

# MATERIAL SAFETY DATA SHEET

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** ASTEC # 101 ACCELERATOR

**PART NUMBER:**

**GENERAL USE:** Protective coating additive

**PRODUCT DESCRIPTION:** Yellow liquid, slightly musty odor.



**MANUFACTURER'S NAME**

Insulating Coatings Corporation

**DATE PREPARED:** July 30, 2009

**SUPERSEDES:** October 18, 2003

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**ADDRESS (NUMBER, STREET, P.O. BOX)**

956 South Hwy 41

**TELEPHONE NUMBER FOR INFORMATION**

(800) 345-5306

**(CITY, STATE AND ZIP CODE)**

Inverness, FL 34450

**COUNTRY**

USA

**EMERGENCY TELEPHONE NUMBER**

ChemTel Inc. 1- (800) 255-3924 Intl. + 01 (813) 248-0585

## SECTION 2 - HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

Yellow liquid, nearly odorless. May cause eye, skin and respiratory tract irritation. May cause allergic respiratory reaction. Harmful if inhaled or swallowed. May cause lung damage. As a result of previous overexposures by inhalation, or a single large dose, certain individuals may develop isocyanate sensitization which will cause them to react to a later exposure to isocyanate at levels well below the TLV. Prolonged skin contact can cause skin sensitization. Individuals who have developed skin sensitization can develop symptoms as a result of contact with very small amounts of liquid material or as a result of exposure to vapor. Toxic gases are emitted during burning or thermal decomposition. Hazard Symbols - Xn. Risk Phrases - R20, 36/37/38, 42/43

### POTENTIAL HEALTH EFFECTS

**INHALATION:** High concentrations are irritating to the respiratory tract; may cause headache, dizziness, nausea, vomiting and malaise. Chronic overexposures, or a single large dose, may cause isocyanate sensitization and subsequent reaction to a later exposure to isocyanate at levels well below the TLV

**SKIN:** Brief contact may cause slight irritation; prolonged contact may cause moderate reddening, swelling and possible necrosis. Chronic exposure may result in skin sensitization, which can cause symptoms as a result of contact with very small amounts of liquid material or as a result of exposure to vapor. Cured material is hard to remove.

**EYES:** Contact causes severe irritation and pain associated with redness and swelling of the conjunctiva.

**INGESTION:** May cause headache, dizziness, diarrhea and general weakness; large doses may result in red blood cell hemolysis.

**CARCINOGENICITY**

NTP?

No

IARC MONOGRAPHS?

No

OSHA REGULATED?

No

## SECTION 3 - HAZARDOUS INGREDIENTS

| HAZARDOUS COMPONENTS                            | %<br>(by weight) | CAS #         | EINECS #      | Hazard<br>Symbol | RISK PHRASES<br>Full Text Section 16 |
|-------------------------------------------------|------------------|---------------|---------------|------------------|--------------------------------------|
| Modified Methylene di-para-phenylene isocyanate | 60 - 90          | Not specified | Not specified |                  | not established                      |
| Diphenylmethane-4,4'-diisocyanate (a,b,c)       | 12               | 101-68-8      | 202-966-0     | Xn               | R-20, 36/37/38, 42/43                |
| Propylene carbonate                             | 5 - 10           | 108-32-7      | 203-572-1     | Xi               | R-36                                 |

The remaining components of this product are non-hazardous or are in small enough quantities as to not meet regulatory thresholds for disclosure. These components contain no substances or impurities which would influence the classification of this product.

(a,c) See Section 15

(b) Ingredients included in the Canadian Ingredient Disclosure List are one of the four categories of ingredients whose identity and concentration must be disclosed on an MSDS if found in a controlled product above the concentration cut-off.

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## SECTION 4 - FIRST AID MEASURES

**INHALATION:** Remove affected person to fresh air; provide oxygen if breathing is difficult; if affected person is not breathing, administer CPR and seek emergency medical attention.

**SKIN:** Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse; if irritation persists, seek medical attention.

**EYES:** Check for and remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open; if irritation persists, seek medical attention.

**INGESTION:** DO NOT induce vomiting; if vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs; seek immediate medical attention. Vomiting may be induced only under the supervision of a physician.

## SECTION 5 - FIRE FIGHTING MEASURES

**GENERAL HAZARDS:** Product will support combustion. Products of combustion include compounds of carbon, hydrogen and oxygen, including carbon monoxide.

### EXTINGUISHING MEDIA

Carbon dioxide, water fog, dry chemical, chemical foam.

### FIRE FIGHTING PROCEDURES

Self - contained respiratory equipment; cool containers to prevent pressure buildup and possible explosion when exposed to extreme heat.

Caution - material will support combustion!

### UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers can explode due to buildup of pressure when exposed to extreme heat.

### HAZARDOUS COMBUSTION PRODUCTS

Smoke, fumes or vapors, oxides of carbon, oxides of nitrogen and traces of HCN.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** WILL SUPPORT COMBUSTION. Evacuate and ventilate area; confine and absorb into absorbent; place material into approved containers for disposal; refer to SARA Title III, Section 313 40 CFR 372, and CERCLA 40 CFR 302 for details concerning reporting requirements. Do not discharge into lakes, ponds, streams or public waters.

## SECTION 7 - HANDLING AND STORAGE

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Keep container closed when not in use; protect containers from abuse; protect from extreme temperatures, open flames. CAUTION - This material will support combustion. Keep this and other chemicals out of reach of children.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

| HAZARDOUS COMPONENTS                            | NIOSH   |                 |          |            | ACGIH   |                 |          |            |
|-------------------------------------------------|---------|-----------------|----------|------------|---------|-----------------|----------|------------|
|                                                 | TWA ppm | TWA mg/m3       | STEL ppm | STEL mg/m3 | TWA ppm | TWA mg/m3       | STEL ppm | STEL mg/m3 |
| Modified Methylene di-para-phenylene isocyanate |         | Not established |          |            |         | Not established |          |            |
| Diphenylmethane-4,4'-diisocyanate (a,b,c)       | 0.02 C  | 0.2 C           |          |            | 0.005   | 0.051           |          |            |
| Propylene carbonate                             |         | Not established |          |            |         | Not established |          |            |

A "C" in the NIOSH or ACGIH column indicates ceiling limits, the concentration that should not be exceeded during any part of the working exposure.

### PERSONAL PROTECTION:

**RESPIRATORY PROTECTION:** None required while threshold limits are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator approved for use in isocyanate - containing environments must be worn.

**PROTECTIVE GLOVES:** Neoprene, butyl or nitrile rubber gloves with cuffs.

**EYE PROTECTION:** Chemical splash goggles. Refer to 29 CFR 1910.133, ANSI Z87.1, or European Standard EN166.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Coveralls, apron, or other equipment should be worn to minimize skin contact.

**WORK / HYGIENIC PRACTICES:** Practice safe workplace habits. Safety showers and safety eyewash nearby.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                |                                                                                          |                                         |
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| <b>MATERIAL SAFETY DATA SHEET</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                                                          |                                         |
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| <b>SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                |                                                                                          |                                         |
| APPEARANCE AND ODOR<br>Yellow liquid, slightly musty odor.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                | VAPOR PRESSURE<br>< 0.01 mm Hg @ 20° C                                                   |                                         |
| pH<br>1.11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                | SPECIFIC GRAVITY (WATER = 1)<br>1.110                                                    |                                         |
| BOILING POINT / BOILING RANGE<br>> 572° F ( > 300° C ) Decomposes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                | SOLUBILITY IN WATER<br>Slightly soluble                                                  | VISCOSITY<br>Not specified              |
| FLASH POINT<br>> 230° F ( > 110° C )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                | VOLATILE ORGANIC COMPOUNDS (VOC's)<br>Not specified                                      |                                         |
| FLAMMABLE LIMITS<br>LEL: Not applicable      UEL: Not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                | VAPOR DENSITY (AIR = 1)<br>3.5                                                           |                                         |
| AUTOIGNITION TEMPERATURE<br>Not established                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                | EVAPORATION RATE (WATER = 1)<br>< 0.01                                                   |                                         |
| <b>SECTION 10 - STABILITY AND REACTIVITY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                |                                                                                          |                                         |
| STABILITY<br>UNSTABLE:<br>STABLE: X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                | CONDITIONS TO AVOID: Extreme temperatures, open flames. Keep product away from moisture. |                                         |
| INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers, strong acids.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                |                                                                                          |                                         |
| HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, hydrocarbons, fumes or vapors, and smoke may be produced.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                |                                                                                          |                                         |
| HAZARDOUS POLYMERIZATION<br>MAY OCCUR:<br>WILL NOT OCCUR: X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                | CONDITIONS TO AVOID: None                                                                |                                         |
| <b>SECTION 11 - TOXICOLOGICAL INFORMATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                |                                                                                          |                                         |
| Hazardous Components                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | CAS #<br>EINECS #              | LD50 of Ingredient<br>(Specify Species and Route)                                        | LC50 of Ingredient<br>(Specify Species) |
| Modified Methylene di-para-phenylene isocyanate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Not specified<br>Not specified | not established                                                                          | not established                         |
| Diphenylmethane-4,4'-diisocyanate (a,b,c)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 101-68-8<br>202-966-0          | 2200 mg / kg<br>Oral - mouse                                                             | 178 mg / m3<br>Inhalation - rat         |
| Propylene carbonate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 108-32-7<br>203-572-1          | 20,0700 mg / kg<br>Oral - rat                                                            | > 5,000 mg / m3<br>Inhalation - rat     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                |                                                                                          |                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                |                                                                                          |                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                |                                                                                          |                                         |
| <b>SECTION 12 - ECOLOGICAL INFORMATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                |                                                                                          |                                         |
| No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.                                                                                                                                                                   |                                |                                                                                          |                                         |
| <b>SECTION 13 - DISPOSAL CONSIDERATIONS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                |                                                                                          |                                         |
| WASTE DISPOSAL METHOD: Dispose of in accordance with local, state, and federal regulations. This product may produce hazardous vapors in a closed disposal container creating a dangerous environment. Refer to 40 CFR 260 - 299 for complete waste disposal regulations. Consult your local, state, or federal agency before disposing of any chemicals. Do not flush to sanitary sewer or waterway. According to the European Waste Catalogue, waste codes are application specific and should be assigned by the user based on the application for which the product is used.                                                                                                                                                                        |                                |                                                                                          |                                         |
| <b>SECTION 14 - TRANSPORT INFORMATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                                                                                          |                                         |
| <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">           PROPER SHIPPING NAME: Non - Hazardous for Transport<br/>           DOT HAZARD CLASS / Packaging Group: Not regulated<br/>           REFERENCE: Not Applicable<br/>           UN / NA IDENTIFICATION NUMBER: None<br/>           LABEL: None Required<br/>           HAZARD SYMBOLS: None         </div> <div style="width: 45%;">           IATA HAZARD CLASS / Packaging Group: Not regulated<br/>           IMDG HAZARD CLASS: Not regulated<br/>           RID / ADR Dangerous Goods Code: Not regulated<br/>           UN TDG Class / Packaging Group: Not regulated<br/>           Hazard Identification Number (HIN): None         </div> </div> |                                |                                                                                          |                                         |
| Note: Transportation information provided is for reference only. Client is urged to consult 49 CFR 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping. Hazard Class 9 must be used if shipping quantity exceeds RQ for this mixture.                                                                                                                                                                                                                                                                                                                                                      |                                |                                                                                          |                                         |

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## SECTION 15 - REGULATORY INFORMATION

### TSCA (USA - Toxic Substance Control Act)

All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume or Polymer Exemption has been granted in accordance with 40 CFR 723.50.

### SARA TITLE III (USA - Superfund Amendments and Reauthorization Act)

311/312 Hazard Categories

Immediate health

313 Reportable Ingredients:

(a) Indicates a toxic chemical subject to annual reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

### CERCLA (USA - Comprehensive Response Compensation and Liability Act)

(b) The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) has notification requirements for releases or spills to the environment of the Reportable Quantity (RQ for this mixture > 24,000 lbs) or greater amounts, according to 40 CFR 302.

### California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986

There is a reportable chemical present (Dibutyl phthalate) known to the state of California to cause cancer or reproductive toxicity.

### CPR (Canadian Controlled Products Regulations)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. WHMIS Classification: D1A, D2A, D2B

### IDL (Canadian Ingredient Disclosure List)

Components of this product identified by CAS number and listed on the Canadian Ingredient Disclosure List are shown in Section 2.

### DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List)

Components of this product identified by CAS number are listed on the DSL or NDSL, or are otherwise in compliance with the New Substances Notification (NSN) regulations. Only ingredients classified as "hazardous" are listed in Section 2 unless otherwise indicated.

### EINECS (European Inventory of Existing Commercial Chemical Substances)

Components of this product identified by CAS numbers are on the European Inventory of Existing Commercial Chemical Substances.

WGK Water Quality Index: 2

VbK Index: A III

### RISK PHRASES:

R20 Harmful by inhalation.  
R36/37/38 Irritating to eyes, respiratory system and skin.  
R42/43 May cause sensitisation by inhalation and skin contact.

### SYMBOL(S) REQUIRED FOR LABEL

Harmful



### SAFETY PHRASES:

S23 Do not breathe vapor.  
S36/37 Wear suitable protective clothing and gloves.  
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible.)

## SECTION 16 - OTHER INFORMATION

### Notes & full R-Phrase text

R20 Harmful by inhalation.  
R36/37/38 Irritating to eyes, respiratory system and skin.  
R42/43 May cause sensitisation by inhalation and skin contact.

### HMIS HAZARD RATINGS

HEALTH

2

\* = Chronic Health Hazard

2 = MODERATE

FLAMMABILITY

1

0 = INSIGNIFICANT

3 = HIGH

PHYSICAL HAZARD

0

1 = SLIGHT

4 = EXTREME

PERSONAL PROTECTIVE EQUIPMENT

C

Safety Glasses, Gloves, Apron

### REVISION SUMMARY:

This MSDS has been revised in the following sections:  
Format revision, text updates

### MSDS Prepared By:

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The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.