



**CastSeal Part A & B
Safety Data Sheet**

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifier

Trade Name **IMPCO CastSeal Cast Iron Porosity Sealant Part A & B**
SDS Date November 5, 2012

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Product Use: Anaerobic Resin Sealant
Uses Advised Against: None

1.3 Details of the Supplier of the Substance or Mixture

Manufacturer: **Godfrey & Wing DBA IMPCO, Incorporated**
 11 Dexter Road
 East Providence, RI 02914

1.4 Emergency Telephone Number

Emergency Spill Information +1 (800) 424-9300 (CHEMTREC)
 +1 (703) 527-3887 for International Calls (call CHEMTREC collect)

Other Product Information: +1 (401) 521-2490
 mail@impc-inc.com

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

EU Classification (67/548/EEC): Part A: Xi R36, R43
 Part B: Xi R37/38, R41, R43, R52/53

GHS Classification:

Part A:

Health	Environmental	Physical
Eye Irritation Category 2A Skin Sensitizer Category 1	Not Hazardous	Not Hazardous

Part B:


Health	Environmental	Physical
Eye Irritation Category 1 Skin Irritation Category 2 Skin Sensitizer Category 1	Aquatic Chronic Category 3	Not Hazardous

2.2 Label Elements


Part A:



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WARNING!
<p>H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.</p>
<p>Prevention: P261 Avoid breathing mist, vapours, or spray. P264 Wash thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves, protective clothing, eye protection and face protection.</p> <p>Response: P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical attention. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P333 + P313 If skin irritation or rash occurs: Get medical attention. P362 + P364 Take off contaminated clothing and wash it before reuse.</p> <p>Disposal: P501 Dispose of contents/container in accordance with local and national regulations.</p>

Part B:


DANGER!
<p>H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H412 Harmful to aquatic life with long lasting effects.</p>
<p>Prevention: P260 Do not breathe mists. P264 Wash thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P280 Wear protective gloves, protective clothing, eye protection and face protection.</p> <p>Response: P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor. P302 + P352 IF ON SKIN: Wash with plenty of water. P333 + P313 If skin irritation or rash occurs: Get medical attention.</p>



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P310 Immediately call a POISON CENTER or doctor.
 P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/container in accordance with local and national regulations.

2.3 Other Hazards: None

SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances

Part A

Ingredient	CAS No. / EINECS No.	Percent	EU Classification (67/548/EEC)	CLP/GHS Classification (1272/2008)
Polyethylene Glycol Dimethacrylate	25852-47-5	50-80%	Xi R36, R43	Eye Irrit. 2A (H319), Skin Sens. 1 (H317)
Hydroxy Propyl Methacrylate	27813-02-1 / 248-666-3	15-35%	Xi R36, R43	Eye Irrit. 2A (H319), Skin Sens. 1 (H317)
Saccharin	81-07-2 / 201-321-0	1-10%	Not Applicable	Not Applicable
Emulsifier	Proprietary	1-5%	Not Applicable	Not Applicable

Part B

Ingredient	CAS No. / EINECS No.	Percent	EU Classification (67/548/EEC)	CLP/GHS Classification (1272/2008)
Polyethylene Glycol Dimethacrylate	25852-47-5	50-80%	Xi R36, R43	Eye Irrit. 2A (H319), Skin Sens. 1 (H317)
Hydroxy Propyl Methacrylate	27813-02-1 / 248-666-3	15-35%	Xi R36, R43	Eye Irrit. 2A (H319), Skin Sens. 1 (H317)
Cumene hydroperoxide	80-15-9 / 201-254-7	1-<5%	O, C, T, N R7, R21/22, R23, R34, R48/20/22, R51/53	Organ. Perox. Type E (H242), Acute Tox. 3 (H331), Acute Tox. 4 (H302, H312), Skin Corr. 1B (H314), STOT RE 2 (H373), Aquat. Chron. 2 (H411)
Emulsifier	Proprietary	1-5%	Not Applicable	Not Applicable

See Section 16 for full text GHS and EU Classifications.

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures



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Part A:

Eye Contact: Immediately flush eyes with water for 15 minutes while lifting the upper and lower lids. Get medical attention if irritation occurs and persists.

Skin Contact: Wash skin thoroughly with soap and water. Remove contaminated clothing and launder before reuse. Get medical attention if irritation or rash occurs.

Inhalation: Remove victim to fresh air. Get medical attention if symptoms develop.

Ingestion: Do not induce vomiting unless directed to do so by medical personnel. Get medical attention.

Part B:

Eye Contact: Immediately flush eyes with water for at least 30 minutes while lifting the upper and lower lids. Get immediate medical attention.

Skin Contact: Immediately wash skin with soap and water for 20 minutes. Remove contaminated clothing and launder before reuse. Shoes and other items that cannot be decontaminated should be disposed of properly. Get medical attention.

Inhalation: Remove victim to fresh air. Get medical attention if symptoms develop.

Ingestion: Do not induce vomiting unless directed to do so by medical personnel. Get medical attention.

See Section 11 for more detailed information on health effects.

4.2 Most Important symptoms and effects, both acute and delayed: Part A: Causes eye irritation with redness and tearing. May cause allergic skin reaction with itching and rash. Part B: Causes severe eye with redness, tearing, and possible corneal damage. Causes skin irritation with redness and discomfort. May cause allergic skin reaction with itching and rash.

4.3 Indication of any immediate medical attention and special treatment needed: Part A: Immediate medical attention should not be required. Part B: Immediate medical attention is required for contact, ingestion, and inhalation overexposure.

SECTION 5: FIRE FIGHTING PROCEDURES

5.1 Extinguishing Media:

Use water fog, carbon dioxide, dry chemical or foam to extinguish the fire.

5.2 Special Hazards Arising from the Substance or Mixture:

Unusual Fire and Explosion Hazards: Not classified as flammable or combustible. May burn under fire conditions.

Combustion Products: Carbon monoxide, carbon dioxide, nitrogen oxides, and sulfur oxides may be released during a fire involving these products.

5.3 Advice for Fire-Fighters: Firefighters should use self-contained breathing apparatus and protective clothing for all fires involving chemicals. Cool fire exposed containers with water. Closed containers may explode when exposed to heat. Fight fire from a safe distance and/or protected area. Contain fire run-off if possible to prevent environmental contamination.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:



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Evacuate personnel to safe areas. Ventilate area. Clean-up personnel should wear appropriate protective clothing to prevent contact with eye, skin, and clothing. Avoid breathing vapors or mists. Spilled or released material may polymerize and release heat and/or gases.

6.2 Environmental Precautions:

Prevent liquid from entering watercourses, sewers and natural waterways. Report spills and releases as required to appropriate authorities.

6.3 Methods and Material for Containment and Cleaning Up:

Contain spill and collect using inert absorbent material such as universal binders, dirt, saw dust or sand. Place in an appropriate container for disposal.

6.4 Reference to Other Sections:

Refer to Section 8 for personal protective equipment and Section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling:

Prevent contact with eyes, skin and clothing. Avoid breathing vapors. Use with adequate ventilation. Always wear impervious gloves, chemical safety goggles and protective clothing when handling this material. Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep product away from excessive heat and open flames. Keep container closed until ready to use.

7.2 Conditions for Safe Storage, Including any Incompatibilities:

Store in a cool, dry, well-ventilated area away from oxidizing materials and other incompatible materials. Keep away from excessive heat and open flames. Keep containers closed when not in use. Store at 25°C (77°F) to preserve shelf-life.

Empty containers retain product residues. Follow all SDS precautions in handling empty containers. Do not reuse containers.

7.3 Specific end use(s):

Industrial uses: Anaerobic Resin Sealant

Professional uses: None identified

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control Parameters:

Hazardous Component	Exposure Limits
Polyethylene Glycol Dimethacrylate	None Established
Hydroxy Propyl Methacrylate	None Established
Saccharin	None Established
Cumyl hydroperoxide	None Established
Emulsifier	None Established



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8.2 Exposure Controls:

Appropriate Engineering Controls: If the recommended exposure limit is exceeded, mechanical ventilation such as local exhaust may be required.

Personal Protective Equipment:

Eye/face Protection: Chemical splash goggles and face shield is recommended to prevent eye contact.

Hands: Impervious gloves such as butyl rubber are recommended to prevent skin contact.

Skin Protection: Impervious clothing is recommended to prevent contamination of personal clothing.

Respiratory Protection: None needed under normal use conditions. If the recommended exposure limit is exceeded or irritation is experienced, an approved full facepiece supplied air respirator can be used. A full facepiece respirator supplied air provides both eye and respiratory protection. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with applicable regulations and good Industrial Hygiene practice.

Other Protective: For operations where contact can occur, a safety shower and an emergency eye wash facility should be available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
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9.1 Information on basic Physical and Chemical Properties

	Part A	Part B
Appearance:	Two Low Density Polyethylene Bottles with screwtop covers	
	Clear, blue, red, or purple liquid	Clear liquid
Odor:	Sweet, pungent odor	
Odor threshold:	Not available	Not available
Boiling Point:	300°F / 149°C	300°F / 149°C
Melting/ Freezing Point:	Not available	
Solubility (in water):	Less than 10%	
Vapor Pressure:	0.05	0.05
Vapor Density (air=1):	>1	
Relative Density:	1.06	
Specific Gravity:	1.06	
Evaporation Rate:	<1	
pH:	Not available	
Octanol/ Water Coefficient:	Not available	
Percent Volatile:	<1% by weight	<5% by weight
Auto-Ignition Temperature:	Not available	
Decomposition Temperature:	Not available	
Viscosity:	Not available	
Flash Point:	200°F / 93°C	



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Method:	Seta Closed Cup	Seta Closed Cup
Flammability (solid, gas):	Not applicable	Not applicable
Flammable Limits:		
Lower Flammable Limit:	Not available	Not available
Upper Flammable Limit:	Not available	Not available
Explosive Properties:	Product does not present an explosion hazard.	Product does not present an explosion hazard.
Oxidizing Properties:	Not available	Not available
VOC Content:	0	0

9.2 Other Information: None available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: Individual parts are reactive and will polymerize even when stored under recommended conditions. When combined during use, products will react by a redox reaction and turn the monomers into a polymer at an accelerated rate. Refer to the Technical Data Sheet for more information on safe use of the product.

10.2 Chemical Stability: Stable under normal storage and handling conditions. Product is a mixture of unsaturated monomers that will polymerize over time. Please refer to the Technical Data Sheet for more information on the product shelf life.

10.3 Possibility of Hazardous Reactions: Polymerization may be highly exothermic and may be violent.

10.4 Conditions to Avoid: Avoid elevated temperatures, ultraviolet radiation, direct sunlight, and inert gas blanketing.

10.5 Incompatible Materials: Avoid contact with oxidizing agents, radical-forming substances (metal ions, peroxides), reducing agents, copper, acids, alkalies, heavy metals, and inert gases.

10.6 Hazardous Decomposition Products: Thermal decomposition may produce carbon monoxide, carbon dioxide, nitrogen oxides, and sulfur oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

Potential Health Effects:

Eye Contact: Contact with Part A may cause eye irritation with redness, blinking and excessive tearing. Contact with Part B may cause severe burns and permanent eye damage.

Skin Contact: Contact with Part A may cause slight skin irritation. Contact with Part B may cause skin irritation with redness and discomfort. Both Part A and Part B May cause sensitization by skin contact.

Inhalation: Both Part A and B may cause slight respiratory tract irritation.

Ingestion: Ingestion of Parts A or B may cause gastrointestinal disturbance and discomfort.

Acute Toxicity: This product has not been tested as a whole.



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Proprietary Dimethacrylate	No data available
Hydroxy Propyl Methacrylate	Oral rat LD50 >5,000 mg/kg Inhalation rat LC50 6,090 mg/m ³ / 4 hours.
Saccharin	Oral rat LD50 17,000 mg/kg
Cumyl hydroperoxide	Oral rat LD50 382 mg/kg Inhalation rat LC50 220 ppm/4 hr
Emulsifier	Oral rat LD50 31,600 mg/kg

Skin corrosion/irritation: Part A is not classified as an irritant. Part B is corrosive.

Eye damage/ irritation: Part A is an eye irritant. Part B is damaging to the eyes.

Respiratory Irritation: Part B may cause irritation through corrosive effects.

Respiratory Sensitization: No data available.

Skin Sensitization: Contact with Part A or Part B may cause skin sensitization.

Germ Cell Mutagenicity: Neither Part A nor Part B are classified as germ cell mutagens.

Carcinogenicity: None of the components of this product at greater than 0.1% are listed as carcinogens by IARC, NTP, ACGIH, OSHA or the EU Directive.

Reproductive Toxicity: Neither Part A nor Part B are classified as reproductive toxins.

Specific Target Organ Toxicity:
 Single Exposure: No data available
 Repeat Exposure: No data available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity: No ecotoxicity data is available for Part A and Part B.

Part B is classified as harmful to the aquatic environment. Avoid environmental releases.

12.2 Persistence and degradability: No data available. Not expected to be readily biodegradable.

12.3 Bioaccumulative Potential: No data available

12.4 Mobility in Soil: No data available

12.5 Results of PVT and vPvB assessment: Not required.

12.6 Other Adverse Effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods:



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Dispose of in accordance with local, state and national regulations.

SECTION 14: TRANSPORT INFORMATION

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
US DOT	None	Not Regulated	None	None	No
Canadian TDG	None	Not Regulated	None	None	No
EU ADR/RID	None	Not Regulated	None	None	No
IMDG	None	Not Regulated	None	None	No
IATA/ICAO	None	Not Regulated	None	None	No

14.6 Special Precautions for User: Refer to applicable regulations for further information.

14.7 Transport in Bulk According to Annex III MARPOL 73/78 and the IBC Code: Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

U.S. FEDERAL REGULATIONS:

CERCLA 103 Reportable Quantity: Part B of this Product has a reportable quantity of 100 lbs. based on the reportable quantity of Cumene hydroperoxide of 10 lbs. present at 1-10%. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA TITLE III:

Hazard Category for Section 311/312: Acute hazard, Chronic hazard

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements:

Cumene hydroperoxide 80-15-9 1-10%

Section 302 Extremely Hazardous Substances (TPQ): None.

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EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.

STATE REGULATIONS:

California Proposition 65: This product contains the following chemicals known to the State of California to cause cancer or reproductive toxicity:

Name	CAS	Amount
N,N-dimethyl-p-toluidine	99-97-8	1%

INTERNATIONAL REGULATIONS:

Canadian Environmental Protection Act: All of the components of this product are listed on the Canadian Domestic Substances List.

CANADIAN WHMIS CLASSIFICATION: Part A: Class D-2-B; Part B: Class E (Corrosive), Class D-2-B



Canadian WHMIS Hazard Symbols: Part A:

Part B:

This product has been classified in accordance with the hazard criteria in the CPR and the MSDS contains all the information required by the CPR.

EUROPEAN INVENTORY OF COMMERCIAL CHEMICAL SUBSTANCES: All of the components of this product are listed or exempted from the EINECS Inventory.

16. OTHER INFORMATION

NFPA RATING:	Health = 3	Fire = 1	Instability = 0	Special: None
HMIS RATING:	Health = 3	Fire = 1	Physical Hazard = 0	

EU Classes and Risk Phrases for Reference (See Sections 2 and 3):

O Oxidizer
 C Corrosive
 N Dangerous for the Environment
 Xi Irritant
 Xn Harmful
 R7 May cause fire.
 R21/22 Harmful if swallowed.
 R23 Toxic by inhalation.
 R34 Causes burns.
 R36 Irritating to eyes.
 R37/38 Irritating to respiratory system and skin.
 R41 Risk of serious damage to eyes.
 R43 May cause sensitization by skin contact.
 R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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SEALANTS**

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CLP/GHS Classification and H Phrases for Reference (See Sections 3):

Organ. Perox. Type E Organic Peroxide Type E

Acute Tox. 3 Acute Toxicity Category 3

Acute Tox. 4 Acute Toxicity Category 4

Aquatic Chronic 2 Aquatic Chronic Toxicity Category 2

Eye Dam. 1 Eye Damage Category 1

Eye Irrit. 2A Eye Irritant Category 2A

Skin Corr. 1B Skin Corrosion Category 1B

Skin Sens. 1 Skin Sensitization Category 1

STOT RE 2 Specific Target Organ Toxicity Repeated Exposure Category 2

H242 Heating may cause a fire.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin and eye damage.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.