AAT-750 Resilient and Sports Floor Adhesive

AAT-750 is a single component urethane adhesive suitable for indoor and outdoor installations of many types of resilient floorings, sports flooring and synthetic turf. This high performance adhesive is ideal for installations of a wide range of resilient flooring over concrete slabs with very high moisture content and in building entrances where extreme moisture exposure is expected. AAT-750 has an extremely high shear strength making it the perfect choice for areas with heavy traffic and rolling loads. There is no flash time required so installation can begin immediately.

AAT-750 is approved for the installation of vinyl tile and plank [VCT, VET, SVT, LVT, LVP], sheet vinyl [homogeneous intended for “full spread” installations and felt backed], rubber flooring, linoleum, wall base, underlayments, and cork flooring. Additionally, AAT-750 is approved for many types of sports flooring and synthetic turf. AAT-750 should not be used for flooring with backings composed of polyolefin, polyethylene, or polypropylene.

The AAT-750 no-slump formula is solvent and water free, nonflammable, very low odor and a 0 VOC adhesive [per SCAQMD Rule 1168]. The adhesive is easy to spread, has a strong green grab and remains flexible. The adhesive is waterproof when cured, however, it is not a moisture inhibitor.

Prior to the start of the installation the installer must determine that the job-site conditions meet or exceed all applicable standards of the flooring manufacturer and AAT. Installation of any flooring should be one of the last jobs of any construction project. Sub-floors must be flat and structurally sound. The sub-floor should be flat within 3/16” in 10’ or 1/8” in 6’. All paint, varnish, oil, wax, finishes and any other bond inhibiting substances must be removed. Smooth or glazed surfaces must be abraded. Patching and leveling should be performed utilizing AAT-722 Urethane Leveling Compound. Concrete sub-floors must be properly prepared according to the recommended practices detailed in the most recent version of document ASTM F-710. Depending upon type and condition of the sub-floor, a mechanical treatment [mechanical brushing, grinding or sanding] may be required. Never sand existing resilient flooring that could contain asbestos. Follow all Federal, State and Local regulations relating to the removal of in-place, asbestos containing material. Primer is normally not needed, however, very porous sub-floors may be primed with AAT-712 Epoxy Primer. Heated sub-floors must be primed.

AAT-750 Resilient and Sports Floor Adhesive can be used over the following sub-floors with a maximum moisture emission rate of 25lbs/1000 sq. ft. /24 hours [ASTM F1869], a maximum in situ RH of 100% [ASTM F2170] and a maximum pH of 14:

- Concrete above, on or below grade
- APA rated plywood underlayment
- Properly prepared gypsum cement
- Existing non-cushion back resilient floors that are well bonded, sound, smooth, and free of waxes, finishes, cleaners and any other bond inhibiting substances.
- Ceramic Tiles
- Stone, Terrazzo
- Radiant heated sub-floors
- Seaming tape [synthetic turf]
- Asphalt
- Steel and aluminum
- Epoxy sealers [100% solid and fully cured]
- Stained concrete that is sound, smooth and free of waxes, cleaners and any other bond inhibiting substances.

For assistance with specific sub-floors and flooring/backing types please contact our Technical Services Department. AAT-750 is not for use with flooring manufactured with polyolefin, polyethylene, or polypropylene.
backings. AAT-750 cannot be used if adhesive removers, solvent or chemical cleaners have been used. For a copy of the Limited Warranty please contact Customer Service.

NOTE: Particleboard and OSB are not recommended underlayments. Strip or plank wood flooring, particleboard and OSB sub-floors should be covered with an approved plywood underlayment (minimum thickness of ¼”). Before beginning installations with flooring types or over sub-floors not listed contact AAT Technical Services for recommendations. AAT will not warrant the adhesive when applied over Lauan plywood. AAT-750 cannot be used if adhesive removers, solvent or chemical cleaners have been used. Regulations may require that existing flooring material or coatings be tested to determine the asbestos content. Refer to the instructions for removal and handling of resilient flooring published by the RFCI in the publication, Recommended Work Practices for Removal of Resilient Floor Coverings. The Resilient Floor Covering Institute may be reached thru their Website www.rfci.org or by calling 301-340-8580.

**Installation Recommendations:**
The installation site should have a consistent air temperature of 32°F-100°F and relative humidity levels should be 20% - 90% prior to the start of the installation. Be familiar with the recommendations and any special instructions from the flooring manufacturer before beginning the installation. Follow the flooring manufacturer’s specific recommendations regarding site temperature and relative humidity during the installation process.

1. Refer to the information above for specific information regarding sub-floor preparation and site conditions. Spread the adhesive with the appropriate trowel. See below for typical trowel notch recommendations. Since this product can be used with so many floor covering products, proper trowel selection is critical to the success of the installation. The adhesive application rate can be affected by several variables including porosity and texture of the sub-floor, backing texture of the floor covering and other factors. It is the mechanic’s responsibility to determine the proper trowel notch before beginning the installation.

<table>
<thead>
<tr>
<th>Working Times</th>
<th>30% RH</th>
<th>50% RH</th>
<th>80% RH</th>
</tr>
</thead>
<tbody>
<tr>
<td>50°F/10°C</td>
<td>60 mins</td>
<td>50 mins</td>
<td>40 mins</td>
</tr>
<tr>
<td>70°F/21°C</td>
<td>50 mins</td>
<td>40 mins</td>
<td>30 mins</td>
</tr>
<tr>
<td>90°F/32°C</td>
<td>40 mins</td>
<td>30 mins</td>
<td>20 mins</td>
</tr>
</tbody>
</table>

2. Place the flooring into adhesive so as to minimize air bubbles and wrinkles.
3. Roll flooring immediately upon placement with an appropriate size roller (75 – 100 lbs) to ensure adequate adhesive transfer. Should bubbles develop, or edges curl (a common problem with some of today’s floor coverings), press, weight or re-roll raised edges 15-30 minutes after installation.
4. AAT-750 cures after approximately 24 hours. Normal traffic can be allowed after this time.

**Trowel Recommendations:**

Flat backings: 1/16” x 1/16” x 1/16 V notch | up to 180 sf/gal.
Rough backings: 1/8” x 1/8” x 1/16” V notch | up to 70 sf/gal.
Sport Flooring: 3/32” x 3/32” x 3/32” V notch | up to 135 sf/gal.
Outdoor on rough surface: 3/16” x 3/16” x 3/16” V notch | up to 50 sf/gal.
Run Length for 9” seam tape: 160 LF/unit

**Note: Trowel Notch dimensions are Width x Depth x Separation**

**SPECIFIC TECHNICAL DATA:**

1. VOC compliant, LEED qualified formula; no chlorinated solvents, nonflammable
2. Clean-Up: Remove uncured adhesive with acetone. Cured adhesive will be difficult to remove, therefore, take care to remove adhesive from the surface of the flooring before it cures. Do not apply the acetone directly to the flooring material. Test on a scrap piece of flooring to ensure that the solvent does not affect the floor’s finish.
3. Packaging: 3 gallon pails
4. Shelf-Life: 12 months from date of manufacture in un-opened container when stored at 70°F.
5. Freeze-Thaw Stable

September 23, 2020
1 Identification

· **Product identifier**
· **Trade name:** AAT-750 Resilient & Sport Flooring Adhesive

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
  Advanced Adhesive Technologies LLC
  424 South Spencer Street
  Dalton, GA 30721
  Tel: 800-228-4583
  Fax: 706-278-6207
· **Emergency telephone number:** CHEMTREC 1-800-424-9300 (USA) 1-703-527-3887 (International)

2 Hazard(s) identification

· **Classification of the substance or mixture**
  GHS08 Health hazard
  Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  Carc. 2 H351 Suspected of causing cancer.
  STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

· **Label elements**
· **GHS label elements**
  The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**
  GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
  Polypropylene glycol, Diphenylmethandiisicyanat Polymer
  diphenylmethane-4,4'-di-isocyanante
  diphenylmethane-2,4'-diisocyanate
  Aromatisches Polyisocyanat-Prepolymer

· **Hazard statements**
  H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  H317 May cause an allergic skin reaction.
  H351 Suspected of causing cancer.
  H373 May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**
  P260 Do not breathe dust/fume/gas/mist/vapors/spray.
  P280 Wear protective gloves/protective clothing/eye protection/face protection.
  P284 [In case of inadequate ventilation] wear respiratory protection.
  P302+P352 If on skin: Wash with plenty of water.
  P308+P313 IF exposed or concerned: Get medical advice/attention.

(Contd. on page 2)
Trade name: AAT-750 Resilient & Sport Flooring Adhesive

(Contd. of page 1)

Classification system:
- NFPA ratings (scale 0 - 4)
  - Health = 0
  - Fire = 1
  - Reactivity = 0

- WHMIS-ratings (scale 0 - 4)
  - Health = *1
  - Fire = 1
  - Reactivity = 0

Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition/information on ingredients
- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:
- 39420-98-9 Polypropyleneglycol, Diphenylmethandiisicyanat Polymer ≤2.5%
- 101-68-8 diphenylmethane-4,4'-di-isocyanante ≤2.5%
- 5873-54-1 diphenylmethane-2,4'-disocyanate ≤2.5%
- 67815-87-6 Aromatisches Polyisocyanat-Prepolymer ≤2.5%

- Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures
- Description of first aid measures
  - After inhalation:
    - Supply fresh air and to be sure call for a doctor.
    - In case of unconsciousness place patient stably in side position for transportation.
  - After skin contact:
    - If skin irritation continues, consult a doctor.
    - Immediately wash with water and soap and rinse thoroughly.
    - Immediately rinse with water.
  - After eye contact:
    - Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  - After swallowing: Do not induce vomiting; immediately call for medical help.
  - Information for doctor:
    - Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 3)
5 Fire-fighting measures

· Extinguishing media
  · Suitable extinguishing agents:
    CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
    Use fire fighting measures that suit the environment.
  · Special hazards arising from the substance or mixture
    During heating or in case of fire poisonous gases are produced.

· Advice for firefighters
  · Protective equipment:
    Do not inhale explosion gases or combustion gases.
    Mount respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures
  Mount respiratory protective device.
  Wear protective equipment. Keep unprotected persons away.
  Ensure adequate ventilation
  Wear protective clothing.
· Environmental precautions:
  Do not allow to enter sewers/ surface or ground water.
· Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.
· Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.
· Protective Action Criteria for Chemicals

<table>
<thead>
<tr>
<th>PAC-1:</th>
<th></th>
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<tbody>
<tr>
<td>101-68-8 diphenylmethane-4,4'-di-isocyanate</td>
<td>0.45 mg/m³</td>
</tr>
<tr>
<td>1305-78-8 calcium oxide</td>
<td>6 mg/m³</td>
</tr>
<tr>
<td>9016-87-9 diphenylmethanediisocyanate,isomeres and homologues</td>
<td>0.15 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-2:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>101-68-8 diphenylmethane-4,4'-di-isocyanate</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td>1305-78-8 calcium oxide</td>
<td>110 mg/m³</td>
</tr>
<tr>
<td>9016-87-9 diphenylmethanediisocyanate,isomeres and homologues</td>
<td>3.6 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-3:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>101-68-8 diphenylmethane-4,4'-di-isocyanate</td>
<td>55 mg/m³</td>
</tr>
<tr>
<td>1305-78-8 calcium oxide</td>
<td>660 mg/m³</td>
</tr>
<tr>
<td>9016-87-9 diphenylmethanediisocyanate,isomeres and homologues</td>
<td>22 mg/m³</td>
</tr>
</tbody>
</table>
7 Handling and storage

- **Handling:**
  - **Precautions for safe handling:**
    - Ensure good ventilation/exhaustion at the workplace.
    - Open and handle receptacle with care.
    - Prevent formation of aerosols.
  - **Information about protection against explosions and fires:** Keep respiratory protective device available.

- **Conditions for safe storage, including any incompatibilities**
  - **Storage:**
    - **Requirements to be met by storerooms and receptacles:** No special requirements.
    - **Information about storage in one common storage facility:** Not required.
    - **Further information about storage conditions:** Keep receptacle tightly sealed.
  - **Specific end use(s)**: No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Control parameters**
  - **Components with limit values that require monitoring at the workplace:**
    - The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
    - At this time, the other constituents have no known exposure limits.

<table>
<thead>
<tr>
<th>Component</th>
<th>PEL Ceiling limit</th>
<th>REL Long-term value</th>
<th>TLV Long-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td>101-68-8 diphenylmethane-4,4'-di-isocyanante</td>
<td>0.2 mg/m³, 0.02 ppm</td>
<td>0.05 mg/m³, 0.005 ppm</td>
<td>0.051 mg/m³, 0.005 ppm</td>
</tr>
</tbody>
</table>

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**
  - **Personal protective equipment:**
    - **General protective and hygienic measures:**
      - Keep away from foodstuffs, beverages and feed.
      - Immediately remove all soiled and contaminated clothing.
      - Wash hands before breaks and at the end of work.
      - Store protective clothing separately.
    - **Breathing equipment:**
      - Not necessary if room is well-ventilated.
      - Use suitable respiratory protective device in case of insufficient ventilation.
    - **Protection of hands:** Not required.
    - **Material of gloves**
      - Butyl rubber, BR
      - PVC gloves
      - Rubber gloves
      - Nitrile rubber, NBR
    - **As protection from splashes gloves made of the following materials are suitable:** Natural rubber, NR
Trade name: AAT-750 Resilient & Sport Flooring Adhesive

- **Eye protection:**
  Tightly sealed goggles

- **Body protection:** Protective work clothing

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

  - **General Information**
    - **Appearance:**
      - *Form:* Solid
      - *Color:* Cream colored
    - *Odor:* Characteristic
    - *Odor threshold:* Not determined.
    - *pH-value:* Not determined.

  - **Change in condition**
    - *Boiling point/Boiling range:* Undetermined.
  
  - **Flash point:**
    - *212 °C (413.6 °F)*
  
  - **Flammability (solid, gaseous):**
    - *Not applicable.*
  
  - **Ignition temperature:**
    - *520 °C (968 °F)*
  
  - **Decomposition temperature:**
    - *Not determined.*
  
  - **Auto igniting:**
    - Product is not selfigniting.
  
  - **Danger of explosion:**
    - Product does not present an explosion hazard.
  
  - **Explosion limits:**
    - *Lower:* Not determined.
    - *Upper:* Not determined.
  
  - **Vapor pressure:**
    - Not determined.
  
  - **Density at 20 °C (68 °F):**
    - *1.4 g/cm³ (11.683 lbs/gal)*
  
  - **Relative density**
    - Not determined.
  
  - **Vapor density**
    - Not determined.
  
  - **Evaporation rate**
    - Not determined.

  - **Solubility in / Miscibility with**
    - *Water:* Not miscible or difficult to mix.
  
  - **Partition coefficient (n-octanol/water):**
    - Not determined.

  - **Viscosity:**
    - *Dynamic at 20 °C (68 °F):*
      - *100,000 mPas*
    - *Kinematic:*
      - Not determined.

  - **Solvent content:**
    - *VOC Content:*
      - *0.00 %*
      - *0.00 %*

  - **Other information**
    - No further relevant information available.
10 Stability and reactivity

- **Reactivity**: No further relevant information available.
- **Chemical stability**
  - *Thermal decomposition / conditions to be avoided*: No decomposition if used according to specifications.
  - **Possibility of hazardous reactions**: No dangerous reactions known.
  - **Conditions to avoid**: No further relevant information available.
  - **Incompatible materials**: No further relevant information available.
  - **Hazardous decomposition products**: No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity**:
    - *LD/LC50 values that are relevant for classification:*
      - **101-68-8 diphenylmethane-4,4'-di-isocyanante**
        - Oral LD50 >2,000 mg/kg (Ratte) (Richtlinie 84/449/EWG, B.1)
        - Dermal LD50 >9,400 mg/kg (rab) (OECD- Prüfrichtlinie 402)
        - Inhalative LC50/ 4h 0.368 mg/l (Ratte)
      - **5873-54-1 diphenylmethane-2,4'-diisocyanate**
        - Oral LD50 >2,000 mg/kg (Ratte) (Richtlinie 84/449/EWG, B.1)
        - Dermal LD50 >9,400 mg/kg (rab) (OECD- Prüfrichtlinie 402)
        - Inhalative LC50 0.31 mg/l (Ratte) (4h, Aerosol)
      - **67815-87-6 Aromatisches Polyisocyanat-Prepolymer**
        - Oral LD50 ≥5,000 mg/kg (Ratte) (OECD- Prüfrichtlinie 423)
  - **Primary irritant effect**:
    - *on the skin*: No irritant effect.
    - *on the eye*: No irritating effect.
  - **Sensitization**:
    - Sensitization possible through inhalation.
    - Sensitization possible through skin contact.
  - **Additional toxicological information**:
    - The product shows the following dangers according to internally approved calculation methods for preparations:
      - Harmful
      - Irritant
  - **Carcinogenic categories**
    - **IARC (International Agency for Research on Cancer)**
      - 101-68-8 diphenylmethane-4,4'-di-isocyanante 3
      - 9016-87-9 diphenylmethanediisocyanate,isomeres and homologues 3
    - **NTP (National Toxicology Program)**
      - None of the ingredients is listed.
    - **OSHA-Ca (Occupational Safety & Health Administration)**
      - None of the ingredients is listed.
12 Ecological information

· Toxicity
  · Aquatic toxicity:
    101-68-8 diphenylmethane-4,4'-di-isocyanante
    LC50/ 96h >1,000 mg/l (Danio rerio (Zebrabärbling)) (OECD- Prüfrichtlinie 203)
    EC50 >1,000 mg/l (Daphnia magna Wasserfloh) (OECD- Prüfrichtlinie 202)
    NOEC >10 mg/l (Daphnia magna Wasserfloh) (OECD- Prüfrichtlinie 202 (Fortpflanzung))

· Persistence and degradability No further relevant information available.
· Behavior in environmental systems:
  · Bioaccumulative potential No further relevant information available.
· Mobility in soil No further relevant information available.
· Additional ecological information: keine
· General notes:
  Water hazard class 1 (Self-assessment): slightly hazardous for water
  Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
· Results of PBT and vPvB assessment
  · PBT: Not applicable.
  · vPvB: Not applicable.
· Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods
  · Recommendation: If product has aged or solidified conventional means of disposal are acceptable.
· Uncleaned packagings:
  · Recommendation: Disposal must be made according to official regulations.

14 Transport information

· UN-Number
  · DOT, ADR, ADN, IMDG, IATA: Void
  · UN proper shipping name: Void
· DOT, ADR, ADN, IMDG, IATA
  · Transport hazard class(es): Void
  · Class: Void
· Packing group
  · DOT, ADR, IMDG, IATA: Void
· Environmental hazards:
  · Marine pollutant: No
· Special precautions for user
  · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.
· UN "Model Regulation": Void
Trade name: AAT-750 Resilient & Sport Flooring Adhesive

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **Sara**
    - None of the ingredient is listed.
  - **Section 313 (Specific toxic chemical listings):**
    - 101-68-8 diphenylmethane-4,4'-di-isocyanate
  - **TSCA (Toxic Substances Control Act):**
    - 1317-65-3 calciumcarbonate
    - 92704-41-1 Kaolin, calciniert, Aluminiumsilicat
    - Dorkafill 600, Dorkafill H
    - 39420-98-9 Polypropyglycol, Diphenylmethandiisicyanat Polymer
    - 101-68-8 diphenylmethane-4,4'-di-isocyanate
    - 5873-54-1 diphenylmethane-2,4'-diisocyanate
    - 1305-78-8 calcium oxide
    - 68611-44-9 Kieselsäure hydrophobiert hochdisperse
    - 67815-87-6 Aromatisches Polyisocyanat-Prepolymer
    - 125643-61-0 A mixture of isomers of: C7-9-alkyl-3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate

- **Hazardous Air Pollutants**
  - 101-68-8 diphenylmethane-4,4'-di-isocyanate

- **Proposition 65**
  - **Chemicals known to cause cancer:**
    - None of the ingredients is listed.
  - **Chemicals known to cause reproductive toxicity for females:**
    - None of the ingredients is listed.
  - **Chemicals known to cause reproductive toxicity for males:**
    - None of the ingredients is listed.
  - **Chemicals known to cause developmental toxicity:**
    - None of the ingredients is listed.

- **Canadian Ingredient disclosure list**
  - **Limit 0.1%**
    - None of the ingredients is listed.
  - **Limit 1%**
    - None of the ingredients is listed.

- **Cancerogenity categories**
  - **EPA (Environmental Protection Agency)**
    - 101-68-8 diphenylmethane-4,4'-di-isocyanate
    - 9016-87-9 diphenylmethanediisocyanate, isomers and homologues
  - **TLV (Threshold Limit Value established by ACGIH)**
    - None of the ingredients is listed.

- **MAK (German Maximum Workplace Concentration)**
  - 101-68-8 diphenylmethane-4,4'-di-isocyanate
Trade name: AAT-750 Resilient & Sport Flooring Adhesive

9016-87-9 diphenylmethanediisocyanate, isomer and homologues

- NIOSH-Ca (National Institute for Occupational Safety and Health)
  None of the ingredients is listed.

- National regulations:
- Technical instructions (air):
<table>
<thead>
<tr>
<th>Class</th>
<th>Share in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>≤2.5</td>
</tr>
</tbody>
</table>

- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Contact: Tel: 800-228-4583
- Date of preparation / last revision: 07/09/2019 / 47
- Abbreviations and acronyms:
  Resp. Sens. 1: Respiratory sensitisation – Category 1
  Skin Sens. 1: Skin sensitisation – Category 1
  Carc. 2: Carcinogenicity – Category 2
  STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2