Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Name: UL607 Resin

Manufacturer: **Chemical Concepts, Inc.**
410 Pike Road
Huntingdon Valley, PA. 19006
Phone: 800.220.1966
Email: sales@chemical-concepts.com Website: www.chemical-concepts.com
Information department: Environment protection department.

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

Relevant identified uses: This product is intended to be used as an Adhesive or Sealant. Any other use is not recommended.

In Case of Emergency Contact: INFOTRAC: 800-535-1035

Section 2. Hazards Identification

2.1 Classification of the Substance or Mixture:

Flammable Liquids, Category 3
Skin Corrosion/Irritation, Category 2
Serious Eye Damage/Eye Irritation, Category 2
Specific Target Organ Toxicity (single exposure), Category 3

2.2 Label Elements:

GHS Signal Word: **Danger**

Hazard-determining components of labelling:
Methyl methacrylate
Methacrylic acid

GHS Hazard Phrases:
H226 - Flammable liquid and vapor.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H317 - May cause an allergic skin reaction.

GHS Precautionary Phrases:
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases:
P302+352 - IF ON SKIN: Wash with plenty of soap and water.
P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338 - 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 or doctor/physician if you feel unwell.
P337+313 - If eye irritation persists, get medical advice/attention.
P362+364 - Take off contaminated clothing and wash it before reuse.
P333+313 - If skin irritation or rash occurs, seek medical advice/attention.

GHS Storage and Disposal Phrases:

P403+233 - Store container tightly closed in well-ventilated place.
P403+235 - Store in cool/well-ventilated place.
P501 - Dispose of contents/container to local/regional/national/international regulations....

UFI:

2.3 Adverse Human Health Effects and Symptoms: Hazards not otherwise classified (HNOC) or not covered by GHS.

Rapidly absorbed through skin.

Section 3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
80-62-6	Methyl methacrylate 01-2119452498-28	60.0 -97.0 %	201-297-1 607-035-00-6	Flam. Liq. 2: H225 Skin Corr. 2: H315 Skin Sens. 1: H317 STOT (SE) 3: H335 H336
79-41-4	Methacrylic acid 01-2119463884-26	1.0 -3.0 %	201-204-4 607-088-00-5	Acute Tox.(O) 4: H302 Acute Tox.(D) 4: H312 Skin Corr. 1A: H314

Section 4. First Aid Measures

4.1 Description of First Aid Measures: Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Take off all contaminated clothing immediately. First Aid Providers should pay close attention to self-protection!

In Case of Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If experiencing respiratory symptoms call a POISON CENTER or doctor/physician.
In the case of lung irritation: Primary treatment using corticoide spray, eg. Auxiloson spray, Pulmicort-dosage-spray. (Auxiloson and Pulmicort are registered trademarks).

In Case of Skin Contact: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. If skin irritation or rash occurs, seek medical advice/attention.

In Case of 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.

In Case of Ingestion: Rinse mouth thoroughly with water. Let water be drank in little sips (dilution effect). Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps. In all cases of doubt, or when symptons persist, seek medical advice. Do NOT induce vomiting.

4.2 Important Symptoms and Effects, Both Acute and Delayed: Do not eat, drink, or smoke while working.

4.3 Indication of any immediate medical attention and special treatment needed: Treat symptomatically and supportively.

Section 5. Fire Fighting Measures

5.1	**Suitable Extinguishing Media:**	Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. In case of major fire and large quantities use atomized water.
	Unsuitable Extinguishing Media:	Do not use high power water jet.
5.2	**Flammable Properties and Hazards:**	
	Hazardous Combustion Products:	Carbon dioxide, carbon monoxide, irritating gases, and vapors can be released in case of fire.
	Flash Pt:	~ 24.00 C (75.2 F) Method Used: Estimate
	Explosive Limits:	LEL: UEL:
	Autoignition Pt:	NA
5.3	**Fire Fighting Instructions:**	In case of fire: Wear self-contained breathing apparatus. In case of fire and/or explosion do not breath fumes. Further information: Collect contaminated fire extinguishing water separately. Do not allow runoff to enter drains or surface water. Use water spray jet to protect personnel and to cool endangered containers. In case of major fire and large quantities: Evacuate area and fight fire remotely due to the risk of explosion.

Section 6. Accidental Release Measures

6.1	**Protective Precautions, Protective Equipment and Emergency Procedures:**	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.
6.2	**Environmental Precautions:**	Prevent further leakage or spillage if safe to do so. Prevent spread over a wide area through use of containment or oil barriers. In case of gas escape or of entry into waterways, soil, or drains: inform the responsible authorities. Do not let product enter drains. Discharge into the environment must be avoided.
6.3	**Methods and Material For Containment and Cleaning Up:**	Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid or universal binding agents). Ventilate affected area. Treat the recovered material in accordance with local and federat regulations. Clean contaminated objects and areas thoroughly while observing environmental regulations.

Section 7. Handling and Storage

7.1	**Precautions To Be Taken in Handling:**	Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Provide adequate ventilation as well as local exhaustion at critical locations.
7.2	**Precautions To Be Taken in Storing:**	Keep container tightly closed in a dry and well-ventilated place. Keep cool. Protect from sunlight. Make sure spills can be contained (e.g. sump pallets or kerbed areas).
	Other Precautions:	Do not store together with: Gas, Explosives, Flammable solids, Pyrophoric liquids and solids, self heating substances and mixtures, substances which emit flammable gases when in contact with water, oxidizing liquids, oxidizing solids, ammonium nitrate, organic peroxides, self-reacting substances and mixtures, non-combustible toxic substances, radioactive substances, or infectious substances. Keep packaging dry and well sealed to prevent contamination and absorption of humidity.

Section 8. Exposure Controls/Personal Protection

8.1 Exposure Parameters:

Do not store at temperatures below 20C or above 60C.

CAS #	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
80-62-6	Methyl methacrylate	ACGIH TLV	TLV: 50 ppm STEL: 100 ppm	
		Australia	TWA: 210 mg/m3 (50 ppm) STEL: 420 mg/m3 (100 ppm)	
		Belgium OEL	TWA: 208 mg/m3 (50 ppm) STEL: 416 mg/m3 (100 ppm)	
		Switzerland OEL	TWA: 210 mg/m3 (50 ppm) STEL: 420 mg/m3 (100 ppm)	
		German AGS (Ausschuss für Gefa	TWA: 210 mg/m3 (50 ppm) STEL: 420 mg/m3 (100 ppm) (15 min)	
		Germany MAK/TRK	TWA: 210 mg/m3 (50 ppm) STEL: 420 mg/m3 (100 ppm) (5min) (8x)	Sensitizer
		Denmark OEL	TWA: 102 mg/m3 (25 ppm) STEL: 204 mg/m3 (50 ppm)	
		Spain OEL	TWA: 208 mg/m3 (50 ppm) STEL: 416 mg/m3 (100 ppm)	
		Finland OEL	TWA: 42 mg/m3 (10 ppm) STEL: 210 mg/m3 (50 ppm) (15 min)	
		France VL	TWA: 410 mg/m3 (100 ppm) STEL: 820 mg/m3 (200 ppm)	
		Hungary OEL	TWA: 210 mg/m3 STEL: 210 mg/m3	
		Ireland OEL	TWA: 50 ppm STEL: 100 ppm (15 min)	
		Italy OEL	TWA: 50 ppm STEL: 100 ppm	
		Latvia OEL	TWA: 10 mg/m3	
		NIOSH	TWA: 410 mg/m3 (100 ppm)	
		Netherlands OEL	TWA: 205 mg/m3 (50 ppm) STEL: 410 mg/m3 (100 ppm)	
		OSHA PELs	PEL: 100 ppm	
		Poland	TWA: 100 mg/m3 STEL: 300 mg/m3	
		Sweden OEL	TWA: 200 mg/m3 (50 ppm) STEL: 600 mg/m3 (150 ppm) (15 min)	
		Britain EH40	TWA: 208 mg/m3 (50 ppm) STEL: 416 mg/m3 (100 ppm)	
79-41-4	Methacrylic acid	ACGIH TLV	TLV: 20 ppm	
		Australia	TWA: 70 mg/m3 (20 ppm)	
		Belgium OEL	TWA: 71 mg/m3 (20 ppm)	
		Switzerland OEL	TWA: 18 mg/m3 (5 ppm) STEL: 36 mg/m3 (10 ppm)	
		Germany MAK/TRK	TWA: 70 mg/m3 E (20 ppm) TWA: 18 mg/m3 E (5 ppm) TWA: 180 mg/m3 E (50 ppm)	
		Denmark OEL	TWA: 70 mg/m3 (20 ppm) STEL: 140 mg/m3 (40 ppm)	
		Spain OEL	TWA: 72 mg/m3 (20 ppm)	

79-41-4 Methacrylic acid (continued)	Finland OEL	TWA: 71 mg/m3 (20 ppm)	
	France VL	TWA: 70 mg/m3 (20 ppm)	
	Ireland OEL	TWA: 70 mg/m3 (20 ppm) STEL: 140 mg/m3 (40 ppm) (15 min)	
	Latvia OEL	TWA: 10 mg/m3	
	NIOSH	TWA: 70 mg/m3 (20 ppm)	
	Sweden OEL	TWA: 70 mg/m3 (20 ppm) STEL: 100 mg/m3 (30 ppm) (15 min)	
	Britain EH40	TWA: 72 mg/m3 (20 ppm) STEL: 143 mg/m3 (40 ppm)	

Derived No-Effect Levels / Predicted No Effect Concentrations:

79-41-4 Methacrylic acid

DNEL Worker	**Value**		**Remarks**
Long-term - Inhalation, local effects	352.000	mg/m³	DNEL (Derived No Effect Level)
Long-term - Inhalation, systemic effects	352.240	mg/m³	DNEL (Derived No Effect Level)
Long-term - Dermal, systemic effects	351.900	mg/kg bw/day	DNEL (Derived No Effect Level)
DNEL Consumer	**Value**		**Remarks**
Long-term - Inhalation, local effects	351.735	mg/m³	DNEL (Derived No Effect Level)
Long-term - Inhalation, systemic effects	352.800	mg/m³	DNEL (Derived No Effect Level)
Long-term - Dermal, systemic effects	351.900	mg/kg bw/day	DNEL (Derived No Effect Level)

80-62-6 Methyl methacrylate

DNEL Worker	**Value**		**Remarks**
Acute/short term - Dermal, local effects	15.000	mg/cm²	DNEL (Derived No Effect Level)
Long-term - Inhalation, local effects	208.000	mg/m³	DNEL (Derived No Effect Level)
Long-term - Inhalation, systemic effects	208.000	mg/m³	DNEL (Derived No Effect Level)
Long-term - Dermal, local effects	15.000	mg/cm²	DNEL (Derived No Effect Level)
Long-term - Dermal, systemic effects	164.040	mg/kg bw/day	DNEL (Derived No Effect Level)
DNEL Consumer	**Value**		**Remarks**
Acute/short term - Dermal, local effects	15.000	mg/cm²	DNEL (Derived No Effect Level)
Long-term - Inhalation, local effects	208.000	mg/m³	DNEL (Derived No Effect Level)
Long-term - Dermal, local effects	15.000	mg/cm²	DNEL (Derived No Effect Level)
Long-term - Dermal, systemic effects	164.000	mg/kg bw/day	DNEL (Derived No Effect Level)

79-41-4 Methacrylic acid

PNEC	**Value**		**Remarks**
aquatic, freshwater	0.820	mg/L	assessment factor.
aquatic, marine water	0.820	mg/L	assessment factor.
soil	1.200	mg/kg soil dw	equilibrium partitioning method.
aquatic, STP	10.000	mg/L	assessment factor.

80-62-6 Methyl methacrylate

PNEC	**Value**		**Remarks**
aquatic, sediment, freshwater	5.740	mg/kg sediment	equilibrium partitioning method.
aquatic, freshwater	0.940	mg/L	assessment factor.
aquatic, marine water	0.940	mg/L	assessment factor.
soil	1.470	mg/kg soil dw	equilibrium partitioning method.
aquatic, STP	10.000	mg/L	assessment factor.

8.2 Exposure Controls:

8.2.1 Engineering Controls (Ventilation etc.): Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing.

8.2.2 Personal protection equipment:

Eye Protection: Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Protective Gloves: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full contact.
Material: Nitrile rubber, Minimum layer thickness: 0.5 mm, Break through time: 480 min. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Other Protective Clothing:

Respiratory Equipment (Specify Type): Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls.

If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

8.2.3 Environmental Exposure Controls: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Exposure Scenarios: Do not allow uncontrolled discharge of product into the environmenmt.

Section 9. Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Physical States:	[ ] Gas [X] Liquid [ ] Solid
Appearance and Odor:	Neutral in color. characteristic odor.
pH:	
Melting Point:	~ -48.00 C (-54.4 F)
Boiling Point:	~ 100.00 C (212.0 F)
Flash Pt:	~ 24.00 C (75.2 F) Method Used: Estimate
Evaporation Rate:	
Saturated Vapor Concentration:	
Flammability (solid, gas):	
Explosive Limits:	LEL: UEL:
Vapor Pressure (vs. Air or mm Hg):	

Vapor Density (vs. Air = 1):	
Specific Gravity (Water = 1):	0.949
Density:	~ 1.015 G/CM3
Solubility in Water:	
Octanol/Water Partition Coefficient:	
Autoignition Pt:	NA
Decomposition Temperature:	
Viscosity:	
Explosive Properties:	No data available.
Oxidizing Properties:	No data available.

9.2 Other Information

9.2.1 Information with regard to physical hazard classes

Information with regard to primary physical hazard:

9.2.2 Other safety characteristics

VOC < 50 g/l mixed

Section 10. Stability and Reactivity

10.1	**Reactivity:**	This product is chemically stable under recommended conditions of storage, use and temperature. This product can polymerize exothermically in the absence of stabilizers, particularly in acid conditions or if the shelf life is exceeded. Stabilization is required by oxygen.
10.2	**Stability:**	Unstable [ ] Stable [X]
10.3	**Conditions To Avoid - Hazardous Reactions:**	Keep away from heat and sources of ignition. Hazardous polymerization will not occur when stored under precribed conditions and within the shelf life of the material.
	Possibility of Hazardous Reactions:	Will occur [ ] Will not occur [X]
10.4	**Conditions To Avoid - Instability:**	Heat, flames and sparks. Protect against direct sunlight or UV radiation. Do not store at temperatures over 60C. Excessive heat can cause sealed containers to burst potentially creating an explosive explosive/flammable vapour-air mixture.
10.5	**Incompatibility - Materials To Avoid:**	Amines, Strong bases, Reaction with strong acids. Reacts with strong oxidants. Oxidizing agents, Peroxides.
10.6	**Hazardous Decomposition or Byproducts:**	Irritating gases/vapours, carbon monoxide, carbon dioxide.

Section 11. Toxicological Information

11.1 Information on Toxicological Effects: This product is sensitizing and may cause an allergic skiin reaction.
People who suffer from skin sensitization problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this preparation.
CAS# 80-62-6: Acute toxicity, LD50, Oral, Rat, 7872. MG/KG; Journal of Industrial Hygiene and Toxicology, Vol/p/yr: 23,343, 1941
Acute toxicity, LC50, Inhalation, Rat, 78000. MG/M3, 4 H. Result: Behavioral: Coma. ; Gigiena Truda i Professional'nye Zabolevaniya.(Labor Hygiene and Occupational Disease), V/O Mezhdunarodnaya Kniga, Vol/p/yr: 20(6),5, 1976
Acute toxicity, LD50, Skin, Species: Rabbit, > 5.000 GM/KG. Result: Skin and Appendages: Skin: After systemic exposure: Dermatitis, other. ; National Technical Information Service, Vol/p/yr: OTS0544282,
CAS# 79-41-4: Acute toxicity, LD50, Oral, Mouse, 1250. MG/KG; Gigiena Truda i Professional'nye Zabolevaniya.(Labor Hygiene and Occupational Disease), V/O Mezhdunarodnaya Kniga, Vol/p/yr: 25(11),57, 1981
Acute toxicity, LD50, Skin, Species: Rabbit, 500.0 MG/KG. Result: Lungs, Thorax, or Respiration:Other changes. Biochemical:Metabolism (intermediary): Effect on inflammation or mediation of inflammation. ; "Documentation of the Threshold Limit Values and Biological Exposure Indices," 5th ed., American Conference of Governmental Industrial Hygienists, I, Vol/p/yr: 5,362, 1986

Irritation or Corrosion: Causes skin irritation.
Causes serious eye irritation.

Sensitization: This product is sensitizing.

Chronic Toxicological Effects: Prolonged exposure to this product may be harmful.

Carcinogenicity/Other Information: IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

Section 12. Ecological Information

12.1 Toxicity: This product is not considered hazardous to the environment. Any significant release of material can have an impact on the environment and should be considered.

12.2 Persistence and Degradability: Semi-Solid.

12.3 Bioaccumulative Potential: Partition coefficient n-octanol / water (log Kow)
Methacrylic Acid 0.93
Methylmethacrylate 1.38

12.4 Mobility in Soil: No data available.

12.5 Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13. Disposal Considerations

13.1 Waste Disposal Method: Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Control report for waste code / waste marking according to EAKV

WASTE DISPOSAL NUMBER OF WASTE FROM RESIDUES/UNUSED PRODUCTS
080409 wastes from the manufacture, formulation, supply and use (MFSU) of coatings, adhesives, sealants and printing inks.

WASTE DISPOSAL NUMBER OF USED PRODUCT
080409 wastes from the manufacture, formulation, supply and use (MFSU) of coatings, adhesives, sealants, and printing inks.

WASTE DISPOSAL NUMBER OF CONTAMINATED PACKAGING
150110 waste packaging, absorbants, wiping, cloths, filter materials, and protective clothing not otherwise specified

Contaminated packaging should be handled in the same way as the substance itself.

Section 14. Transport Information

14.1 LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Adhesives, [containing a flammable liquid]
Special Provisions 149, B52, IB2, T4, TP1, TP8
Packaging Exceptions 150
Packaging (Non-Bulk) 173
Packaging (Bulk) 242

DOT Hazard Class: 3 FLAMMABLE LIQUID

UN/NA Number: UN1133 **Packing Group:** III

14.1 LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Adhesives, [containing a flammable liquid]
Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

UN Number: UN1133 **Packing Group:** III

Hazard Class: 3 - FLAMMABLE LIQUID **ADR Classification:** F1

ADR Tunnel Code: D/E

14.2 MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Adhesives, [containing a flammable liquid] Semi-Solid.

UN Number: UN1133 **Packing Group:** III

Hazard Class: 3 - FLAMMABLE LIQUID

IMDG EMS Number: F-E, S-D

Marine Pollutant: No

14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Adhesives, [containing a flammable liquid] Semi-Solid.

UN Number: UN1133 **Packing Group:** III

Hazard Class: 3 - FLAMMABLE LIQUID **IATA Classification:** 3

Section 15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
80-62-6	Methyl methacrylate	No	Yes NA	Yes
79-41-4	Methacrylic acid	No	No	No

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

[ ] Yes [X] No Explosive
[X] Yes [ ] No Flammable (gases, aerosols, liquid, or solid)
[ ] Yes [X] No Oxidizer (liquid, solid or gas)
[ ] Yes [X] No Self-reactive
[ ] Yes [X] No Pyrophoric (liquid or solid)
[ ] Yes [X] No Pyrophoric gas
[ ] Yes [X] No Self-heating
[ ] Yes [X] No Organic peroxide
[ ] Yes [X] No Corrosive to metal
[ ] Yes [X] No Gas under pressure (compressed gas)
[ ] Yes [X] No In contact with water emits flammable gas
[ ] Yes [X] No Combustible Dust
[ ] Yes [X] No (Physical) Hazard Not Otherwise Classified (HNOC)

[ ] Yes [X] No Acute toxicity (any route of exposure)
[X] Yes [ ] No Skin Corrosion or Irritation
[X] Yes [ ] No Serious eye damage or eye irritation
[ ] Yes [X] No Respiratory or Skin Sensitization
[ ] Yes [X] No Germ cell mutagenicity
[ ] Yes [X] No Carcinogenicity
[ ] Yes [X] No Reproductive toxicity
[X] Yes [ ] No Specific target organ toxicity (single or repeated exposure)
[ ] Yes [X] No Aspiration Hazard
[ ] Yes [X] No Simple Asphyxiant
[ ] Yes [X] No (Health) Hazard Not Otherwise Classified (HNOC)

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
80-62-6	Methyl methacrylate	TSCA: Yes - Inventory: Active/Exempt; CA PROP.65: No
79-41-4	Methacrylic acid	TSCA: Yes - Inventory: Active/Exempt; CA PROP.65: No

CAS #	Hazardous Components (Chemical Name)	International Regulatory Lists
80-62-6	Methyl methacrylate	REACH: Yes - 01-2119452498-28: Full, (P)
79-41-4	Methacrylic acid	REACH: Yes - 01-2119463884-26: Full, (P)

Section 16. Other Information

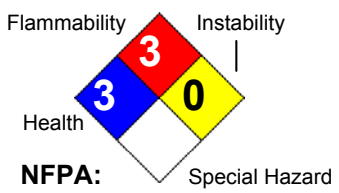
Revision Date: 03/20/2023

Hazard Rating System:

HMIS:

HEALTH	3
FLAMMABILITY	3
PHYSICAL	0
PPE	Ap

NFPA:



Additional Information About This Product:

Company Policy or Disclaimer: The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice

Multi-region format

about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Chemical™ Concepts
Our expertise is your solution.
chemical-concepts.com
800.220.1966
410 Pike Road • Huntingdon Valley, PA 19006

Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Name: **UL607 Activator**

Manufacturer: **Chemical Concepts, Inc.**
410 Pike Road
Huntingdon Valley, PA. 19006
Phone: 800.220.1966
Email: sales@chemical-concepts.com Website: www.chemical-concepts.com
Information department: Environment protection department.

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

Relevant identified uses: This product is intended to be used as an Adhesive or Sealant. Any other use is not recommended.

In Case of Emergency Contact: INFOTRAC: 800-535-1035

Section 2. Hazards Identification

2.1 Classification of the Substance or Mixture:

Organic Peroxides, Type G
Skin Corrosion/Irritation, Category 2
Serious Eye Damage/Eye Irritation, Category 2
Skin Sensitization, Category 1

2.2 Label Elements:

Warning **GHS Signal Word:**

Hazard-determining components of labelling:
Oxirane, 2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-
Benzoyl peroxide

GHS Hazard Phrases:
H242 - Heating may cause a fire.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.

GHS Precautionary Phrases:
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P234 - Keep only in original container.
P235 - Keep cool.
P240 - Ground/bond container and receiving equipment.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash hands thoroughly after handling.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases:
P302+352 - IF ON SKIN: Wash with plenty of soap and water.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.
P321 - Specific treatment see Section 4 and or information on this label.
P332+313 - If skin irritation occurs, get medical advice/attention.
P333+313 - If skin irritation or rash occurs, seek medical advice/attention.
P337+313 - If eye irritation persists, get medical advice/attention.
P362+364 - Take off contaminated clothing and wash it before reuse.

GHS Storage and Disposal Phrases:

P403 - Store in well-ventilated place.
P410 - Protect from sunlight.
P411 - Store at temperatures not exceeding 25°C/77°F.
P420 - Store away from other materials.
P501 - Dispose of contents/container to local/official regulations.

UFI:

2.3 Adverse Human Health Hazards not otherwise classified (HNOC) or not covered by GHS -none.

Effects and Symptoms:

Section 3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
1675-54-3	Oxirane, 2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bis- 01-2119456619-26	65.0 -90.0 %	216-823-5 603-073-00-2	Skin Corr. 2: H315 Skin Sens. 1: H317 Eye Damage 2: H319
94-36-0	Benzoyl peroxide 01-2119511472-50	10.0 -15.0 %	202-327-6 617-008-00-0	Org. Perox. B: H241 Skin Sens. 1: H317 Eye Damage 2A: H319

Section 4. First Aid Measures

4.1 Description of First Aid Measures: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

In Case of Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In Case of Skin Contact: Wash off with soap and plenty of water. Consult a physician.

In Case of Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

In Case of Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Important Symptoms and Effects, Both Acute and Delayed: The most important known symptoms and effects are described in the labelling (see section 2 .2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed: No data available.

Section 5. Fire Fighting Measures

5.1	**Suitable Extinguishing Media:**	Semi-Solid. Sand, Foam, Carbon Dioxide, or Extinguishing powder. In case of major fire and large quantities use water jet spray or mist.
	Unsuitable Extinguishing Media:	Semi-Solid. High power water jet.
5.2	**Flammable Properties and Hazards:**	Semi-Solid. Irritating gases and vapors can be released in case of fire.
	Hazardous Combustion Products:	Semi-Solid. Carbon dioxide, carbon monoxide, irritating gases, and vapors can be released in case of fire.
	Flash Pt:	252.00 C (485.6 F) Method Used: Estimate
	Explosive Limits:	LEL: UEL:
	Autoignition Pt:	
5.3	**Fire Fighting Instructions:**	Wear self contained breathing apparatus for fire fighting if necessary. Further information: No data available. Use water spray to cool unopened containers.

Section 6. Accidental Release Measures

6.1	**Protective Precautions, Protective Equipment and Emergency Procedures:**	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. For personal protection see section 8. Evacuate personnel to safe areas. Avoid breathing dust.
6.2	**Environmental Precautions:**	Prevent further leakage or spillage if safe to do so. Prevent spread over a wide area through use of containment or oil barriers. In case of gas escape or of entry into waterways, soil, or drains: inform the responsible authorities. Do not let product enter drains. Discharge into the environment must be avoided.
6.3	**Methods and Material For Containment and Cleaning Up:**	Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid or universal binding agents). Ventilate affected area. Treat the recovered material in accordance with local and federat regulations. Clean contaminated objects and areas thoroughly while observing environmental regulations.

Section 7. Handling and Storage

7.1	**Precautions To Be Taken in Handling:**	Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. For precautions see section 2. Wear suitable protective clothing (See section 8)
7.2	**Precautions To Be Taken in Storing:**	Keep container tightly closed in a dry and well-ventilated place. Only use containers specifically approved for the substance/product.
	Other Precautions:	Do not store together with Eplosives, Oxidizing solids, Oxidizing liquids, Radioactive substances, infectious substances, or Animal feedstuff.

Section 8. Exposure Controls/Personal Protection

8.1 Exposure Parameters:

Multi-region format

CAS #	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
94-36-0	Benzoyl peroxide	ACGIH TLV	TLV: 5 mg/m3	
		Australia	TWA: 5 mg/m3 STEL: 10 mg/m3 (Inhalable aerosol)	
		Belgium OEL	TWA: 5 mg/m3	
		Switzerland OEL	TWA: 5 mg/m3 (Inhalable aerosol)	

94-36-0 Benzoyl peroxide (continued)	German AGS (Ausschuss für Gefa	TWA: 5 mg/m3 STEL: 5 mg/m3 (15 min) (Inhalable aerosol)	
	Germany MAK/TRK	TWA: 5 mg/m3 STEL: 10 mg/m3 (5min) (8x)	Sensitizer
	Denmark OEL	TWA: 5 mg/m3 STEL: 10 mg/m3	
	Spain OEL	TWA: 5 mg/m3	Sensitizer
	Finland OEL	TWA: 5 mg/m3 STEL: 10 mg/m3 (15 min)	
	France VL	TWA: 5 mg/m3	
	Hungary OEL	TWA: 5 mg/m3 STEL: 5 mg/m3	
	Ireland OEL	TWA: 5 mg/m3	
	NIOSH	TWA: 5 mg/m3	
	OSHA PELs	PEL: 5 mg/m3	
	Britain EH40	TWA: 5 mg/m3 () STEL: ()	

Derived No-Effect Levels / Predicted No Effect Concentrations:

94-36-0 Benzoyl peroxide

DNEL Worker	Value		Remarks
Long-term - Inhalation, systemic effects	494.000	mg/m³	ECHA REACH Guidance.
Long-term - Dermal, systemic effects	1166.000	mg/kg bw/day	ECHA REACH Guidance.
DNEL Consumer	**Value**		**Remarks**
Long-term - Oral, systemic effects	200.000	mg/kg bw/day	ECHA REACH Guidance.

1675-54-3 Oxirane, 2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-

DNEL Worker	Value		Remarks
Long-term - Inhalation, systemic effects	61.700	mg/m³	ECHA REACH Guidance.

94-36-0 Benzoyl peroxide

PNEC	Value		Remarks
aquatic, sediment, freshwater	0.013	mg/kg sediment	equilibrium partitioning method.
aquatic, sediment, marine water	0.001	mg/kg sediment	equilibrium partitioning method.
aquatic, freshwater	0.020	µg/L	
aquatic, marine water	0.002	µg/L	
soil	0.003	mg/kg soil dw	equilibrium partitioning method.
aquatic, STP	0.350	mg/L	

8.2 Exposure Controls:

8.2.1 Engineering Controls (Ventilation etc.): Provide adequate ventilation.

8.2.2 Personal protection equipment:

Eye Protection: Safety glasses should be worn when handling this material. If splashing is possible chemical goffles or face shield should be worn. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Protective Gloves: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Material: Nitrile rubber, Minimum layer thickness: 0..35 mm, Break through time: >=480 min.
This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Other Protective Clothing: Lab coat or apron should be worn when contamination of clothing is likely. Minimum standard for preventive measures while handling or working with materials is specified in the TRGS 500.

Respiratory Equipment (Specify Type): With correct and proper use, and under normal conditions, breathing protection is not required. Respiratory protection is necessary exposure limit values are exceeded and/or when insufficient ventilation results in an aersol or mist formation.
A particulate filter device in accordance with DIN EN 143 Type P1-3 is typically suitable. The filter class must be suitable for the maximum contaminate concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, a self-contained breathing apparatus must be used. Observe the wear time limits according to GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

8.2.3 Environmental Exposure Controls: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Exposure Scenarios: Ingredient CAS# 94-36-0, Dibenzoyl Peroxide:

Section 9. Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Physical States:	[ ] Gas [X] Liquid [ ] Solid
Appearance and Odor:	Paste. characteristic odor.
pH:	
Melting Point:	> 100.00 C (212.0 F)
Boiling Point:	> 300.00 C (572.0 F)
Flash Pt:	252.00 C (485.6 F) Method Used: Estimate
Evaporation Rate:	
Saturated Vapor Concentration:	
Flammability (solid, gas):	No data available.

Explosive Limits:	LEL:	UEL:
Vapor Pressure (vs. Air or mm Hg):		
Vapor Density (vs. Air = 1):		
Specific Gravity (Water = 1):	~ 1.149	
Density:	~ 1.168 G/CM3	
Solubility in Water:		
Octanol/Water Partition Coefficient:		
Autoignition Pt:		
Decomposition Temperature:		
Viscosity:		
Explosive Properties:	No data available.	
Oxidizing Properties:	No data available.	

9.2 Other Information

9.2.1 Information with regard to physical hazard classes

Information with regard to primary physical hazard:

9.2.2 Other safety characteristics

VOC < 50 g/l mixed

Section 10. Stability and Reactivity

10.1	**Reactivity:**	This product is chemically stable under recommended conditions of storage, use and temperature.
10.2	**Stability:**	Unstable [ ] Stable [X]
10.3	**Conditions To Avoid - Hazardous Reactions:**	Protect against UV Radiation, Direct sunlight, heat, open flame, and sparks.
	Possibility of Hazardous Reactions:	Will occur [ ] Will not occur [X]
10.4	**Conditions To Avoid - Instability:**	Protect against UV Radiation, Direct sunlight, heat, open flame, and sparks.
10.5	**Incompatibility - Materials To Avoid:**	Strong oxidizing agents, acids, Amines, Bases, Metals, Alcohols.
10.6	**Hazardous Decomposition or Byproducts:**	No known hazardous decomposition products.

Section 11. Toxicological Information

11.1 Information on Toxicological Effects: Based on available data, the classification criteria for acute toxicity are not met.
CAS# 1675-54-3: Acute toxicity, LD50, Oral, Rat, 11300. UL/KG; Union Carbide Data Sheet, Union Carbide Corp., Vol/p/yr: 4/21, 1967
Acute toxicity, LD50, Skin, Species: Rabbit, 20.00 GM/KG. Result: Behavioral: Somnolence (general depressed activity). Gastrointestinal:Hypermotility, diarrhea. Nutritional and Gross Metabolic:Weight loss or decreased weight gain. ; "Patty's Industrial Hygiene and Toxicology," 3rd rev. ed., Clayton, G.D., and F.E. Clayton, eds., John Wiley & Sons, Inc., Vol/p/yr: 2A,2219, 1981

Irritation or Corrosion: Causes skin irritation.
Causes serious eye irritation.

Sensitization: This product is sensitizing and contains epoxy constituents. This product may produce or cause an allergic skin reaction. People who suffer from skin snsitization problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this preparation.

Chronic Toxicological Effects: Specific target organ toxicity - single exposure: Semi-Solid.

Specific target organ toxicity - repeated exposure: Semi-Solid.

Carcinogenicity/Other Information: IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

Section 12. Ecological Information

12.1 Toxicity: This product is not considered hazardous to the environment. Any significant release of material can have an impact on the environment and should be considered.

12.2 Persistence and Degradability: No information available.

12.3 Bioaccumulative Potential: Partition coefficient n-octanol / water (log Pow)
Epoxy : >=2,918
DiBenzoyl Peroxide : 3.2.

12.4 Mobility in Soil: No data available.

12.5 Results of PBT and vPvB assessment: The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13. Disposal Considerations

13.1 Waste Disposal Method:

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Control report for waste code / waste marking according to EAKV

WASTE DISPOSAL NUMBER OF WASTE FROM RESIDUES/UNUSED PRODUCTS
080409 wastes from the manufacture, formulation, supply and use (MFSU) of coatings, adhesives, sealants and printing inks.

WASTE DISPOSAL NUMBER OF USED PRODUCT
080409 wastes from the manufacture, formulation, supply and use (MFSU) of coatings, adhesives, sealants, and printing inks.

WASTE DISPOSAL NUMBER OF CONTAMINATED PACKAGING
150110 waste packaging, absorbants, wiping, cloths, filter materials, and protective clothing not otherwise specified

Contaminated packaging should be handled in the same way as the substance itself.

Section 14. Transport Information

14.1 LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not regulated as dangerous goods
DOT Hazard Class:
UN/NA Number:

14.1 LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Not regulated as dangerous goods
UN Number:
Hazard Class:

14.2 MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Not regulated as dangerous goods
UN Number:
Packing Group:
Hazard Class:
IMDG MFAG Number:
Marine Pollutant: No

14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not regulated as dangerous goods
UN Number:
Packing Group:
Hazard Class:

Section 15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
1675-54-3	Oxirane, 2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-	No	No	No
94-36-0	Benzoyl peroxide	No	No	Yes

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

[ ] Yes [X] No Explosive
[ ] Yes [X] No Flammable (gases, aerosols, liquid, or solid)
[ ] Yes [X] No Oxidizer (liquid, solid or gas)
[ ] Yes [X] No Self-reactive
[ ] Yes [X] No Pyrophoric (liquid or solid)
[ ] Yes [X] No Pyrophoric gas
[ ] Yes [X] No Self-heating
[X] Yes [ ] No Organic peroxide
[ ] Yes [X] No Corrosive to metal
[ ] Yes [X] No Gas under pressure (compressed gas)
[ ] Yes [X] No In contact with water emits flammable gas
[ ] Yes [X] No Combustible Dust
[ ] Yes [X] No (Physical) Hazard Not Otherwise Classified (HNOC)
[ ] Yes [X] No Acute toxicity (any route of exposure)
[X] Yes [ ] No Skin Corrosion or Irritation
[X] Yes [ ] No Serious eye damage or eye irritation
[X] Yes [ ] No Respiratory or Skin Sensitization
[ ] Yes [X] No Germ cell mutagenicity
[ ] Yes [X] No Carcinogenicity
[ ] Yes [X] No Reproductive toxicity
[ ] Yes [X] No Specific target organ toxicity (single or repeated exposure)
[ ] Yes [X] No Aspiration Hazard
[ ] Yes [X] No Simple Asphyxiant
[ ] Yes [X] No (Health) Hazard Not Otherwise Classified (HNOC)

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
1675-54-3	Oxirane, 2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-	TSCA: Yes - Inventory: Active/Exempt, 8A; CA PROP.65: No
94-36-0	Benzoyl peroxide	TSCA: Yes - Inventory: Active/Exempt; CA PROP.65: No

CAS #	Hazardous Components (Chemical Name)	International Regulatory Lists
1675-54-3	Oxirane, 2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-	REACH: Yes - (P)
94-36-0	Benzoyl peroxide	REACH: Yes - 01-2119511472-50: Full, (P)

Section 16. Other Information

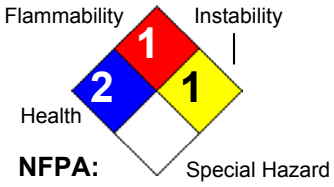
Revision Date: 07/06/2022

Hazard Rating System:

HMIS:

HEALTH	2
FLAMMABILITY	1
PHYSICAL	1
PPE	Ap

NFPA:



Additional Information About This Product:

Company Policy or Disclaimer:

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.