

SDS Revision Date: 06/19/2019

1. Identification

1.1. Product identifier

Product Identity Permaglo LS 24 / Brunett SS

Alternate Names Arterial Embalming 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

Combustible Liquid; H227 Combustible Liquid.
Acute Tox. 4; H302 Harmful if swallowed.

Acute Tox. 4;H312 Harmful in contact with skin.

Acute Tox. 4;H332 Harmful 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.

Muta. 2;H341 Suspected of causing genetic defects.

Carc. 1B;H350 May cause cancer.

STOT SE 3;H335 May cause respiratory irritation.

2.2. Label elements



Danger



SDS Revision Date: 06/19/2019

H227 Combustible liquid.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

[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.

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.

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.

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.

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

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

P405 Store locked up.

[Disposal]:



SDS Revision Date: 06/19/2019

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	[1][2]	
Formaldehyde CAS Number: 0000050-00-0	10 - 25	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-Propylene glycol CAS Number: 0000057-55-6	1 - 5	Not Classified	[1]	
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]	

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.

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.

^[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.



SDS Revision Date: 06/19/2019

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

Overview No specific symptom data available.

Reproductive or genetic defect hazard. Treat symptomatically. See section 2 for further

details.

Inhalation Harmful if inhaled. May cause respiratory irritation.

Eyes Causes serious eye irritation.

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, 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.

ERG Guide No. 171

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.

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

DO NOT USE COMBUSTIBLE MATERIALS.



SDS Revision Date: 06/19/2019

Section 7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

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

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 oxidizers, strong alkalies, 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]
0000057-55-6 1,2-Propylene glycol		OSHA	No Established Limit
		ACGIH	TWA(Aerosol): 10 mg/m3
		NIOSH	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]

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.



SDS Revision Date: 06/19/2019

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.

Section 9. Physical and chemical properties

Appearance Clear deep red-brown Liquid

Odor Slightly perfumed, with pungent odor.

Odor threshold Not determined

pH 8.0-9.5

Melting point / freezing point N.A

Initial boiling point and boiling range 94-97C 202-206F 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%

Upper Explosive Limit: 73%

Vapor pressure (Pa) Not Measured **Vapor Density** Greater than 1 **Relative Density** 1.055-1.065 Solubility in Water Not Measured Partition coefficient n-octanol/water (Log Kow) Not Measured **Auto-ignition temperature** Not Measured **Decomposition temperature** Not Measured Viscosity (cSt) Not Measured

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



SDS Revision Date: 06/19/2019

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 oxidizers, strong alkalies, 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			1,000.00, Rat - Category: 3
1,2-Propylene glycol - (57-55-6)	22,000.00, Rat - Category: NA	>2,000.00, Rabbit - Category: 5	105.00, Rat - Category: NA		
Methanol - (67-56-1)	2,769.00, Rat - Category: 5	17,100.00, Rabbit - Category: NA			64,000.00, Rat - Category: NA

Carcinogen Data

CAS No.	Ingredient	Source	ce 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		
0000057-55-6 1,2-Propylene glycol	1,2-Propylene glycol	,2-Propylene glycol 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			
0000067-56-1 Methanol		OSHA	Regulated Carcinogen: No		
	NTP IARC		Known: No; Suspected: No		
			Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;		
		ACGIH	No Established Limit		



SDS Revision Date: 06/19/2019

Classification	Category	Hazard Description	
Acute toxicity (oral)	4	Harmful if swallowed.	
Acute toxicity (dermal)	4	Harmful in contact with skin.	
Acute toxicity (inhalation)	4	Harmful if inhaled.	
Skin corrosion/irritation	2	Causes skin irritation.	
Serious eye damage/irritation	2	Causes serious eye irritation.	
Respiratory sensitization		Not Applicable	
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

No additional information provided for this product. See Section 3 for chemical specific data.

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
1,2-Propylene glycol - (57-55-6)	40,613.00, Oncorhynchus mykiss	43,500.00, Daphnia magna	24,200.00 (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

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.



SDS Revision Date: 06/19/2019

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 IMO / IMDG (Ocean ICAO/IATA **Transportation**) Transportation) 14.1. UN NA3082 NA3082 NA3082 number 14.2. UN NA3082, Other regulated Other regulated substances, Other regulated substances, proper substances, liquid, n.o.s., (Contains liquid, n.o.s., (Contains liquid, n.o.s., (Contains shipping Formeldehyde), liquid, Formeldehyde), liquid, Formeldehyde), liquid, name n.o.s..(Contains Formaldehyde), 9. n.o.s..(Contains Formaldehyde) n.o.s..(Contains Formaldehyde) 14.3. **DOT Hazard Class: 9** Air Class: 9 **IMDG**: 9 **Transport** Sub Class: Not Applicable hazard class(es) 14.4. Packing III Ш Ш group

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 All (Control Act (TSCA)

All components of this material are either listed or exempt from listing on the TSCA

Inventory.

US EPA Tier II Hazards Fire: Yes

Sudden Release of Pressure: No

Reactive: No

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

EPCRA 302 Extremely Hazardous:

Formaldehyde



SDS Revision Date: 06/19/2019

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. For more information go to www.P65Warnings.ca.gov.

Section 16. Other information

SDS Revision Date 06/19/2019

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.

H331 Toxic if inhaled.

H335 May cause respiratory irritation.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H370 Causes damage to organs.

H371 May cause damage to organs.

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