

Reviewed on 03/29/2023

1 Identification

- · Product identifier
- · Trade name: Chemcon Adhesive Hardener Liquid
- · Article number: Chemcon Adh Hardener Liq
- \cdot Details of the supplier of the safety data sheet

• Manufacturer/Supplier: Chemical Consultants Inc. 1850 Wild Turkey Circle Corona, CA 92878 USA +1 (951) 735-5511 ncollins@ccidom.com

• Information department: Product safety department

• Emergency telephone number: INFOTRAC 1-800-535-5053

2 Hazard(s) identification

· Classification of the substance or mixture

GHS02 Flame

Flammable Liquids 2

H225 Highly flammable liquid and vapor.

GHS08 Health hazard

Specific Target Organ Toxicity - Repeated Exposure 2 H373 May cause damage to organs through prolonged or repeated exposure.

GHS07

Eye Irritation 2A Specific Target Organ Toxicity - Single Exposure 3 H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

· Label elements

• *GHS label elements* The product is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms*



· Signal word Danger

• *Hazard-determining components of labeling:* acetone N,N-dimethyl-p-toluidine

• Hazard statements H225 Highly flammable liquid and vapor. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

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H373 May cause de	amage to organs through prolonged or repeated exposure.
· Precautionary state	ements
P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/
	shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present
	and easy to do. Continue rinsing.
P312	Call a poison center/doctor if you feel unwell.
P314	Get medical advice/attention if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use CO2, powder or water spray to extinguish.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international
	regulations.
• Other hazards	

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

• Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:		
67-64-1	acetone	>90%
99-97-8	N,N-dimethyl-p-toluidine	<10%

4 First-aid measures

· Description of first aid measures

· General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.

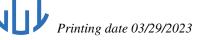
· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

• After swallowing: If symptoms persist consult doctor.

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· Information for doctor:

- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

5 *Fire-fighting measures*

- · Extinguishing media
- · Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Special hazards arising from the substance or mixture
- During heating or in case of fire poisonous gases are produced.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures	
Mount respiratory protective device.	
Wear protective equipment. Keep unprotected persons away.	
• Environmental precautions:	
Dilute with plenty of water.	
For large spills: Do not allow to enter sewers/ surface or ground water.	
• Methods and material for containment and cleaning up:	
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).	
Dispose contaminated material as waste according to item 13.	
Ensure adequate ventilation.	
· Reference to other sections	
See Section 7 for information on safe handling.	
See Section 8 for information on personal protection equipment.	
See Section 13 for disposal information.	
· Protective Action Criteria for Chemicals	
· PAC-1:	
67-64-1 acetone	200 ppm
• PAC-2:	
67-64-1 acetone	3200* ppm
· PAC-3:	
67-64-1 acetone	5700* ppm

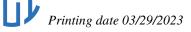
7 Handling and storage

· Handling:

- · Precautions for safe handling
- Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of aerosols.
- · Information about protection against explosions and fires:
- Keep ignition sources away Do not smoke.
- Protect against electrostatic charges.
- Keep respiratory protective device available.

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- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed. Store in cool, dry conditions in well sealed receptacles.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- · Control parameters

• Components with limit values that require monitoring at the workplace:

67-64-1 acetone

- PEL Long-term value: 2400 mg/m³, 1000 ppm
- REL Long-term value: 590 mg/m³, 250 ppm
- TLV Short-term value: 500 ppm Long-term value: 250 ppm A4, BEI

99-97-8 N,N-dimethyl-p-toluidine

WEEL Long-term value: 0.5 ppm

· Ingredients with biological limit values:

67-64-1 acetone

BEI 25 mg/L

Medium: urine Time: end of shift Parameter: Acetone (nonspecific)

• Additional information: The lists that were valid during the creation were used as basis.

· Exposure controls

- · Personal protective equipment:
- General protective and hygienic measures:
- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Store protective clothing separately.
- Avoid contact with the eyes.

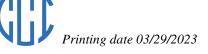
Avoid contact with the eyes and skin.

• Breathing equipment:

Personal protective equipment should be selected based on an assessment of risk of exposure as uses and conditions of use vary and there is no single PPE scenario that fits all. There are chemicals in the blend that evaporate into the air and under conditions of large use volumes in combination with limited ventilation, respiratory protection may be warranted. Conditions where the worker uses the product in small amounts with local exhaust ventilation, protective gloves and eye protection may be sufficient to control exposure

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· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation \cdot **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

 \cdot Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.





Tightly sealed goggles

Information on basic physical and c General Information	hemical properties
Appearance:	
Form:	Fluid
Color:	According to product specification
Odor:	Characteristic
Odor threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	-94.7 °C (-138.5 °F)
Boiling point/Boiling range:	55 °C (131 °F)
Flash point:	-17 °C (1.4 °F)
Flammability (solid, gaseous):	Highly flammable.
Ignition temperature:	465 °C (869 °F)
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapo mixtures are possible.
Explosion limits:	
Lower:	2.6 Vol %
Upper:	13 Vol %
Vapor pressure at 20 °C (68 °F):	233 hPa (174.8 mm Hg)



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· Density at 20 °C (68 °F):	0.79345 g/cm ³ (6.62134 lbs/gal)	
· Relative density	Not determined.	
· Vapor density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Fully miscible.	
· Partition coefficient (n-octanol/	water): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
VOC content:	0.0 g/l / 0.00 lb/gal	
• Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

• Acute toxicity:

· LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Oral	LD50	4,348 mg/kg
Dermal	LD50	13,043 mg/kg
Inhalative		

· Primary irritant effect:

• on the skin: No irritant effect.

• on the eye: Irritating effect.

• Sensitization: No sensitizing effects known.

 \cdot Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

99-97-8 N,N-dimethyl-p-toluidine

· NTP (National Toxicology Program)

None of the ingredients is listed.

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· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- $\cdot \textit{Bioaccumulative potential No further relevant information available}.$
- Mobility in soil No further relevant information available.
- \cdot Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- **Recommendation:** Dispose of content and/or container in accordance with local regional no
 - Dispose of content and/or container in accordance with local, regional, national and/or international regulations.
- · Uncleaned packagings:
- · Recommendation:

Dispose of content and/or container in accordance with local, regional, national and/or international regulations • **Recommended cleansing agent:** Water, if necessary with cleansing agents.

· UN-Number		
· DOT, IMDG, IATA	UN1993	
· UN proper shipping name		
$\cdot DOT$	Flammable liquids, n.o.s. (Acetone)	
· IMDG, IATA	FLAMMABLE LIQUID, N.O.S. (ACETONE)	
· Transport hazard class(es)		
·DOT		
RAMARE LOUD		
· Class	3 Flammable liquids	

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	(Contd. of page
Label	3
IMDG, IATA	
Class	3 Flammable liquids
Label	3
Packing group DOT, IMDG, IATA	II
Environmental hazards: Marine pollutant:	No
Special precautions for user	Warning: Flammable liquids
Hazard identification number (Kemler code)	
EMS Number: Stowage Category	F-E, <u>S-E</u> B
0 0 0	D
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
DOT	
Quantity limitations	On passenger aircraft/rail: 5 L
	On cargo aircraft only: 60 L
IMDG	
Limited quantities (LQ)	1L
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	UN 1993 FLAMMABLE LIQUID, N.O.S. (ACETONE), 3, II

15 Regulatory information

• Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

· Sara

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

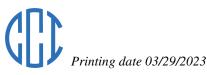
All components have the value ACTIVE.

· Hazardous Air Pollutants

None of the ingredients is listed.

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Proposition 65 Chemicals known to cause cancer: 99-97-8 N,N-dimethyl-p-toluidine Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed. Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed. Chemicals known to cause developmental toxicity: None of the ingredients is listed. Chemicals known to cause developmental toxicity: None of the ingredients is listed. Chemicals known to cause developmental toxicity: None of the ingredients is listed. Chemicals known to cause developmental toxicity: None of the ingredients is listed. Chemicals known to cause developmental toxicity: None of the ingredients is listed. Chemicals known to cause developmental toxicity: None of the ingredients is listed. Chemicals known to cause developmental toxicity: None of the ingredients is listed. Pennsylvania Right-to-Know List: 67-64-1 acetone F3 Pennsylvania Special Hazardous Substance List: 67-64-1 acetone E Carcinogenic categories EPA (Environmental Protection Agency) 67-64-1 acetone I TLV (Threshold Limit Value) 67-64-1 acetone A4		(Contd. of page 8)
99-97-8 N,N-dimethyl-p-toluidine • Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed. • Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed. • Chemicals known to cause developmental toxicity: None of the ingredients is listed. • Chemicals known to cause developmental toxicity: None of the ingredients is listed. • New Jersey Special Hazardous Substance List: 67-64-1 67-64-1 acetone F3 • Pennsylvania Special Hazardous Substance List: 67-64-1 67-64-1 acetone E • Carcinogenic categories E • Carcinogenic categories F74 (Environmental Protection Agency) 67-64-1 acetone I	· Proposition 65	
• Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed. • Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed. • Chemicals known to cause developmental toxicity: None of the ingredients is listed. • Chemicals known to cause developmental toxicity: None of the ingredients is listed. • New Jersey Special Hazardous Substance List: 67-64-1 acetone • Pennsylvania Right-to-Know List: 67-64-1 acetone • Pennsylvania Special Hazardous Substance List: 67-64-1 acetone • Carcinogenic categories • EPA (Environmental Protection Agency) 67-64-1 acetone • TLV (Threshold Limit Value)	· Chemicals known to cause cancer:	
None of the ingredients is listed. • Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed. • Chemicals known to cause developmental toxicity: None of the ingredients is listed. • New Jersey Special Hazardous Substance List: 67-64-1 acetone • Pennsylvania Right-to-Know List: 67-64-1 acetone • Pennsylvania Special Hazardous Substance List: 67-64-1 acetone • Carcinogenic categories • EPA (Environmental Protection Agency) 67-64-1 acetone	99-97-8 N,N-dimethyl-p-toluidine	
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None of the ingredients is listed. New Jersey Special Hazardous Substance List: 67-64-1 acetone F3 Pennsylvania Right-to-Know List: 67-64-1 acetone 67-64-1 acetone F3 Pennsylvania Special Hazardous Substance List: 67-64-1 acetone F3 Pennsylvania Special Hazardous Substance List: 67-64-1 acetone E Carcinogenic categories EPA (Environmental Protection Agency) 67-64-1 acetone 1 TLV (Threshold Limit Value)	None of the ingredients is listed.	
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67-64-1acetoneF3• Pennsylvania Right-to-Know List:67-64-1acetone67-64-1acetoneE• Pennsylvania Special Hazardous Substance List:E67-64-1acetoneE• Carcinogenic categoriesE• EPA (Environmental Protection Agency)167-64-1acetone1• TLV (Threshold Limit Value)1	None of the ingredients is listed.	
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67-64-1 acetone E • Carcinogenic categories . • EPA (Environmental Protection Agency) 67-64-1 67-64-1 acetone I • TLV (Threshold Limit Value) I	67-64-1 acetone	
Carcinogenic categories EPA (Environmental Protection Agency) 67-64-1 acetone I TLV (Threshold Limit Value)	· Pennsylvania Special Hazardous Substance List:	
· EPA (Environmental Protection Agency) 67-64-1 I · TLV (Threshold Limit Value) I	67-64-1 acetone	E
67-64-1 acetone I • TLV (Threshold Limit Value) I	· Carcinogenic categories	
• TLV (Threshold Limit Value)	· EPA (Environmental Protection Agency)	
	67-64-1 acetone	Ι
67-64-1 acetone A4	· TLV (Threshold Limit Value)	
	67-64-1 acetone	A4

Safety Data Sheet acc. to OSHA HCS

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

• GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). · Hazard pictograms



· Signal word Danger

· Hazard-determining components of labeling:

acetone

N,N-dimethyl-p-toluidine

· Hazard statements

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

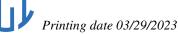
H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
- P242 Use only non-sparking tools.
- Take precautionary measures against static discharge. P243
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P264 Wash thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.

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	(Contd. of page 9)
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present
	and easy to do. Continue rinsing.
P312	Call a poison center/doctor if you feel unwell.
P314	Get medical advice/attention if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use CO2, powder or water spray to extinguish.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Environment protection department.

- · Contact: Mr. Collins
- · Date of preparation / last revision 03/29/2023 · Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit BEI: Biological Exposure Limit Flammable Liquids 2: Flammable liquids – Category 2 Eye Irritation 2A: Serious eye damage/eye irritation - Category 2A Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) - Category 3 Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) - Category 2