

1. Identification

1.1. Product identifier

Product Identity Halt Cavity

Alternate Names Halt Cavity

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 Dodge Chemical Company (Canada) Ltd.
The Dodge Chemical Company (Canada) Ltd.
1265 Fewster Drive
Mississauga ON L4W 1A2

Emergency

CHEMTREC (USA) (800) 424-9300

24 hour Emergency Telephone No. (888) 226-8832 (CANUTEC)

Customer Service: Dodge Chemical Company (Canada) Ltd. (800) 263-0862, (905) 625-0311

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Flam. Liq. 3;H226	Flammable liquid and vapor.
Acute Tox. 4;H302	Harmful if swallowed.
Acute Tox. 4;H312	Harmful in contact with skin.
Acute Tox. 3;H331	Toxic if inhaled.
Skin Irrit. 2;H315	Causes skin irritation.
Eye Dam. 1;H318	Causes serious eye damage.
Skin Sens. 1;H317	May cause an allergic skin reaction.
Resp. Sens. 1;H334	May cause allergy or asthma symptoms of breathing difficulties if inhaled.
Muta. 2;H341	Suspected of causing genetic defects.
Carc. 1B;H350	May cause cancer.
STOT SE 3;H335	May cause respiratory irritation.
Aquatic Chronic 2;H411	Toxic to aquatic life with long lasting effects.

2.2. Label elements



Danger

H226 Flammable liquid and vapor.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H331 Toxic if inhaled.

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

H335 May cause respiratory irritation.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

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.

P210 Keep away from heat / sparks / open flames / hot surfaces - 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.

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.

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

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 / 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.

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

P310 Immediately call a POISON CENTER or doctor / physician.

P330 IF SWALLOWED: Rinse mouth.

P331 Do NOT induce vomiting.

P333+313 If skin irritation or a rash occurs: Get medical advice / attention.

P342+311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor / physician.

P340 Remove person to fresh air and keep comfortable for breathing.

P362+364 Take off contaminated clothing and wash it before reuse.

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

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 Controlled Products Regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Formaldehyde CAS Number: 0000050-00-0 Synonyms: Formaldehyde	10 - 30	Carc. 1B;H350 Muta. 2;H341 Acute Tox. 3;H301 Acute Tox. 3;H311 Acute Tox. 3;H331 Skin Corr. 1B;H314 ≥ 25 % Skin Irrit. 2;H315 5 % ≤ C < 25 % Skin Sens. 1;H317 >0.2 % STOT SE 3;H335 ≥ 5 %	[1][2]
Methanol CAS Number: 0000067-56-1 Synonyms: methanol (as methanol), METHYL ALCOHOL, Methanol	3 - 7	Flam. Liq. 2;H225 Acute Tox. 3;H331 Acute Tox. 3;H311 Acute Tox. 3;H301 STOT SE 1;H370 (> 10%)	[1][2]
Glutaraldehyde CAS Number: 0000111-30-8 Synonyms: 1,5-Pentanedial, Aldehyd glutarowy, Glutaraldehyde, Pentanedial, Glutaral	3 - 7	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]
Aluminum chloride hydroxide (Al₂Cl(OH)₅) CAS Number: 0012042-91-0 Synonyms: Aluminum chloride hydroxide (Al ₂ Cl(OH) ₅)	1 - 5	Not Classified	[1]

The actual concentration or concentration range is 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 the person is conscious, have them drink water. Contact a physician immediately. Do not induce vomiting.

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

Overview	Possible routes of entry are dermal, oral and inhalation. Contains material that can cause target organ damage (mucous membranes, gastrointestinal tract, upper respiratory tract, skin, eyes, central nervous system (CNS)). Some reports suggest that formaldehyde may cause respiratory sensitization, such as asthma, and that pre-existing respiratory and skin disorders may be aggravated by exposure. May be fatal or cause blindness if swallowed. Reproductive or genetic defect hazard. Treat symptomatically. See section 2 for further details.
Inhalation	Toxic if inhaled. May cause respiratory irritation. May cause allergy or asthma symptoms of breathing difficulties if inhaled.
Eyes	Causes serious eye damage.
Skin	Harmful in contact with skin. May cause an allergic skin reaction. Causes skin irritation.
Ingestion	Harmful if swallowed.

Section 5. Fire-fighting measures

5.1. Extinguishing media

Dry chemical, foam, carbon dioxide and water fog.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: May form formaldehyde gas, carbon oxides, hydrogen, formic acid and various hydrocarbons. Incomplete combustion may also produce irritating smoke and toxic and/or irritating gases or fumes.

Keep away from heat / sparks / open flames / hot surfaces - No smoking.

Keep container tightly closed.

Ground / bond container and receiving equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
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 self-contained breathing apparatus to protect from decomposition products.

ERG Guide No. 132

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

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.

Neutralize residual product in the spill area using sodium carbonate or sodium bicarbonate.

DO NOT USE COMBUSTIBLE MATERIALS.

Section 7. Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin. Avoid contact with eyes. Observe good industrial hygiene practices. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Launder contaminated clothing before reuse. Avoid environmental contamination.

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

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials: Avoid contact with strong oxidizers, strong alkalis, strong mineral acids, phenol and urea.

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

Exposure

CAS No.	Ingredient	Source	Value
0000050-00-0	Formaldehyde	OSHA	TWA 0.75 ppm STEL 2 ppm
		ACGIH	0.1 ppm TWA 0.3 ppm STEL
		NIOSH	Ca TWA 0.016 ppm C 0.1 ppm [15-minute]
		Supplier	No Established Limit
0000067-56-1	Methanol	OSHA	TWA 200 ppm (260 mg/m3)
		ACGIH	TWA: 200 ppm STEL: 250 ppm
		NIOSH	TWA 200 ppm (260 mg/m3) ST 250 ppm (325 mg/m3) [skin]
		Supplier	No Established Limit
0000111-30-8	Glutaraldehyde	OSHA	No Established Limit
		ACGIH	Ceiling: 0.05 ppm
		NIOSH	C 0.2 ppm (0.8 mg/m3)
		Supplier	No Established Limit
0012042-91-0	Aluminum chloride hydroxide (Al2Cl(OH)5)	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

8.2. Exposure controls

Respiratory

If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

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

Appearance	Blue Liquid
Odor	Pungent
Odor threshold	Not determined
pH	2.5-3.5
Melting point / freezing point	N.A
Initial boiling point and boiling range	93-96C 200-204F
Flash Point	55-57C 131-135F
Evaporation rate (Ether = 1)	< 1 (n-Butyl acetate = 1)
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: 7% Upper Explosive Limit: 73%
Vapor pressure (Pa)	Not Available
Vapor Density	Greater than 1
Specific Gravity	1.045-1.055
Solubility in Water	Not Available
Partition coefficient n-octanol/water (Log Kow)	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available
Viscosity (cSt)	Not Available
VOC Content	99%

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 the recommended storage and handling conditions prescribed. At higher temperatures, product may form formic acid and methanol.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid heat and open flame. Exposure to cold may cause precipitation of the polymer, will re-dissolve upon gentle heating.

10.5. Incompatible materials

Avoid contact with strong oxidizers, strong alkalis, strong mineral acids, phenol and urea.

10.6. Hazardous decomposition products

May form formaldehyde gas, carbon oxides, hydrogen, formic acid and various hydrocarbons. Incomplete combustion may also produce irritating smoke and toxic and/or irritating gases or fumes.

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
Formaldehyde - (50-00-0)	260.00, Guinea Pig - Category: 3	270.00, Rabbit - Category: 3	No data available	No data available	1,000.00, Rat - Category: 3
Methanol - (67-56-1)	2,769.00, Rat - Category: 5	17,100.00, Rabbit - Category: NA	No data available	No data available	64,000.00, Rat - Category: NA
Glutaraldehyde - (111-30-8)	246.00, Rat - Category: 3	>2,000.00, Rabbit - Category: 5	No data available	0.48, Rat - Category: 2	No data available
Aluminum chloride hydroxide (Al ₂ Cl(OH) ₅) - (12042-91-0)	9,187.00, Rat - Category: NA	>2,000.00, Rat - Category: 5	No data available	No data available	No data available

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000050-00-0	Formaldehyde	OSHA	Regulated Carcinogen: Yes
		NTP	Known: Yes; Suspected: Yes
		IARC	Group 1: Yes; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
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;
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;
0012042-91-0	Aluminum chloride hydroxide (Al ₂ Cl(OH) ₅)	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;

Classification	Category	Hazard Description
Acute toxicity (oral)	4	Harmful if swallowed.
Acute toxicity (dermal)	4	Harmful in contact with skin.
Acute toxicity (inhalation)	3	Toxic if inhaled.
Skin corrosion/irritation	2	Causes skin irritation.
Serious eye damage/irritation	1	Causes serious eye damage.
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	2	Suspected of causing genetic defects.
Carcinogenicity	1B	May cause cancer.
Reproductive toxicity	---	Not Applicable
STOT-single exposure	3	May cause respiratory irritation.
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

Possible routes of entry:: No data available.

Symptoms and effects, both acute and delayed::

Possible routes of entry are dermal, oral and inhalation. Contains material that can cause target organ damage (mucous membranes, gastrointestinal tract, upper respiratory tract, skin, eyes, central nervous system (CNS)). Some reports suggest that formaldehyde may cause respiratory sensitization, such as asthma, and that pre-existing respiratory and skin disorders may be aggravated by exposure. May be fatal or cause blindness if swallowed. Reproductive or genetic defect hazard. Treat symptomatically.

Inhalation	Toxic if inhaled. May cause respiratory irritation. May cause allergy or asthma symptoms of breathing difficulties if inhaled.
Eyes	Causes serious eye damage.
Skin	Harmful in contact with skin. May cause an allergic skin reaction. Causes skin irritation.
Ingestion	Harmful if swallowed.

Section 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
Formaldehyde - (50-00-0)	1.41, Oncorhynchus mykiss	5.80, Daphnia pulex	Not Available
Methanol - (67-56-1)	15,400.00, Lepomis macrochirus	18,260.00, Daphnia magna	22,000.00 (96 hr), Pseudokirchneriella subcapitata
Glutaraldehyde - (111-30-8)	10.00, Oncorhynchus mykiss	29.73, Daphnia magna	1.20 (72 hr), Desmodesmus subspicatus
Aluminum chloride hydroxide (Al ₂ Cl(OH) ₅) - (12042-91-0)	101.00, Danio rerio	47.50, Daphnia magna	14.00 (72 hr), Pseudokirchneriella subcapitata

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Available

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.

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

	TDG (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	UN1198		
14.2. UN proper shipping name	UN1198, Formaldehyde solutions, flammable, 3, III	Formaldehyde solutions, flammable	Formaldehyde solutions, flammable
14.3. Transport hazard class(es)	TDG Hazard Class: 3	IMDG: 3 Sub Class: Not Applicable	Air Class: 3
14.4. Packing group	III	III	III
14.5. Environmental hazards			
IMDG	Marine Pollutant: Yes; (Glutaraldehyde)		
14.6. Special precautions for user:	None		

Section 15. Regulatory information

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations and the SDS contains all of the information required by those regulations.

WHMIS 1988 B3 D1B E
Classification

Canadian Domestic Substance List (DSL):

Aluminum chloride hydroxide (Al₂Cl(OH)₅)
Formaldehyde
Glutaraldehyde
Methanol
Polyvinyl pyrrolidone

Canadian Non-Domestic Substance List (NDSL):

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

Section 16. Other information

SDS Revision Date 03/06/2019

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.

H315 Causes skin irritation.

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.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H370 Causes damage to organs.



**Safety Data Sheet
Halt Cavity**

**SDS Revision
Date: 03/06/2019**

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.

End of Document