)				
LC50	=	27			mg/l
Duration of exposure		96	h		

tert-Butylperbenzoate

Species	zebra fish (Brachydanio rerio)				
LC50		1,6			mg/l
Duration of exposure		96	h		

Daphnia toxicity (Components)

2-Hydroxy-2-methylpropiophenone

Species	Daphnia magna				
EC50	>	119			mg/l
Duration of exposure		48	h		

Acrylic acid

Species	Daphnia magna				
EC50	=	47	to	95	mg/l
Duration of exposure		48	h		

tert-Butylperbenzoate

Species	Daphnia magna				
EC50		11			mg/l
Duration of exposure		24	h		

Algae toxicity (Components)

2-Hydroxy-2-methylpropiophenone

Species	Scenedesmus subspicatus				
EC50		1,95			mg/l
Duration of exposure		72	h		

2-Hydroxy-2-methylpropiophenone

Species	Scenedesmus subspicatus				
EC10		0,629			mg/l
Duration of exposure		72	h		

Acrylic acid

Species	Scenedesmus subspicatus				
ErC50	=	0,13			mg/l
Duration of exposure		72	h		

tert-Butylperbenzoate

Species	Algae				
EC50		0,8			mg/l
Duration of exposure		72	h		

12.2. Persistence and degradability

General information

not determined

Chemical oxygen demand (COD) (Components)

Acrylic acid

Value	=	1,48	kg/kg

Biochemical oxygen demand (BOD5) (Components)

Acrylic acid

Value	=	0,31	kg/kg

12.3. Bioaccumulative potential

General information

not determined

Partition coefficient: n-octanol/water

Remarks	not determined

12.4. Mobility in soil

General information

not determined

12.5. Results of PBT and vPvB assessment

General information

not determined

12.6. Other adverse effects

General information

not determined

General information / ecology

Do not allow to enter soil, waterways or waste water canal. Avoid release into the atmosphere.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Disposal recommendations for the product

Dispose of waste according to applicable legislation.

Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off in agreement with the regional waste disposal company.

SECTION 14: TRANSPORT INFORMATION

Ground transport DOT ***

14.1. UN number

UN 3082

14.2. UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isobornyl acrylate)

14.3. Transport hazard class(es)

Class	9
Label	9

14.4. Packing group

Packing group	III
Remarks	The product is not subject to any other provisions of ADR provided packaging of not more than 5 l / 5 kg (SP 375)
Limited Quantity	5 l
Transport category	3

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS

Marine transport IMDG/GGVSee ***

14.1. UN number

UN 3082

14.2. UN proper shipping name
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isobornyl acrylate)
14.3. Transport hazard class(es)
Class 9
14.4. Packing group
Packing group III
Remarks The product can be transported in accordance with IMDG Code paragraph 2.10.2.7, provided packaging not more than 5 l / 5 kg.
14.5. Environmental hazards
Marine Pollutant

Air transport ICAO/IATA ***

14.1. UN number
UN 3082
14.2. UN proper shipping name
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isobornyl acrylate)
14.3. Transport hazard class(es)
Class 9
14.4. Packing group
Packing group III
Remarks The product is not subject to any other provisions of IATA provided packaging of not more than 5 l / 5 kg (A197)
14.5. Environmental hazards
ENVIRONMENTALLY HAZARDOUS

SECTION 15:REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Other information

All components are contained in the TSCA inventory or exempted.
All components are contained in the IECSC inventory.
All components are contained in the ECL inventory.
All components are contained in the DSL inventory.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302Extremely Hazardous Substance (40 CFR 355)

The product does not contain any listed components.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

Components: Acrylic acid

Clean Water Act (CWA) Section 307 Toxic Pollutants (40 CFR 401.15)

The product does not contain any listed components.

Clean Water Act (CWA) Section 311 Toxic Pollutants (40 CFR 116.4)

The product does not contain any listed components.

Clean Air Act (CAA) Section 112 Regulated Toxic Substances And Threshold Quantities For Accidental Release Prevention (40 CFR 68.130 Table 1+2)

Components: Acrylic acid; Methacrylic acid

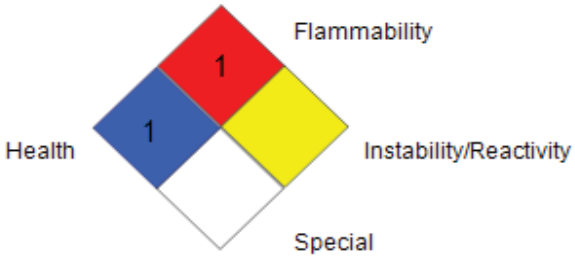
Clean Air Act (CAA) Section 112 Regulated Flammable Substances And Threshold Quantities For Accidental Release Prevention (40 CFR 68.130 Table 3+4)

The product does not contain any listed components.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

Warning! This product may contain trace quantities of substance(s) known to the state of California to cause cancer and/or reproductive toxicity - not added as a part of the formulation but remaining as residuals from the manufacturing process of our raw material suppliers.

NFPA Rating Information



HMIS® Rating Information

Health	1
Flammability	1
Physical Hazard	
Personal Protection	

SECTION 16: OTHER INFORMATION

Department issuing safety data sheet

Department product safety

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: ***
This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.