Safety Data Sheet
Introfiant OTC

SDS Revision Date: **12/03/2013**

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Identity Introfiant OTC

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

Intended use Arterial Embalming chemical.

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 USA
01821-5731

Emergency

CHEMTREC (USA) (800) 424-9300

Customer Service

The Dodge Company, Inc (800) 443-6343, (978) 600-2099

2. Hazard identification of the product

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. 3;H311	Toxic in contact with skin.
Acute Tox. 2;H330	Fatal if inhaled.
Skin Corr. 1B;H314	Causes severe skin burns and eye damage.
Eye Dam. 1;H318	Causes serious eye damage.
Skin Sens. 1;H317	May cause an allergic skin reaction.
Carc. 2;H351	Suspected of causing cancer.
STOT SE 3;H335	May cause respiratory irritation.
Aquatic Chronic 1;H410	Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

Danger

H226 Flammable liquid and vapor.
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.
H318 Causes serious eye damage.
H330 Fatal if inhaled.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H410 Very 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.
P241 Use explosion-proof electrical / ventilating / light / equipment.
P260 Do not breathe 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.
P284 Wear respiratory protection.

[Response]:

P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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 continuously 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.

P320 Specific treatment is urgent (see information on this label).

P333 If skin irritation or a rash occurs:

P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P363 Wash contaminated clothing before reuse.

P370 In case of fire:

P378 Use alcohol resistant foam, CO2, powder, water spray for extinction. Do not use water jet.

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 relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Formaldehyde **CAS Number: 0000050-00-0**	**25 - 50**	**Carc. 2;H351** **Acute Tox. 3;H331** **Acute Tox. 3;H311** **Acute Tox. 3;H301** **Skin Corr. 1B;H314** **Skin Sens. 1;H317**	**[1][2]**
Borax (B4Na2O7.10H2O) **CAS Number: 0001303-96-4**	**1.0 - 10**	**Repr. 1B;H360FD** **Acute Tox. 4;H332**	**[1][2]**
Propanediol **CAS Number: 0000057-55-6**	**1.0 - 10**		**[1]**
Methanol **CAS Number: 0000067-56-1**	**1.0 - 10**	**Flam. Liq. 2;H225** **Acute Tox. 3;H331** **Acute Tox. 3;H311** **Acute Tox. 3;H301** **STOT SE 1;H370**	**[1][2]**

[1] Substance classified 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.

4. First aid measures

4.1. Description of first aid measures

General

Move victim to fresh air.
Call 911 or emergency medical service.
Give artificial respiration if victim is not breathing.
Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
Administer oxygen if breathing is difficult.
Remove and isolate contaminated clothing and shoes.
In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
Wash skin with soap and water.
In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin.
Keep victim warm and quiet.
Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Inhalation

Move victim to fresh air. Call emergency medical care. Apply artificial respiration if victim is not breathing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Administer oxygen if breathing is difficult.

Eyes

Irrigate copiously with clean fresh water for at least 10 minutes, holding the eyelids apart and seek medical attention.

Skin

Remove and isolate contaminated clothing and shoes. In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. Keep victim warm and quiet. Keep victim under observation.

Ingestion

If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

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

Overview

Effects of contact or inhalation may be delayed. Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 3 and Section 15

	for each ingredient). Risk of cancer depends on duration and level of exposure. See section 2 for further details.
Inhalation	Fatal if inhaled. May cause respiratory irritation.
Eyes	Causes serious eye damage.
Skin	Toxic in contact with skin. May cause an allergic skin reaction. Causes severe skin burns and eye damage.
Ingestion	Harmful if swallowed.

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

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.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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

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

Do not breathe mist / vapors / spray.

5.3. Advice for fire-fighters

Wear positive pressure self-contained breathing apparatus (SCBA).
Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.
Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
Vapors may form explosive mixtures with air.
Vapors may travel to source of ignition and flash back.
Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
Vapor explosion and poison hazard indoors, outdoors or in sewers.
Those substances designated with a **(P)** may polymerize explosively when heated or involved in a fire.
Runoff to sewer may create fire or explosion hazard.
Containers may explode when heated.
Many liquids are lighter than water.

TOXIC; may be fatal if inhaled, ingested or absorbed through skin.
Inhalation or contact with some of these materials will irritate or burn skin and eyes.
Fire will produce irritating, corrosive and/or toxic gases.
Vapors may cause dizziness or suffocation.

Runoff from fire control or dilution water may cause pollution.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Large Spill: Water spray may reduce vapor; but may not prevent ignition in closed spaces.
Water spray may reduce vapor; but may not prevent ignition in closed spaces.

6.2. Environmental precautions

Do not allow spills to enter drains or watercourses.

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

Remove sources of ignition, do not turn lights or unprotected electrical equipment on or off. In case of a major spill or spillage in a confined space evacuate the area and check that solvent vapor levels are below the Lower Explosive Limit before re-entering.

CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions.
Keep unauthorized personnel away.
Stay upwind.
Keep out of low areas.
Ventilate closed spaces before entering.

7. Handling and storage

7.1. Precautions for safe handling

This coating contains solvents. Solvent vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Areas of storage, preparation and application should be ventilated to prevent the creation of flammable or explosive concentrations of vapor in air and avoid vapor concentrations higher than the occupational exposure limits.

The requirements of the Highly Flammable Liquids and Liquefied Petroleum Gases Regulations apply if the flashpoint is between 21°C and 32°C.

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

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Naked flames and smoking should not be permitted in storage areas. It is recommended that fork lift trucks and electrical equipment are protected to the appropriate standard.

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.

All sources of ignition (hot surfaces, sparks, open flames etc) should be excluded from areas of preparation and application. All electrical equipment (including torches) should be protected (Ex) to the appropriate standard.

The product may charge electrostatically. Always use earthing leads when pouring solvents and transferring product. Operators should wear clothing which does not generate static (at least 60% natural fiber) and antistatic footwear; floors should be of conducting type.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingestion	Source	Value
0000050-00-0	Formaldehyde	OSHA	TWA 0.75 ppmSTEL 2 ppm
		ACGIH	TWA: 0.3 ppm Ceiling: 1 ppmS, A2, 1
		NIOSH	Ca TWA 0.016 ppm C 0.1 ppm [15-minute]
		Supplier	No Established Limit
0000057-55-6	Propanediol	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	10 mg/m3 TWA (listed as AIHA WEEL)
0000067-56-1	Methanol	OSHA	TWA 200 ppm (260 mg/m3)
		ACGIH	TWA: 200 ppmSTEL: 250 ppm Skin
		NIOSH	TWA 200 ppm (260 mg/m3) ST 250 ppm (325 mg/m3) [skin]
		Supplier	No Established Limit
0001303-96-4	Borax (B4Na2O7.10H2O)	OSHA	No Established Limit
		ACGIH	TWA: 2 mg/m3STEL: 6 mg/m3
		NIOSH	TWA 5 mg/m3
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingestion	Source	Value
0000050-00-0	Formaldehyde	OSHA	Select Carcinogen: Yes
		NTP	Known: Yes; Suspected: Yes
		IARC	Group 1: Yes; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0000057-55-6	Propanediol	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0000067-56-1	Methanol	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0001303-96-4	Borax (B4Na2O7.10H2O)	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

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.

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. - [Prevention]:

9. Physical and chemical properties

Appearance	Clear, deep garnet Liquid
Odor	Pungent
Odor threshold	Not Measured
pH	Not Measured
Melting point / freezing point (°C)	Not Measured
Initial boiling point and boiling range (°C)	90 - 92C (194 - 198F)
Flash Point	53 - 56C (128 - 132F) TCC
Evaporation rate (Ether = 1)	< 1
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	**Lower Explosive Limit:** 7 (formaldehyde) **Upper Explosive Limit:** 73 (formaldehyde)
Vapor pressure (Pa)	Not Measured
Vapor Density	> 1
Specific Gravity	1.080 - 1.090
Solubility in Water	Not Measured
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature (°C)	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured
VOC %	96%

9.2. Other information

No other relevant information.

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 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.

11. Toxicological information

Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr	Inhalation Gas LD50, ppm
Formaldehyde - (50-00-0)	800.00, Rat - Category: 4	270.00, Rabbit - Category: 3	0.578, Rat - Category: 2	No data available	168.00, Rat - Category: NA
Borax (B4Na2O7.10H2O) - (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
Propanediol - (57-55-6)	20,000.00, Rat - Category: NA	20,800.00, Rabbit - Category: NA	105.00, Rat - Category: NA	No data available	No data available
Methanol - (67-56-1)	143.00, Human - Category: 3	15,800.00, Rabbit - Category: NA	128.00, Rat - Category: NA	No data available	64,000.00, Rat - Category: NA

Item	Category	Hazard
Acute Toxicity (mouth)	4	Harmful if swallowed.
Acute Toxicity (skin)	3	Toxic in contact with skin.
Acute Toxicity (inhalation)	2	Fatal if inhaled.
Skin corrosion/irritation	1B	Causes severe skin burns and eye damage.
Eye damage/irritation	1	Causes serious eye damage.
Sensitization (respiratory)	---	Not Applicable
Sensitization (skin)	1	May cause an allergic skin reaction.

Germ toxicity	---	Not Applicable
Carcinogenicity	2	Suspected of causing cancer.
Reproductive Toxicity	---	Not Applicable
Specific target organ systemic toxicity (single exposure)	3	May cause respiratory irritation.
Specific target organ systemic Toxicity (repeated exposure)	---	Not Applicable
Aspiration hazard	---	Not Applicable

12. Ecological information

12.1. Toxicity

Very 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	0.788 (96 hr), Ulva pertusa
Borax (B4Na2O7.10H2O) - (1303-96-4)	74.00, Limanda limanda	484.00, Daphnia magna	24.00 (72 hr), Scenedesmus subspicatus
Propanediol - (57-55-6)	710.00, Pimephales promelas	10,000.00, Daphnia magna	Not Available
Methanol - (67-56-1)	100.00, Pimephales promelas	10,000.00, Daphnia magna	16.912 (96 hr), Ulva pertusa

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.

13. Disposal considerations

13.1. Waste treatment methods

Do not allow into drains or water courses. Wastes and emptied containers should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act.

Using information provided in this data sheet advice should be obtained from the Waste Regulation Authority, whether the special waste regulations apply.

14. Transport information

14.1. UN number UN1992

14.2. UN proper shipping name Flammable liquids, toxic, n.o.s., (Formaldehyde)

14.3. Transport hazard class(es)

DOT (Domestic Surface Transportation)

DOT Proper Shipping Name	Flammable liquids, toxic, n.o.s., (Formaldehyde)
DOT Hazard Class	3
DOT Label	3, 6.1
UN / NA Number	UN1992
DOT Packing Group	III
CERCLA/DOT RQ	39 gal. / 355 lbs.

IMO / IMDG (Ocean Transportation)

IMDG Proper Shipping Name	Flammable liquids, toxic, n.o.s., (Formaldehyde)
IMDG Hazard Class	3
Sub Class	6.1
IMDG Packing Group	III

14.4. Packing group III

14.5. Environmental hazards

IMDG Marine Pollutant: Yes (Formaldehyde)

14.6. Special precautions for user

Not Applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not Applicable

15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented. All ingredients of this product are listed on the TSCA (Toxic Substance Control Act) Inventory or are not required to be listed on the TSCA Inventory.

WHMIS Classification D2A E

US EPA Tier II Hazards

Fire: Yes
Sudden Release of Pressure: No
Reactive: No
Immediate (Acute): Yes
Delayed (Chronic): Yes

EPCRA 311/312 Chemicals and RQs (lbs) (>0.1%) :

Formaldehyde (100.00)

Methanol (5,000.00)

EPCRA 302 Extremely Hazardous (>.1%) :

Formaldehyde

EPCRA 313 Toxic Chemicals (>.1%) :

Formaldehyde

Methanol

Proposition 65 - Carcinogens (>0.0%):

Formaldehyde

Proposition 65 - Developmental Toxins (>0.0%):
(No Product Ingredients Listed)

Proposition 65 - Female Repro Toxins (>0.0%):
(No Product Ingredients Listed)

Proposition 65 - Male Repro Toxins (>0.0%):
(No Product Ingredients Listed)

N.J. RTK Substances (>1%) :

Formaldehyde

Methanol

Propanediol

Penn RTK Substances (>1%) :

Borax (B4Na2O7.10H2O)

Formaldehyde

Methanol

Propanediol

16. Other information

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.

H332 Harmful if inhaled.

H350 May cause cancer.

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

H370 Causes damage to organs.

H400 Very toxic to aquatic life.

This is the first revision of this SDS format, changes from previous revision not applicable.

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