

1. Identification

1.1. Product identifier

Product Identity Dodge Anatomical Fixative Concentrate
Alternate Names Dodge Anatomical Fixative Concentrate

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

Intended use 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

Combustible Liquid;H227	Combustible Liquid.
Acute Tox. 4;H302	Harmful if swallowed.
Acute Tox. 3;H311	Toxic in contact with skin.
Acute Tox. 3;H331	Toxic if inhaled.
Skin Corr. 1;H314	Causes severe skin burns and 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 3;H412	Harmful to aquatic life with long lasting effects.

2.2. Label elements



Danger

H227 Combustible liquid.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

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.

H412 Harmful 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, and other ignition sources - No smoking.

P233 Keep container tightly closed.

P235 Keep cool.

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, doctor or 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 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.

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

P321 Specific treatment (see information on this label).

P330 IF SWALLOWED: Rinse mouth.

P331 Do NOT induce vomiting.

P333+313 If skin irritation or a rash occurs: 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+311 If experiencing respiratory symptoms: Call a POISON CENTER, doctor or physician.

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+235 Store in a well ventilated place. Keep cool.

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
Formaldehyde CAS Number: 0000050-00-0	50 - 75	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]
2-methylpentane-2,4-diol CAS Number: 0000107-41-5	1 - 5	Eye Irrit. 2;H319 Skin Irrit. 2;H315	[1][2]
Methanol CAS Number: 0000067-56-1	1 - 5	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	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]
Borates, tetra, sodium salts, decahydrate CAS Number: 0001303-96-4	1 - 5	Repr. 1B;H360FD (@> 8.5%) Acute Tox. 4;H332	[1][2]
Bioban-S CAS Number: 0000137-40-6	1 - 5	Not Classified	[1]
Trisodium EDTA CAS Number: 0000150-38-9	1 - 5	Acute Tox. 4;H302 Eye Irrit. 2;H319	[1]

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 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. Check section 2.2 (GHS Label Elements) for further details.

Inhalation Toxic if inhaled. May cause respiratory irritation. May cause allergy or asthma symptoms of breathing difficulties if inhaled.

Skin Toxic in contact with skin. May cause an allergic skin reaction. Causes severe skin burns and eye damage.

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, and other ignition sources - No smoking.

Keep cool.

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.

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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.

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.

Check section 2.2 (GHS Label Elements) for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool dry area, away from heat, sparks and open flame.

Keep containers sealed when not in use.

Store out of direct sunlight.

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

Check section 2.2 (GHS Label Elements) for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

Section 8. Exposure controls / personal protection

8.1. Control parameters

CAS No.	Ingredient	Exposure	
		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]
0000067-56-1	Methanol	OSHA	TWA 200 ppm (260 mg/m ³)
		ACGIH	TWA: 200 ppm STEL: 250 ppm
		NIOSH	TWA 200 ppm (260 mg/m ³) ST 250 ppm (325 mg/m ³) [skin]
0000107-41-5	2-methylpentane-2,4-diol	OSHA	No Established Limit
		ACGIH	25 ppm TWA (vapor fraction)

		NIOSH	C 25 ppm (125 mg/m ³)
0000111-30-8	Glutaraldehyde	OSHA	No Established Limit
		ACGIH	Ceiling: 0.05 ppm
		NIOSH	C 0.2 ppm (0.8 mg/m ³)
0000137-40-6	Bioban-S	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
0000150-38-9	Trisodium EDTA	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
0001303-96-4	Borates, tetra, sodium salts, decahydrate	OSHA	No Established Limit
		ACGIH	TWA: 2 mg/m ³ STEL: 6 mg/m ³
		NIOSH	TWA 5 mg/m ³

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 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 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.

Check section 2.2 (GHS Label Elements) for further details.

Section 9. Physical and chemical properties

Appearance	Clear, slightly viscous, fluorescent orange Liquid
Odor	Pungent
Odor threshold	Not determined
pH	8 - 9.2
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	91 - 97 C (196 - 207F)
Flash Point	61 - 63C (142 - 146F)
Evaporation rate (Ether = 1)	< 1 (n-Butyl acetate = 1)
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: 7 (formaldehyde)

Vapor pressure (Pa)	Upper Explosive Limit: 73 (formaldehyde)
Vapor Density	Not Measured
Relative Density	>1
Solubility in Water	1.050 - 1.070
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured
VOC Content	97%

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 redissolve upon gentle heating.

10.5. Incompatible materials

Avoid contact with strong oxidants, 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
2-methylpentane-2,4-diol - (107-41-5)	No data available	No data available	No data available	No data available	No data available
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
Borates, tetra, sodium salts, decahydrate - (1303-96-4)	2,660.00, Rat - Category: 5	10,000.00, Rabbit - Category: NA	No data available	2.00, Rat - Category: 4	No data available
Bioban-S - (137-40-6)	No data available	No data available	No data available	No data available	No data available
Trisodium EDTA - (150-38-9)	No data available	No data available	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;
		ACGIH	A1
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
0000107-41-5	2-methylpentane-2,4-diol	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
0000137-40-6	Bioban-S	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
0000150-38-9	Trisodium EDTA	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
0001303-96-4	Borates, tetra, sodium salts, decahydrate	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

Classification	Category	Hazard Description
Acute toxicity (oral)	4	Harmful if swallowed.
Acute toxicity (dermal)	3	Toxic in contact with skin.
Acute toxicity (inhalation)	3	Toxic if inhaled.
Skin corrosion/irritation	1	Causes severe skin burns and eye damage.
Serious eye damage/irritation	---	Not Applicable
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

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
Formaldehyde - (50-00-0)	1.41, Oncorhynchus mykiss	5.80, Daphnia pulex	Not Available
2-methylpentane-2,4-diol - (107-41-5)	9,910.00, Gambusia affinis	5,410.00, Daphnia magna	430.00 (72 hr), Pseudokirchneriella subcapitata
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



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Borates, tetra, sodium salts, decahydrate - (1303-96-4)	74.00, Limanda limanda	484.00, Daphnia magna	24.00 (72 hr), Scenedesmus subspicatus
Bioban-S - (137-40-6)	Not Available	Not Available	Not Available
Trisodium EDTA - (150-38-9)	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.

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	UN1992		
14.2. UN proper shipping name	UN1992, Flammable liquids, toxic, n.o.s., (Formaldehyde), 3, II	Flammable liquids, toxic, n.o.s., (Formaldehyde)	Flammable liquids, toxic, n.o.s., (Formaldehyde)
14.3. Transport hazard class(es)	DOT Hazard Class: 3	IMDG: 3 Sub Class: 6.1	Air Class: 3
14.4. Packing group	III	III	III
14.5. Environmental hazards			
IMDG	Marine Pollutant: No;		
14.6. Special precautions for user	Not Applicable		

Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.

EPCRA 302 Extremely Hazardous:

Formaldehyde

EPCRA 313 Toxic Chemicals:

Formaldehyde

Methanol

Proposition 65 - Carcinogens (>0.0%):

Formaldehyde

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:



WARNING: This product can expose you to chemicals including [Formaldehyde], which is known to the State of California to cause cancer, and [Methanol], which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Section 16. Other information

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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.

H302 Harmful 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.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.



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H331 Toxic if inhaled.

H332 Harmful 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.

H360FD May damage fertility. Suspected of damaging the unborn child.

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.

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