

SDS Revision Date:

03/28/2014

# 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Identity ZIP-LIP

Alternate Names Liquid Adhesive, Mixture

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

Intended use Liquid adhesive

**Application Method** See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name The Dodge Company, Inc

9 Progress Road Billerica, MA 01821

**Emergency** 

CHEMTREC (USA) (800) 424-9300

**Customer Service** 

The Dodge Company, Inc (800) 443-6343, (978) 600-2099

# 2. Hazard identification of the product

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

Acute Tox. 4;H302 Harmful if swallowed. Skin Irrit. 2;H315 Causes skin irritation.

Eye Irrit. 2;H319 Causes serious eye irritation.

Repr. 2;H361D Suspected of damaging the unborn child. STOT SE 3;H336 May cause drowsiness or dizziness.

STOT RE 2;H373 May cause damage to organs through prolonged or repeated exposure.

Aquatic Chronic 2;H411 Toxic to aquatic life with long lasting effects.



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#### 2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



Danger

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness and dizziness.

H361d Suspected of damaging the unborn child.

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

H411 Toxic to aquatic life with long lasting effects.

### [Prevention]:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing dust / fume / gas / mist / vapors / spray.

P262 Do not get in eyes, on skin, or on clothing.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves / eye protection / face protection.

#### [Response]:

P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P304+312 IF INHALED: Call a POISON CENTER or doctor / physician if you feel unwell.

P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P308+313 IF exposed or concerned: Get medical advice / attention.

P314 Get Medical advice / attention if you feel unwell.

P321 Specific treatment (see information on this label).

P331 Do NOT induce vomiting.

P337+313 If eye irritation persists: Get medical advice / attention.



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P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P362 Take off contaminated clothing and wash before reuse.

P391 Collect spillage.

### [Storage]:

P403+233 Store in a well ventilated place. Keep container tightly closed.

P405 Store locked up.

### [Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

# 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Toluene CAS Number: 0000108-88-3	50 - 75	Flam. Liq. 2;H225 Repr. 2;H361d Asp. Tox. 1;H304 STOT RE 2;H373 Skin Irrit. 2;H315 STOT SE 3;H336	[1][2]
Heptane CAS Number: 0000142-82-5	10 - 25	Flam. Liq. 2;H225 Asp. Tox. 1;H304 Skin Irrit. 2;H315 STOT SE 3;H336 Aquatic Acute 1;H400 Aquatic Chronic 1;H410	[1][2]
Butanone CAS Number: 0000078-93-3	10 - 25	Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336	[1][2]
Solvent naphtha (petroleum), light aliphatic CAS Number: 0064742-89-8	1.0 - 10	Asp. Tox. 1;H304	[1]
Magnesium oxide CAS Number: 0001309-48-4	1.0 - 10		[1][2]

- [1] Substance classified with a health or environmental hazard.
- [2] Substance with a workplace exposure limit.
- [3] PBT-substance or vPvB-substance.

<sup>\*</sup>The full texts of the phrases are shown in Section 16.



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## 4. First aid measures

## 4.1. Description of first aid measures

**General** Move victim to fresh air.

Call 911 or emergency medical service if deemed necessary.

Give artificial respiration if victim is not breathing.

Administer oxygen if breathing is difficult.

Remove and isolate contaminated clothing and shoes.

In case of contact with substance, immediately flush skin or eyes with running water for at

least 20 minutes.

Wash skin with soap and water.

In case of burns, immediately cool affected skin for as long as possible with cold water. Do

not remove clothing if adhering to skin.

Keep victim warm and quiet.

Ensure that medical personnel are aware of the material(s) involved and take precautions

to protect themselves.

**Inhalation** Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give

artificial respiration. If unconscious place in the recovery position and obtain immediate

medical attention. Give nothing by mouth.

Eyes Irrigate copiously with clean fresh water for at least 15 minutes, holding the eyelids apart

and seek medical attention.

**Skin** Remove and isolate contaminated clothing and shoes. In case of contact with substance,

immediately flush skin or eyes with running water for at least 20 minutes. Shower and wash

with soap and water. Keep victim warm and quiet.

**Ingestion** If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce

vomiting.

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

**Overview** Exposure to solvent vapor concentrations from the component solvents in excess of the

stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular

weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation

and soreness with possible reversible damage. See section 2 for further details.

**Inhalation** May cause drowsiness or dizziness.

**Eves** Causes serious eye irritation.

Skin Causes skin irritation.
Ingestion Harmful if swallowed.



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# 5. Fire-fighting measures

## 5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO<sup>2</sup>, powder, water spray. Do not use; water jet.

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

carbon dioxide, carbon monoxide, oxides of nitrogen, hydrogen chloride, chlorine, and phosgene.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Avoid breathing dust / fume / gas / mist / vapors / spray.

Do not get in eyes, on skin, or on clothing.

## 5.3. Advice for fire-fighters

Wear positive pressure self-contained breathing apparatus (SCBA).

Structural firefighters' protective clothing will only provide limited protection.

HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.

Vapors may form explosive mixtures with air.

Vapors may travel to source of ignition and flash back.

Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).

Vapor explosion hazard indoors, outdoors or in sewers.

Runoff to sewer may create fire or explosion hazard.

Containers may explode when heated.

Many liquids are lighter than water.

Substance may be transported hot.

Inhalation or contact with material may irritate or burn skin and eyes.

Fire may produce irritating, corrosive and/or toxic gases.

Vapors may cause dizziness or suffocation.

Runoff from fire control or dilution water may cause pollution.

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## 6. Accidental release measures

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

Water spray may reduce vapor; but may not prevent ignition in closed spaces.

#### 6.2. Environmental precautions

Do not allow spills to enter drains or watercourses.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

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

Vapor is heavier than air and may flow along surface to distant ignition source and flashback.

Large Spill: As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions.

Keep unauthorized personnel away.

Stay upwind.

Keep out of low areas.

Ventilate closed spaces before entering.

# 7. Handling and storage

#### 7.1. Precautions for safe handling

Store in accordance with the National Fire Protection Association's publication NFPA 30, Flammable and Combustible Liquids Code. 29 CFR 1910.106 applies to the handling, storage, and use of flammable and combustible liquids.

See section 2 for further details. - [Prevention]:

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

Handle containers carefully to prevent damage and spillage.

Incompatible materials: Strong oxidizing agents

See section 2 for further details. - [Storage]:

#### 7.3. Specific end use(s)

No data available.



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# 8. Exposure controls and personal protection

# 8.1. Control parameters

# **Exposure**

CAS No.	Ingestion	Source	Value
0000078-93-3 Butanone	Butanone	OSHA	TWA 200 ppm (590 mg/m3)
		ACGIH	TWA: 50 ppmSTEL: 100 ppm
		NIOSH	TWA 200 ppm (590 mg/m3) ST 300 ppm (885 mg/m3)
		Supplier	No Established Limit
0000108-88-3 Toluene	Toluene	OSHA	TWA 200 ppm C 300 ppm 500 ppm (10-minute maximum peak)STEL 150 ppm
		ACGIH	TWA: 20 ppmR
		NIOSH	TWA 100 ppm (375 mg/m3) ST 150 ppm (560 mg/m3)
		Supplier	No Established Limit
0000142-82-5 Heptane	Heptane	OSHA	TWA 500 ppm (2000 mg/m3)
		ACGIH	TWA: 400 ppmSTEL: 500 ppm
		NIOSH	TWA 85 ppm (350 mg/m3) C 440 ppm (1800 mg/m3) [15-minute]
	Supplier	No Established Limit	
0001309-48-4 Magnesium oxide	OSHA	TWA 15 mg/m3	
	ACGIH	TWA: 3 mg/m3 (respirable dust/fume) 10 mg/m3 (inhalable fume)STEL: 10 mg/m3 (inhalable fume)	
		NIOSH	no established RELs
		Supplier	No Established Limit
0064742-89-8	Solvent naphtha (petroleum), light aliphatic	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

# **Carcinogen Data**

CAS No.	Ingestion	Source	ce Value		
0000078-93-3 Butanone	OSHA	Select Carcinogen: No			
			Known: No; Suspected: No		
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;		
0000108-88-3 Toluene	OSHA	Select Carcinogen: No			
		NTP	Known: No; Suspected: No		
	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;			
0000142-82-5 Heptane		OSHA	Select Carcinogen: No		
	NTP	Known: No; Suspected: No			
	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;			
0001309-48-4	Magnesium oxide	OSHA	Select Carcinogen: No		



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		NTP	Known: No; Suspected: No
	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;	
0064742-89-8	je se i i i i i i i i i i i i i i i i i i	OSHA	Select Carcinogen: No
aliphatic	NTP	Known: No; Suspected: No	
	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;	

### 8.2. Exposure controls

**Respiratory** Not necessary where area is properly ventilated.

**Eyes** Wear safety eyewear, e.g. safety spectacles, goggles or visors to protect against the

splash of liquids.

**Skin** Overalls which cover the body, arms and legs should be worn. Skin should not be exposed.

All parts of the body should be washed after contact. Wear PVC or rubber gloves.

**Engineering Controls** Provide adequate ventilation. Where reasonably practicable this should be achieved by the

use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits

suitable respiratory protection must be worn.

using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

# 9. Physical and chemical properties

**Appearance** Tan Paste

Odor Aromatic Hydrocarbon

Odor threshold

pH

Not Measured

Not Measured

Melting point / freezing point (°C)

Not Measured

Initial boiling point and boiling range (°C)

183-187F (84-86C)

Flash Point

**Evaporation rate (Ether = 1)**Greater than Bu Acetate

Flammability (solid, gas) Not Applicable

Upper/lower flammability or explosive limits Lower Explosive Limit: 1.9%

**Upper Explosive Limit: 9.5%** 

Vapor pressure (Pa) Not Measured

Vapor Density >1
Specific Gravity .80-.81
Solubility in Water Negligible
Partition coefficient n-octanol/water (Log Kow) Not Measured



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Auto-ignition temperature (°C)
Decomposition temperature
Viscosity (cSt)
VOC %

Not Measured Not Measured Not Measured 85-90

#### 9.2. Other information

No other relevant information.

# 10. Stability and reactivity

### 10.1. Reactivity

Hazardous Polymerization will not occur.

## 10.2. Chemical stability

Stable under normal circumstances.

#### 10.3. Possibility of hazardous reactions

No data available.

#### 10.4. Conditions to avoid

Excessive heat and open flame.

### 10.5. Incompatible materials

Strong oxidizing agents

## 10.6. Hazardous decomposition products

carbon dioxide, carbon monoxide, oxides of nitrogen, hydrogen chloride, chlorine, and phosgene.

# 11. Toxicological information

#### **Acute toxicity**

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

2-butoxyethanol and its acetate are readily absorbed through the skin and will cause harmful effects on the blood.



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Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr	Inhalation Gas LD50, ppm
Toluene - (108-88-3)	636.00, Rat - Category: 4	8,400.00, Rabbit - Category: NA	No data available	No data available	No data available
Heptane - (142-82-5)	17,000.00, Rat - Category: NA	3,000.00, Rabbit - Category: 5	103.00, Rat - Category: NA	No data available	No data available
Butanone - (78-93-3)	2,737.00, Rat - Category: 5	6,480.00, Rabbit - Category: NA	32.00, Mouse - Category: NA	No data available	No data available
Solvent naphtha (petroleum), light aliphatic - (64742-89-8)	5,000.00, Mouse - Category: 5	3,000.00, Rabbit - Category: 5	No data available	No data available	No data available
Magnesium oxide - (1309-48-4)	No data available	No data available	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Item	Category	Hazard
Acute Toxicity (mouth)	4	Harmful if swallowed.
Acute Toxicity (skin)		Not Applicable
Acute Toxicity (inhalation)		Not Applicable
Skin corrosion/irritation	2	Causes skin irritation.
Eye damage/irritation	2	Causes serious eye irritation.
Sensitization (respiratory)		Not Applicable
Sensitization (skin)		Not Applicable
Germ toxicity		Not Applicable
Carcinogenicity		Not Applicable
Reproductive Toxicity	Not Defined	Suspected of damaging the unborn child.
Specific target organ systemic toxicity (single exposure)	3	May cause drowsiness or dizziness.
Specific target organ systemic Toxicity (repeated exposure)	2	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard		Not Applicable



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# 12. Ecological information

## 12.1. Toxicity

Toxic to aquatic life with long lasting effects.

### **Aquatic Ecotoxicity**

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Toluene - (108-88-3)	5.80, Oncorhynchus mykiss	19.60, Daphnia magna	Not Available
Heptane - (142-82-5)	375.00, Oreochromis mossambicus	50.00, Daphnia magna	Not Available
Butanone - (78-93-3)	400.00, Cyprinodon variegatus	520.00, Daphnia magna	500.00 (96 hr), Skeletonema costatum
Solvent naphtha (petroleum), light aliphatic - (64742-89-8)	Not Available	Not Available	4,700.00 (72 hr), Selenastrum capricornutum
Magnesium oxide - (1309-48-4)	Not Available	Not Available	Not Available

## 12.2. Persistence and degradability

There is no data available on the preparation itself.

### 12.3. Bioaccumulative potential

Not Measured

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

#### 12.6. Other adverse effects

No data available.

# 13. Disposal considerations

#### 13.1. Waste treatment methods

Do not allow into drains or water courses. Wastes and emptied containers should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act.

Using information provided in this data sheet advice should be obtained from the Waste Regulation Authority, whether the special waste regulations apply.



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# 14. Transport information

**14.1. UN number** UN1993

**14.2. UN proper shipping name** Flammable liquids, n.o.s., (Lactol Spirits/Toluene)

14.3. Transport hazard class(es)

DOT (Domestic Surface Transportation) IMO / IMDG (Ocean Transportation)

DOT Proper Shipping<br/>NameDomestic Ground: Not<br/>Regulated (containerIMDG Proper<br/>Shipping NameFlammable liquids,<br/>n.o.s., (Lactol

size 1oz.) UN1993, Spirits/Toluene)
Flammable liquids,

n.o.s.,(Lactol Spirits/Toluene), 3, II

DOT Hazard Class 3 IMDG Hazard Class 3

**DOT Label** 3 **Sub Class** Not Applicable

UN / NA Number UN1993

DOT Packing Group | I | IMDG Packing Group | I | CERCLA/DOT RQ | 214 gal. / 1786 lbs.

14.4. Packing group

14.5. Environmental hazards

IMDG Marine Pollutant: Yes ( Heptane )

14.6. Special precautions for user

Not Applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not Applicable



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# 15. Regulatory information

**Regulatory Overview** The regulatory data in Section 15 is not intended to be all-inclusive, only selected

regulations are represented. All ingredients of this product are listed on the TSCA (Toxic Substance Control Act) Inventory or are not required to be listed on the TSCA Inventory.

WHMIS Classification D2A

US EPA Tier II Hazards Fire: No

Sudden Release of Pressure: No

Reactive: No

Immediate (Acute): Yes Delayed (Chronic): Yes

## EPCRA 311/312 Chemicals and RQs (lbs):

Butanone (5,000.00)

Toluene (1,000.00)

## **EPCRA 302 Extremely Hazardous:**

(No Product Ingredients Listed)

### **EPCRA 313 Toxic Chemicals:**

Toluene

# Proposition 65 - Carcinogens (>0.0%):

(No Product Ingredients Listed)

# Proposition 65 - Developmental Toxins (>0.0%):

Toluene

### **Proposition 65 - Female Repro Toxins (>0.0%):**

(No Product Ingredients Listed)

## **Proposition 65 - Male Repro Toxins (>0.0%):**

(No Product Ingredients Listed)

#### N.J. RTK Substances (>1%):

Butanone

Heptane

Magnesium oxide

Toluene

### Penn RTK Substances (>1%):

Butanone

Heptane

Magnesium oxide

Toluene



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# 16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

### The full text of the phrases appearing in section 3 is:

H225 Highly flammable liquid and vapor.

H303 May be harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H305 May be harmful if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H320 Causes eye irritation.

H332 Harmful if inhaled.

H333 May be harmful if inhaled.

H335 May cause respiratory irritation.

H360 May damage fertility or the unborn child.

H362 May cause harm to breast-fed children.

H370 Causes damage to organs.

H371 May cause damage to organs.

H372 Causes damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H401 Toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

### This is the first revision of this SDS format, changes from previous revision not applicable.

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End of Document