1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: I&I Guard Foam APK 3.1:1-2
Revision Date: 02-2019
Product Code: I&I Guard APK
Company: Stag Technologies, 564 W. 9320 S., Sandy, UT 84070
Company Contact: Matthew Peterson
Company Phone: 844-STAGTEC
Emergency:
Domestic Shipments and to Canada: 1-800-633-8253
International Shipments: 1-801-629-0667

2. HAZARDS IDENTIFICATION

GHS Ratings:
- Oral Toxicity: Acute Tox. 4
  - Oral>300+<=2000mg/kg
- Skin corrosive: 2
  - Reversible adverse effects in dermal tissue, Draize score: >=2.3 < 4.0 or persistent inflammation
- Eye corrosive: 2B
  - Mild eye irritant: Subcategory 2B, Reversible in 7 days
- Respiratory sensitizer: 1
  - Respiratory sensitizer
- Skin sensitizer: 1B
  - Skin sensitizer
- Carcinogen: 2
  - Limited evidence of human or animal carcinogenicity

GHS Hazards:
- H302: Harmful if swallowed
- H315: Causes skin irritation
- H317: May cause an allergic skin reaction
- H320: Causes eye irritation
- H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H351: Suspected of causing cancer
GHS Precautions

P201  Obtain special instructions before use
P202  Do not handle until all safety precautions have been read and understood
P261  Avoid breathing dust/fume/gas/mist/vapours/spray
P264  Wash ... thoroughly after handling
P270  Do not eat, drink or smoke when using this product.
P280  Wear protective gloves/protective clothing/eye protection/face protection.
P281  Use personal protective equipment as required.
P285  In case of inadequate ventilation wear respiratory protection.
P321  Specific treatment (see ... on this label).
P330  Rinse mouth.
P362  Take off contaminated clothing and wash before reuse.
P301+P312  IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302+P352  IF ON SKIN: Wash with soap and water.
P304+P341  IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338  IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P308+P313  IF exposed or concerned: Get medical advice/attention.
P332+P313  If skin irritation occurs: Get medical advice/attention.
P337+P313  If eye irritation persists, get medical advice/attention.
P342+P311  Call a POISON CENTER or doctor/physician.
P405  Store locked up.
P501  Dispose of contents/container to ... 

Signal Word

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalyst</td>
<td>98-94-2</td>
<td>1.00% - 5.00%</td>
</tr>
<tr>
<td>Proprietary</td>
<td>6846-50-0</td>
<td>1.00% - 5.00%</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURE

If inhaled remove to fresh air. If breathing is difficult, give oxygen. Obtain medical advice if there are persistent symptoms. Rinse immediately with plenty of water for at least 15 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Remove contacts if present and easy to do. Continue Rinsing. Get medical attention, if irritation or symptoms of overexposure persists. Immediately wash skin with soap and plenty of water. If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.
5. FIRE FIGHTING MEASURES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>N/A</td>
</tr>
<tr>
<td>LEL</td>
<td>N/A</td>
</tr>
<tr>
<td>UEL</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Not applicable

Foam, Carbon dioxide (CO2) or dry chemical or water spray (water stream may be ineffective).

In case of fire use the following suitable extinguishing agent.

6. ACCIDENTAL RELEASE MEASURES

In case of fire, the following can be released:
- Nitrogen Oxide (NOx)
- Carbon Dioxide
- Carbon Monoxide (CO)

Firefighters, and others exposed, wear self-contained breathing apparatus.

7. HANDLING AND STORAGE

Avoid breathing vapor. Avoid contact with eyes, skin and clothing. Keep away from heat and flame. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling. Avoid exposure to heat, light, and air for prolonged periods of time. Store in a cool, dry well ventilated area away from sources of heat and incompatible materials. Eliminate all ignition materials and incompatible materials. Collect spill with non spark tools. No information available.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Chemical Name / CAS No.</th>
<th>Catalyst 98-94-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA Exposure Limits</td>
<td>Not Established.</td>
</tr>
<tr>
<td>ACGIH Exposure Limits</td>
<td>Not Established.</td>
</tr>
<tr>
<td>Other Exposure Limits</td>
<td>Not Established.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name / CAS No.</th>
<th>PROPRIETARY 6846-50-0</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA Exposure Limits</td>
<td>Not Established.</td>
</tr>
<tr>
<td>ACGIH Exposure Limits</td>
<td>Not Established.</td>
</tr>
<tr>
<td>Other Exposure Limits</td>
<td>Not Established.</td>
</tr>
</tbody>
</table>

Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended. Always use adequate ventilation that comply with local regulations.

Eye/face Protection

Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the Europena.
Skin Protection  Chemical-resistant gloves and chemical goggles, face-shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing.

Respiratory Protection  A NIOSH air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne.

9. PHYSICAL & CHEMICAL PROPERTIES
   Boiling Range  100 to 282°C
   Specific Gravity (SG)  1.058
   Lbs VOC/Gallon Less Water  0.04
   Lbs VOC/Gallon Less Exempt  0.04
   % VOL by Volume  0.04

10. CHEMICAL STABILITY & REACTIVITY INFORMATION
    Stable. Hazardous polymerization will not occur. STABLE. Oxidizing Agents. No Data Found. None known, other than Sec. #2 and Sec #5. Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION
    Mixture Toxicity
    Component Toxicity
    Oral  N.D.A.
    Dermal  N.D.A.
    Inhalation  N.D.A.

12. ECOLOGICAL INFORMATION
    No ecotoxicity data was found for the product.

13. DISPOSAL CONSIDERATIONS
    Dispose of in accordance with applicable local/municipal, state/provincial and federal regulations.

14. TRANSPORT INFORMATION
    UN- Number  Not Applicable
    DOT, ADR, IMDG, IATA  Not Applicable
    Packaging Group  Not Applicable
    Hazard Class  Not Applicable

15. REGULATORY INFORMATION
    EPCRA-Emergency Planning and Community Right-to-Know-Act
    SARA 311/312 Hazards: Acute Health Hazards
    SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING!

    This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:
    111-46-6 2,2’-oxtbisethanol; diethylene glycol 1.5 %

    The following chemicals are classified under SARA 313 Toxic Release Inventory (TRI):
    111-46-6 2,2’-oxtbisethanol; diethylene glycol 1.5 %
Country: EU
Safety Phrase: None

Regulation: All Components Listed
REACH (EU) SUBSTANCES OF VERY HIGH CONCERN: No
Toxic Substance Control Act (TSCA): No

16. OTHER INFORMATION

Further information: HMIS® is a registered trade and service mark of the NPCA.
HMIS® ratings:
  Health: 2
  Flammability: 1
  Physical hazard: 1

NFPA ratings:
  Health: 2
  Flammability: 1
  Instability: 0

Disclaimer: The information provided in this Safety Data Sheet is correct to the best of our knowledge information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
**1. PRODUCT AND COMPANY IDENTIFICATION**

- **Product Name**: I&I Guard - Part A
- **Revision Date**: 02-2019
- **Product Code**: I&I Guard APK
- **Company**: Stag Technologies, 564 W. 9320 S., Sandy, UT 84070
- **Company Contact**: Matthew Peterson
- **Company Phone**: 844-STAGTEC
- **Emergency**: Domestic Shipments and to Canada: 1-800-633-8253
  International Shipments: 1-801-629-0667

**2. HAZARDS IDENTIFICATION**

**GHS Ratings:**

- **Inhalation Toxicity**: Acute Tox. 1 Gases<=100ppm, Vapors<=0.5mg/l, Dusts&mists<=0.05mg/l
- **Skin corrosive**: Reversible adverse effects in dermal tissue, Draize score: >=2.3 < 4.0 or persistent inflammation
- **Eye corrosive**: Eye irritant: Subcategory 2A, Reversible in 21 days
- **Respiratory sensitizer**: Respiratory sensitizer
- **Skin sensitiser**: Skin sensitizer
- **Carcinogen**: Limited evidence of human or animal carcinogenicity

**GHS Hazards:**

- H315: Causes skin irritation
- H317: May cause an allergic skin reaction
- H319: Causes serious eye irritation
- H330: Fatal if inhaled
- H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H351: Suspected of causing cancer
GHS Precautions:
P201  Obtain special instructions before use
P202  Do not handle until all safety precautions have been read and understood
P260  Do not breathe dust/fume/gas/mist/vapours/spray
P261  Avoid breathing dust/fume/gas/mist/vapours/spray
P264  Wash ... thoroughly after handling
P271  Use only outdoors or in a well-ventilated area
P272  Contaminated work clothing should not be allowed out of the workplace
P280  Wear protective gloves/protective clothing/eye protection/face protection
P281  Use personal protective equipment as required
P284  Wear respiratory protection
P285  In case of inadequate ventilation wear respiratory protection
P310  Immediately call a POISON CENTER or doctor/physician
P320  Specific treatment is urgent (see ... on this label)
P321  Specific treatment (see ... on this label)
P362  Take off contaminated clothing and wash before reuse
P363  Wash contaminated clothing before reuse
P302+P352  IF ON SKIN: Wash with soap and water
P304+P340  IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P304+P341  IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338  IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P308+P313  IF exposed or concerned: Get medical advice/attention
P332+P313  If skin irritation occurs: Get medical advice/attention
P333+P313  If skin irritation or a rash occurs: Get medical advice/attention
P337+P313  If eye irritation persists, get medical advice/attention
P342+P311  Call a POISON CENTER or doctor/physician
P405  Store locked up
P403+P233  Store in a well ventilated place. Keep container tightly closed
P501  Dispose of contents/container to ...

Signal Word  Danger

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polymeric Diphenylmethane Diisocyanate</td>
<td>9016-87-9</td>
<td>50.00% - 60.00%</td>
</tr>
<tr>
<td>4,4’ Diphenylmethane Diisocyanate</td>
<td>101-68-8</td>
<td>30.00% - 40.00%</td>
</tr>
<tr>
<td>Diphenylmethane</td>
<td>5873-54-1</td>
<td>1.00% - 5.00%</td>
</tr>
<tr>
<td>Proprietary</td>
<td></td>
<td>0.10% - 1.00%</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES
If inhaled remove to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur. Consult a physician immediately if symptoms such as shortness of breath or asthma are observed. A hyper-reactive response to even a minimal concentration of diisocyanates may develop in sensitised persons. This product is a respiratory irritant and potential respiratory sensitiser: repeated inhalation of vapor or aerosol at levels above occupational exposure limit could cause respiratory sensitisation.

Rinse immediately with plenty of water for at least 15 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Remove contacts if present and easy to do. Continue Rinsing. Get medical attention, if irritation or symptoms of overexposure persists. Immediately wash skin with soap and plenty of water. Sever allergic skin reactions, bronchioospasm and anaphylactic shock possible. If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES
Flash Point N/A
LEL N/A
UEL N/A
Not applicable
Foam, Carbon dioxide (CO2) or dry chemical or water spray (water stream may be ineffective).
Water may be used if no other available and then in copious quantities. Reaction between water and hot isocyanate may be vigorous.
Not available
Firefighters, and others exposed, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES
Stop leak. Dike or contain spill. Pump into salvage tanks and/or absorb with suitable material. Use sparkless shovel to remove material. Evacuate area and keep unnecessary and unprotected personnel from entering the spill area. Use appropriate containment and clean up immediately. Corrosive. Avoid personal contact and breathing vapor or mist. Stop leak. Dike and contain spill. Prevent spilled material from entering the ground, water and/or air by using appropriate containment methods.

7. HANDLING AND STORAGE
Avoid breathing vapor. Avoid contact with eyes, skin and clothing. Keep away from heat and flame. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling. Avoid exposure to heat, light, and air for prolonged periods of time. Store in a cool, dry well ventilated area away from sources of heat and incompatible materials. Eliminate all ignition materials and incompatible materials. Collect spill with non spark tools. No information available.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION
Chemical Name / CAS No. Polymeric Diphenylmethane Diisocyanate 9016-87-9
OSHA Exposure Limits Not Established.
ACGIH Exposure Limits Not Established.
Other Exposure Limits Not Established.

Chemical Name / CAS No. 4,4’Diphenylmethane Diisocyanate 101-68-8
OSHA Exposure Limits Not Established.
ACGIH Exposure Limits 0.005 ppm TWA (listed under Methylene bisphenyl isocyanate (MDI)); 0.05 mg/m³ TWA 0.020 ppm Ceiling (10 min); 0.2 mg/m³ Ceiling (10 min)
Chemical Name / CAS No. Diphenylmethane 5873-54-1
OSHA Exposure Limits Not Established.
ACGIH Exposure Limits Not Established.
Other Exposure Limits Not Established.

Chemical Name / CAS No. Proprietary
OSHA Exposure Limits Not Established.
ACGIH Exposure Limits Not Established.
Other Exposure Limits Not Established.

Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended. Always use adequate ventilation that comply with local regulations.

Eye/face Protection:
Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.

Skin Protection:
Chemical-resistant gloves and chemical goggles, face-shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing.

Respiratory Protection:
A NIOSH air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known or any other circumstance where air purifying respirator may not provide adequate protection.

9. PHYSICAL & CHEMICAL PROPERTIES
Specific Gravity (SG) 1.230
Lbs VOC/Gallon Less Water 0.00
Lbs VOC/Gallon Less Exempt 0.00
% VOL by Volume 0.00

10. CHEMICAL STABILITY & REACTIVITY INFORMATION
Stable, Hazardous polymerization will not occur. Will react with Polyurethane Resins especially at elevated temperatures.
STABLE.
Polyurethane Resins under uncontrolled conditions
Acids
Amines
Metals
Water
Carbon Dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.
Hydrocarbons
Hydrogen cyanide (hydrocyanic acid)
Hazardous polymerization will not occur.
11. TOXICOLOGICAL INFORMATION

Mixture Toxicity
- Inhalation Toxicity LC50: 0mg/L

Component Toxicity
- 9016-87-9 Polymeric Diphenylmethane Diisocyanate
  - Oral LD50: 49 g/kg (Rat)
  - Inhalation LC50: 490 mg/m³ (Rat)
- 101-68-8 4,4’Diphenylmethane Diisocyanate
  - Inhalation LC50: 369 mg/m³ (Rat)

Eyes
- Irritant to the eyes. Corrosive to Eyes

Skin
- Irritant to the skin. Corrosive to Skin

Inhalation
- Irritant to respiratory tract. Prolonged or excessive inhalation may cause respiratory tract irritation.

Sensitization:
- Skin sensitization in humans.
  - Avoid breathing vapors

Oral
- N.D.A.

Dermal
- N.D.A.

Inhalation
- N.D.A.

12. ECOLOGICAL INFORMATION

No ecotoxicity data was found for the product.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with applicable local/municipal, state/provincial and federal regulations.

14. TRANSPORT INFORMATION

- NA 3082, OTHER REGULATED SUBSTANCES, LIQUID, N.O.S. (Methylene Diphenyl Diisocyanate).
- DOT Class 9
- DOT Packaging Class III
- Marine Pollutant: No

15. REGULATORY INFORMATION

SARA III: Sec311 & 312

CA PROP. 65 NOTICE: This product does not contain any chemicals known by the State of California to cause cancer, birth defects or any other reproductive harm.

CANADIAN REGULATORY INFORMATION

- WHMIS: Class 9
- WHMIS Symbols: Stylized T.
- WHMIS Trade Secret Registry Numbers: None

Hazardous Products Act Information
- This product SDS contains ingredients which are Controlled and/or on the Ingredient Disclosure List (HPA sections 13 and 14).

State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)
- WARNING! This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:
  - 5873-54-1 Diphenylmethane 1 to 5 %
The following chemicals are classified under SARA 313 Toxic Release Inventory (TRI):

- 9016-87-9  Polymeric Diphenylmethane Diisocyanate  50 to 60%
- 101-68-8  4,4’ Diphenylmethane Diisocyanate  30 to 40%
- 5873-54-1  Diphenylmethane  1 to 5%

Country: EU
Regulation: REACH (EU) SUBSTANCES OF VERY HIGH CONCERN
Toxic Substance Control Act (TSCA)
- EU - No
- TSCA - Yes
Safety Phrase: None

16. OTHER INFORMATION

Further information: HMIS® is a registered trade and service mark of the NPCA.

Health: 2
Flammability: 1
Physical hazard: 1

NFPA ratings
Health: 2
Flammability: 1
Instability: 1

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