

### 1. Identification

#### 1.1. Product identifier

**Product Identity** Freedom Cav  
**Alternate Names** Formaldehyde Free Chemical Mixture

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

**Intended use** See Technical Data Sheet.  
**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(s) identification

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

Flam. Liq. 2;H225	Highly Flammable liquid and vapor.
Acute Tox. 3;H301	Toxic if swallowed.
Acute Tox. 3;H311	Toxic in contact with skin.
Acute Tox. 3;H331	Toxic if inhaled.
Skin Irrit. 2;H315	Causes skin irritation.
Eye Irrit. 2;H319	Causes serious eye irritation.
Skin Sens. 1;H317	May cause an allergic skin reaction.
Resp. Sens. 1;H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT SE 1;H370	Causes damage to organs. Specific Target Organs: (Not Available)
Aquatic Chronic 3;H412	Harmful to aquatic life with long lasting effects.

#### 2.2. Label elements



**Danger**

H225 Highly flammable liquid and vapor.  
H301 Toxic if swallowed.  
H311 Toxic in contact with skin.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H331 Toxic if inhaled.  
H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.  
H370 Causes damage to organs.  
H412 Harmful to aquatic life with long lasting effects.

### **[Prevention]:**

P210 Keep away from heat, sparks, open flames, and other ignition sources - No smoking.  
P233 Keep container tightly closed.  
P240 Ground, bond container and receiving equipment.  
P241 Use explosion-proof electrical, ventilating, light, equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P261 Avoid breathing dust, fume, gas, mist, vapors, spray.  
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.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P273 Avoid release to the environment.  
P280 Wear protective gloves, eye protection, face protection.

### **[Response]:**

P301+310 IF SWALLOWED: Immediately call a POISON CENTER, doctor or physician.  
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+312 If inhaled: Call a poison center or doctor or physician if you feel unwell.  
P305+351+338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.  
P307+311 IF exposed: Call a POISON CENTER or doctor , physician.  
P321 Specific treatment (see information on this label).  
P330 IF SWALLOWED: Rinse mouth.  
P333+313 If skin irritation or a rash occurs: Get medical advice or attention.  
P337+313 If eye irritation persists: Get medical advice or attention.  
P341 If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P342 If experiencing respiratory symptoms:  
P362 Take off contaminated clothing and wash before reuse.  
P363 Wash contaminated clothing before reuse.

P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

**[Storage]:**

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

P405 Store locked up.

**[Disposal]:**

P501 Dispose of contents or container in accordance with local and 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
Methanol CAS Number: 0000067-56-1	50 - 75	Flam. Liq. 2;H225 Acute Tox. 3;H331 Acute Tox. 3;H311 Acute Tox. 3;H301 STOT SE 1;H370 (> 10%)	[1][2]
Aluminum chloride hydroxide (Al2Cl(OH)5) CAS Number: 0012042-91-0	10 - 25	Not Classified	[1]
Glutaraldehyde CAS Number: 0000111-30-8	1 - 5	Acute Tox. 2;H330 Acute Tox. 3;H301 STOT SE 3;H335 Skin Corr. 1B;H314 Resp. Sens. 1;H334 Skin Sens. 1A;H317 Aquatic Acute 1;H400 Aquatic Chronic 1;H410	[1][2]

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

\*The full texts of the phrases are shown in Section 16.

### Section 4. First aid measures

#### 4.1. Description of first aid measures

**General**

In all cases of doubt, or when symptoms persist, seek medical attention.  
Never give anything by mouth to an unconscious person.

**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 water for at least 15 minutes, holding the eyelids apart and seek medical attention.

**Skin**

Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

**Ingestion**

**If chemical is swallowed, Call Physician Or Poison Control Center For Most Current Information. Ingestion is life threatening.**

Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow.

Victims Of chemical exposure must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take copy of label and SDS with victim to health professional.

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

##### Overview

Acute: Severe irritation of the tissue that had contact with the product (skin, eyes, mucous membranes). Drowsiness, fatigue, confusion may be experienced after inhalation or ingestion of the material.

Chronic: Methanol is eliminated slowly from the body. Therefore repeated exposures may build up to toxic levels in body tissues. Animal studies shows long term exposures to Methanol damages the CNS, kidneys or liver, skin disorders, and birth defects.

Symptoms of Over Exposure by Route of Exposure: Methanol may be harmful if swallowed, inhaled, or injected into skin. Methanol can cause skin and eye irritation or damage. Methanol can be very irritating to mucous membranes and the respiratory tract.

Inhalation: Inhalation of Methanol vapors may lead to irritation of the nose and throat. Symptoms of overexposure may include dizziness, coughing, headache, dyspnea, lachrymation, nausea and vomiting. Exposure to high concentrations of this material vapor may cause unconsciousness or death.

Primary Routes of Entry: Inhalation, skin contact, eyes, ingestion.

Target Organs: CNS, eyes, circulatory and respiratory systems.

Contact With Skin or Eyes: Methanol is an eye and skin irritant. Splashes in the eye may cause eye irritation, redness, tearing, and temporary corneal damage or blindness.

Skin Absorption: Methanol is absorbed through the skin and may result in effects similar to inhalation exposure.

Ingestion: Ingestion of one to four ounces of Methanol can cause irreversible damage to the nervous system, blindness, or death. It cannot be made non-poisonous. Aspiration of the material into the lungs can cause chemical pneumonitis.

Injection: Injection of Methanol can lead to redness and irritation of the surrounding tissue. Treat symptomatically. See section 2 for further details.

##### Inhalation

Toxic if inhaled. Causes damage to organs. May cause allergy or asthma symptoms of breathing difficulties if inhaled.

##### Eyes

Causes serious eye irritation.

##### Skin

Toxic in contact with skin. May cause an allergic skin reaction. Causes skin irritation.

##### Ingestion

Toxic if swallowed.

## Section 5. Fire-fighting measures

### 5.1. Extinguishing media

Dry chemical, foam or carbon dioxide.

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

Hazardous decomposition: High temperatures and fires may produce such toxic substances as carbon monoxide and carbon dioxide.

Keep away from heat, sparks, open flames, and other ignition sources - No smoking.

Keep container tightly closed.

Ground, bond container and receiving equipment.

Use explosion-proof electrical, ventilating, light, equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

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

### 5.3. Advice for fire-fighters

Wear self-contained breathing apparatus to protect from decomposition products.

**ERG Guide No.** 128

## Section 6. Accidental release measures

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

Keep container closed when not in use. Avoid contact with eyes, skin, or clothing.

### 6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

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.

Spread an inert absorbent on the spill and place in a suitable, properly labeled container for recovery or disposal.

Flush area with large quantities of water.

## Section 7. Handling and storage

### 7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

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

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

Incompatible materials: This substance is not compatible with strong oxidizing agents, acetyl bromide, alkylaluminum solutions, beryllium hydride, boron trichloride, with carbon tetrachloride and metals, chloroform and sodium or sodium hydroxide, cyanuric chloride, dichloromethane and air, diethylzinc, hydrogen and raney nickel catalyst.

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

### 7.3. Specific end use(s)

No data available.

## Section 8. Exposure controls and personal protection

### 8.1. Control parameters

CAS No.	Ingredient	Exposure	
		Source	Value
0000067-56-1	Methanol	OSHA	TWA 200 ppm (260 mg/m <sup>3</sup> )
		ACGIH	TWA: 200 ppm STEL: 250 ppm
		NIOSH	TWA 200 ppm (260 mg/m <sup>3</sup> ) ST 250 ppm (325 mg/m <sup>3</sup> ) [skin]
0000111-30-8	Glutaraldehyde	OSHA	No Established Limit
		ACGIH	Ceiling: 0.05 ppm
		NIOSH	C 0.2 ppm (0.8 mg/m <sup>3</sup> )
0012042-91-0	Aluminum chloride hydroxide (Al <sub>2</sub> Cl(OH) <sub>5</sub> )	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

### 8.2. Exposure controls

- Respiratory** Not necessary where area is properly ventilated.
- Eyes** Wear safety glasses with side shields to protect the eyes. An eye wash station is suggested as a good workplace practice.
- 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 to keep skin contact to a minimum. Refer to the manufacturer's recommendations regarding the suitability of any gloves used.
- 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.
- Other Work Practices** Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details.

### Section 9. Physical and chemical properties

<b>Appearance</b>	Clear to straw colored Liquid
<b>Odor</b>	Mild perfumed
<b>Odor threshold</b>	Not determined
<b>pH</b>	N.A
<b>Melting point / freezing point</b>	N.A
<b>Initial boiling point and boiling range</b>	63-66C 146-150F
<b>Flash Point</b>	10-12C 50-54F
<b>Evaporation rate (Ether = 1)</b>	> 1 (n-Butyl acetate = 1)
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> 6% <b>Upper Explosive Limit:</b> 36.5%
<b>Vapor pressure (Pa)</b>	Not Measured
<b>Vapor Density</b>	Greater than 1
<b>Relative Density</b>	0.965-0.975
<b>Solubility in Water</b>	Not Measured
<b>Partition coefficient n-octanol/water (Log Kow)</b>	Not Measured
<b>Auto-ignition temperature</b>	Not Measured
<b>Decomposition temperature</b>	Not Measured
<b>Viscosity (cSt)</b>	Not Measured
<b>VOC Content</b>	90%

#### 9.2. Other information

No other relevant information.

### Section 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

Extreme heat may cause product to decompose, producing acrid smoke and irritating fumes.

#### 10.5. Incompatible materials

This substance is not compatible with strong oxidizing agents, acetyl bromide, alkylaluminum solutions, beryllium hydride, boron trichloride, with carbon tetrachloride and metals, chloroform and sodium or sodium hydroxide, cyanuric chloride, dichloromethane and air, diethylzinc, hydrogen and raney nickel catalyst.

#### 10.6. Hazardous decomposition products

High temperatures and fires may produce such toxic substances as carbon monoxide and carbon dioxide.

### Section 11. Toxicological information

#### Acute toxicity

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).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Methanol - (67-56-1)	2,769.00, Rat - Category: 5	17,100.00, Rabbit - Category: NA	---	---	64,000.00, Rat - Category: NA
Aluminum chloride hydroxide (Al <sub>2</sub> Cl(OH) <sub>5</sub> ) - (12042-91-0)	9,187.00, Rat - Category: NA	>2,000.00, Rat - Category: 5	---	---	---
Glutaraldehyde - (111-30-8)	246.00, Rat - Category: 3	>2,000.00, Rabbit - Category: 5	---	0.48, Rat - Category: 2	---

#### Carcinogen Data

CAS No.	Ingredient	Source	Value
0000067-56-1	Methanol	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
0000111-30-8	Glutaraldehyde	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	A4
0012042-91-0	Aluminum chloride hydroxide (Al <sub>2</sub> Cl(OH) <sub>5</sub> )	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	3	Toxic if swallowed.
Acute toxicity (dermal)	3	Toxic in contact with skin.
Acute toxicity (inhalation)	3	Toxic if inhaled.
Skin corrosion/irritation	2	Causes skin irritation.
Serious eye damage/irritation	2	Causes serious eye irritation.
Respiratory sensitization	1	May cause allergy or asthma symptoms of breathing difficulties if inhaled.
Skin sensitization	1	May cause an allergic skin reaction.
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable

Reproductive toxicity	---	Not Applicable
STOT-single exposure	1	Causes damage to organs.
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

## Section 12. Ecological information

### 12.1. Toxicity

Harmful 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
Methanol - (67-56-1)	15,400.00, Lepomis macrochirus	18,260.00, Daphnia magna	22,000.00 (96 hr), Pseudokirchneriella subcapitata
Aluminum chloride hydroxide (Al <sub>2</sub> Cl(OH) <sub>5</sub> ) - (12042-91-0)	101.00, Danio rerio	47.50, Daphnia magna	14.00 (72 hr), Pseudokirchneriella subcapitata
Glutaraldehyde - (111-30-8)	10.00, Oncorhynchus mykiss	29.73, Daphnia magna	1.20 (72 hr), Desmodesmus subspicatus

### 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 PBT/vPvB chemicals.

### 12.6. Other adverse effects

No data available.

## Section 13. Disposal considerations

### 13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

### Section 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	UN1993	UN1993	UN1993
14.2. UN proper shipping name	UN1993, Flammable liquids, n.o.s., (contains methyl alcohol) 3, II	Flammable liquids, n.o.s., (contains methyl alcohol)	Flammable liquids, n.o.s., (contains methyl alcohol)
14.3. Transport hazard class(es)	<b>DOT Hazard Class: 3</b>	<b>IMDG: 3</b> <b>Sub Class: Not Applicable</b>	<b>Air Class: 3</b>
14.4. Packing group	II	II	II
14.5. Environmental hazards			
IMDG	Marine Pollutant: No;		
14.6. Special precautions for user	Not Applicable		

### Section 15. Regulatory information

<b>Regulatory Overview</b>	The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.
<b>Toxic Substance Control Act (TSCA)</b>	All components of this material are either listed or exempt from listing on the TSCA Inventory.
<b>US EPA Tier II Hazards</b>	<p><b>Fire: Yes</b></p> <p><b>Sudden Release of Pressure: No</b></p> <p><b>Reactive: No</b></p> <p><b>Immediate (Acute): Yes</b></p> <p><b>Delayed (Chronic): No</b></p>

**EPCRA 302 Extremely Hazardous:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**EPCRA 313 Toxic Chemicals:**

Methanol

**Proposition 65 - Carcinogens (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

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

Methanol

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

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

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

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

### Proposition 65 Label Warning:

This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

## Section 16. Other information

**SDS Revision Date**      **06/19/2019**

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.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H330 Fatal if inhaled.

H331 Toxic if inhaled.

H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H370 Causes damage to organs.

H371 May cause damage to organs.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

This Safety data Sheet was prepared using information provided by/obtained from the Dodge Chemical Company Inc. The information in the Safety Data Sheet is offered for your consideration and guidance when exposed to the product. The Dodge Chemical Company, Inc. expressly disclaim all expressed or implied warranty and assumes no responsibilities for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other processes as to the accuracy of and/or sufficiency of such information. This Safety Data Sheet may not be changed or altered in any way without the expressed knowledge and permission of The Dodge Chemical Company, Inc.

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