



VISCEROCK FF

MSDS No.:DOD-053

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MATERIAL SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

Product identifier : **VISCEROCK FF**

Product Code(s) : None reported.

Product Use : Embalming Chemical

Chemical Family : Mixture.

Supplier's name and address:

The Dodge Company, Inc.

165 CambridgePark Drive
Cambridge, MA, USA
02140-2388

Manufacturer's name and address:

Refer to Supplier

Information Telephone # : (800) 443-6343

24 Hr. Emergency Tel # : (800) 424-9300 (CHEMTREC)

SECTION 2 - HAZARDS IDENTIFICATION

Classification : OSHA: This material is classified as hazardous under OSHA regulations (29CFR 1910.1200).

Hazardous classification:
Acute Health Hazard;
Chronic Health Hazard

Emergency Overview

POTENTIAL HEALTH EFFECTS:

Signs and symptoms of short-term (acute) exposure

Inhalation : May cause irritation of the nose, throat, mucous membranes, and respiratory tract. Symptoms may include coughing, mucous production and difficulty breathing.

Skin : May cause mild to moderate irritation. Stinging, redness and possible dermatitis (rash).

Eyes : May cause moderate to severe irritation. Symptoms will include pain, redness and tearing.

Ingestion : May be harmful if swallowed. Ingestion may cause severe irritation to the mouth, throat and stomach.

Effects of long-term (chronic) exposure

: Prolonged or repeated contact may cause drying, cracking and defatting of the skin.
Contains material which may cause adverse blood system effects. Contains substances that may damage genetic material or cause embryotoxic/ fetotoxic effects.

Carcinogenic status : See TOXICOLOGICAL INFORMATION, Section 11.

Additional health hazards : See TOXICOLOGICAL INFORMATION, Section 11.

Potential environmental effects

: See ECOLOGICAL INFORMATION, Section 12.



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SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	Wt.%
Aluminum sulfate	10043-01-3	5.00 - 10.00
Borax	1303-96-4	1.00 - 5.00

SECTION 4 - FIRST AID MEASURES

- Inhalation** : Immediately remove person to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. If symptoms develop, seek medical attention.
- Skin contact** : For skin contact, wash with soap and water while removing contaminated clothing. If irritation or symptoms develop, seek medical attention. Wash contaminated clothing before re-use.
- Eye contact** : Immediately flush eyes with running water for at least 15 minutes. Seek immediate medical attention/advice.
- Ingestion** : Do NOT induce vomiting. Rinse mouth with water. Have victim drink one to two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.
- Notes For Physician** : Treat symptomatically.

SECTION 5 - FIRE FIGHTING MEASURES

- Fire hazards/conditions of flammability** : Not flammable under normal conditions of use.
- Flammability classification (OSHA 29 CFR 1910.1200)** : N/Ap
- Oxidizing properties** : None known.
- Explosion data: Sensitivity to mechanical impact / static discharge** : Not expected to be sensitive to mechanical impact or static discharge.
- Suitable extinguishing media** : Use media suitable to the surrounding fire such as water fog or fine spray, alcohol foams, carbon dioxide and dry chemical.
- Special fire-fighting procedures/equipment** : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame.
- Hazardous combustion products** : Metal oxides; Oxides of carbon and nitrogen, various hydrocarbons, smoke.
- NFPA Rating** : 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe
: *Health: 2 Flammability: 0 Instability: 0 Special Hazards: None*

SECTION 6 - ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions** : Ensure spilled product does not enter drains, sewers, waterways, or confined spaces.
- Spill response/cleanup** : Remove all sources of ignition. Ventilate area of release. Stop the spill at source if it is safe to do so. Vacuum or sweep up spilled material using a method that does not generate airborne dust. If dust is generated, monitor to ensure that exposure levels are not exceeded. Place spilled material into a suitable, labelled container for later disposal (see Section 13). Notify the appropriate authorities as required.
- Prohibited materials** : Keep away from incompatibles.
- Special spill response procedures**

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Melting/Freezing point : N/Av	Coefficient of water/oil distribution : N/Av
Vapour pressure (mmHg @ 20° C / 68° F) : N/Av	Solubility in water : Negligible
Vapour density (Air = 1) : N/Av	Evaporation rate (n-Butyl acetate = 1) : N/Av
Volatile organic Compounds (VOC's) : N/Av	Volatiles (% by weight) : 1(approximately)
Flash point : N/Av	Auto-ignition temperature : N/Av
Flash point Method : N/Av	Upper flammable limit (% by vol.) : N/Av
Lower flammable limit (% by vol.) : N/Av	Flashback observed : N/Av
Flame Projection Length : N/Av	

Section 10: Stability And Reactivity

Stability and reactivity : Stable at ambient temperatures and pressures.
Hazardous polymerization : Hazardous polymerisation does not occur.
Conditions to avoid : Avoid contact with incompatible materials.
Materials To Avoid And Incompatibility : See Section 7 (Handling and Storage) for further details.
Hazardous decomposition products : None known, refer to hazardous combustion products in Section 4.

SECTION 11 - TOXICOLOGICAL INFORMATION

Target organs : Eyes, skin, respiratory system and digestive system.
Routes of exposure : <i>Inhalation:</i> YES <i>Skin Absorption:</i> NO <i>Skin & Eyes:</i> YES <i>Ingestion:</i> YES
Toxicological data : There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

<u>Ingredients</u>	<u>LC₅₀(4hr)</u> <u>inh, rat</u>	<u>LD₅₀</u>	
		<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
Aluminum sulfate	N/Av	1930 mg/kg	N/Av
Borax	>2040mg/m ³	1200 mg/kg	>2000mg/kg

Carcinogenic status :	Contains the following chemicals listed as Group A4 (Not classifiable as a human carcinogen) by ACGIH: Borax (CAS 1303-96-4) No other components are classified as carcinogenic by IARC, ACGIH, OSHA or NTP.
Reproductive effects :	This product contains Disodium tetraborate, decahydrate (CAS # 1303-96-4). The data regarding subchronic and chronic oral exposure to boric acid or borax (Disodium tetraborate, decahydrate) in laboratory animals have demonstrated reproductive toxicity. Available animal data indicates that this substance has toxic effects on the male reproductive tract. Testicular lesions have been observed in rats, mice, and dogs administered boric acid or borax in food or drinking-water (INTERNATIONAL PROGRAMME ON CHEMICAL SAFETY Environmental Health Criteria document # 204).
Teratogenicity :	This product contains Disodium tetraborate, decahydrate (CAS # 1303-96-4). Sodium tetraborate has been investigated as a developmental hazard.
Mutagenicity :	Not expected to be mutagenic in humans.
Epidemiology :	None known or reported by the manufacturer.
Sensitization to material :	Not expected to be a skin or respiratory sensitizer.
Synergistic materials :	None known or reported by the manufacturer.
Irritancy :	Moderate to severe eye irritant. Mild to moderate skin irritant.

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other important hazards : Blood disorder may occur after ingestion. Ingestion of large amounts of aluminum salts over a prolonged period may cause phosphate deficiency, based on animal and human information. Inadequate phosphorus intake results in abnormally low serum phosphate levels (hypophosphatemia).

Conditions aggravated by overexposure
: Pre-existing skin, eye and respiratory disorders.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity : No data is available on the product itself. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters. The product contains the following substances which are hazardous for the environment:
Aluminium sulfate (CAS 10043-01-3):
LC50/96h/Carassius auratus = 100mg/L
LC50/96h/Gambusia affinis = 37mg/L
Chloramine-T (CAS 127-65-1):
LC50/96h/Poecilia reticulata = 31mg/L
LC50/96h/Oncorhynchus mykiss (rainbow trout) = 20.2 - 26.2 mg/L
LC50/96h/Pimephales promelas (Fathead minnow) = 6.52 - 7.51 mg/L
EC50/48h/Daphnia magna (Water flea) = 4.5mg/L
EC50/6D/Chlorella pyrenoidosa = 80 mg/L

Mobility : No data is available on the product itself.

Persistence : No data is available on the product itself.

Bioaccumulation potential : No data is available on the product itself.

Other Adverse Environmental effects
: No data is available on the product itself.


SECTION 13 - DISPOSAL CONSIDERATIONS

Handling for Disposal : Handle waste according to recommendations in Section 7.

Methods of Disposal : Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.

RCRA : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14: TRANSPORT INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
49CFR/DOT	None	Not regulated.	Not regulated	none	
49CFR/DOT Additional information	None.				

SECTION 15 - REGULATORY INFORMATION

US Federal Information:



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TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): (5000 lbs / 2270 kg) Aluminium sulfate (CAS 10043-01-3)

SARA TITLE III: Sec. 302, Extremely Hazardous Substances, 40 CFR 355: No Extremely Hazardous Substances are present in this material.

SARA TITLE III: Sec. 311 and 312, MSDS Requirements, 40 CFR 370 Hazard Classes: Immediate (Acute) health hazard; Chronic Health Hazard. Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This material is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above de minimus concentrations.

US State Right to Know Laws:

California Proposition 65: To the best of our knowledge, this product does not contain any chemicals known to the State of California to cause cancer or reproductive harm.

Other U.S. State "Right to Know" Lists: The following chemicals are specifically listed by individual States:

Aluminium sulfate (CAS 10043-01-3): CA, MA, NJ, PA

Borax (CAS 1303-96-4): CA, MA, MN, NJ, PA, RI

SECTION 16 - OTHER INFORMATION

HMIS Rating : *_-Chronic hazard 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe
*Health: *2 Flammability: 0 Reactivity: 0*

Legend : ACGIH: American Conference of Governmental Industrial Hygienists
CA: California
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR: Code of Federal Regulations
DOT: Department of Transportation
EPA: Environmental Protection Agency
HMIS: Hazardous Materials Identification System
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
Inh: Inhalation
LC: Lethal Concentration
LD: Lethal Dose
MA: Massachusetts
MN: Minnesota
N/Ap: Not Applicable
N/Av: Not Available
NFPA: National Fire Protection Association
NJ: New Jersey
NTP: National Toxicology Program
NIOSH: National Institute of Occupational Safety and Health
OSHA: Occupational Safety and Health Administration
PA: Pennsylvania
PEL: Permissible exposure limit

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RCRA: Resource Conservation and Recovery Act
 RI: Rhode Island
 RTECS: Registry of Toxic Effects of Chemical Substances
 SARA: Superfund Amendments and Reauthorization Act
 STEL: Short Term Exposure Limit
 TLV: Threshold Limit Values
 TWA: Time Weighted Average

References

1. ACGIH, Threshold Limit Values and Biological Exposure Indices
2. International Agency for Research on Cancer Monographs
3. Material Safety Data Sheet from manufacturer.
4. US EPA Title III List of Lists
5. California Proposition 65 List

<p><u>Prepared for:</u> The Dodge Company Inc. 165 CambridgePark Drive Cambridge, MA, USA, 02140 Telephone: (800) 443-6343 Please direct all enquiries to The Dodge Company.</p>	
<p><u>Prepared by:</u> ICC The Compliance Center Inc. http://www.thecompliancecenter.com</p>	

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