# SAFETY DATA SHEET

### 1. Identification

| Product identifier                                     | TuffRez 235 - Resin/Side A |
|--|----------------------------|
| Other means of identification                          |                            |
| SKU#   | TR320R                     |
| Recommended use  | Not available.             |
| Recommended restrictions None known.                   |                            |
| Manufacturer/Importer/Supplier/Distributor information |                            |

Manufacturer

Holcim Solutions and Products US, LLC 26 Century Boulevard, Suite 205 Nashville, Tennessee 37214 1-800-878-7876 •www.polyspec.com

| Emergency phone number | CHEMTREC      | 800-424-9300 |
|------------------------|---------------|--------------|
| <b>C 1</b>             | International | 703-527-3887 |

### 2. Hazard(s) identification

| Physical hazards      | Flammable liquids                                      | Category 3  |
|-----------------------|--|-------------|
| Health hazards        | Serious eye damage/eye irritation                      | Category 2A |
|                       | Sensitization, skin                                    | Category 1  |
| Environmental hazards | Hazardous to the aquatic environment, acute hazard     | Category 3  |
|                       | Hazardous to the aquatic environment, long-term hazard | Category 3  |
| OSHA defined hazards  | Not classified.  |             |

#### Label elements

| Signal word             | Warning   |
|-------------------------|---|
| Hazard statement        | Flammable liquid and vapor. May cause an allergic skin reaction. Causes serious eye irritation.<br>Harmful to aquatic life with long lasting effects.   |
| Precautionary statement | t in the second s |
| Prevention              | Keep away from heat/sparks/open flames/hot surfaces No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing mist or vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/eye protection/face protection.  |
| Response                | If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.<br>If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and<br>easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. If eye<br>irritation persists: Get medical advice/attention. Wash contaminated clothing before reuse. In case<br>of fire: Use appropriate media to extinguish.  |
| Storage                 | Store in a well-ventilated place. Keep cool.  |
| Disposal                | Dispose of contents/container in accordance with local/regional/national/international regulations.   |
|                         |   |

39.7% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment. 59.34% of the mixture consists of component(s) of unknown acute oral toxicity. 59.34% of the mixture consists of component(s) of unknown acute inhalation toxicity. 39.7% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 59.34% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 59.34% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 59.34% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.

### 3. Composition/information on ingredients

None known.

| Mixtures                                 |                           |            |         |
|--|---------------------------|------------|---------|
| Chemical name                            | Common name and synonyms  | CAS number | %       |
| Propylene Glycol Methyl Ether<br>Acetate | 1-Methoxy-2-propylacetate | 108-65-6   | 30 - 60 |
| 1-Chloro-4-(trimethyl)benzene            |                           | 98-56-6    | 10 - 30 |
| 2,6-diméthyl-4-heptanone                 |                           | 108-83-8   | 1 - 5   |
| Other components below reportat          | ole levels                |            | 30 - 60 |

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

| Inhalation   | Move to fresh air. Call a physician if symptoms develop or persist.   |
|--|---|
| Skin contact   | Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.  |
| Eye contact  | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.   |
| Ingestion  | Rinse mouth. Get medical attention if symptoms occur.   |
| Most important<br>symptoms/effects, acute and<br>delayed                     | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis. Rash.  |
| Indication of immediate<br>medical attention and special<br>treatment needed | Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed. |
| General information  | Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.   |
| 5. Fire-fighting measures  |   |
| Suitable extinguishing media   | Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2).   |
| Unsuitable extinguishing media   | Do not use water jet as an extinguisher, as this will spread the fire.  |
| Specific hazards arising from the chemical                                   | Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.  |
| Special protective equipment<br>and precautions for firefighters             | Self-contained breathing apparatus and full protective clothing must be worn in case of fire.   |
| Fire fighting equipment/instructions   | In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.  |
| Specific methods   | Use standard firefighting procedures and consider the hazards of other involved materials.  |
| General fire hazards   | Flammable liquid and vapor.   |

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

| Methods and materials for<br>containment and cleaning up     | Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. Prevent product from entering drains.  |
|--|--|
|  | Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.   |
|  | Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.  |
| Environmental precautions                                    | Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.<br>Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all<br>environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into<br>drains, water courses or onto the ground.  |
| 7. Handling and storage                                      |  |
| Precautions for safe handling                                | Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. |
| Conditions for safe storage, including any incompatibilities | Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).   |

#### 8. Exposure controls/personal protection

#### **Occupational exposure limits**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

| Components   | Туре                      | Value     |  |
|--|---------------------------|-----------|--|
| 2,6-diméthyl-4-heptanone<br>(CAS 108-83-8)                 | PEL                       | 290 mg/m3 |  |
|  |                           | 50 ppm    |  |
| US. ACGIH Threshold Limit Values                           | 3                         |           |  |
| Components   | Туре                      | Value     |  |
| 2,6-diméthyl-4-heptanone<br>(CAS 108-83-8)                 | TWA                       | 25 ppm    |  |
| US. NIOSH: Pocket Guide to Chen                            | nical Hazards             |           |  |
| Components   | Туре                      | Value     |  |
| 2,6-diméthyl-4-heptanone<br>(CAS 108-83-8)                 | TWA                       | 150 mg/m3 |  |
|  |                           | 25 ppm    |  |
| US. Workplace Environmental Exp                            | osure Level (WEEL) Guides |           |  |
| Components   | Type                      | Value     |  |
| Propylene Glycol Methyl<br>Ether Acetate (CAS<br>108-65-6) | TWA                       | 50 ppm    |  |

### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

**Biological limit values** 

No biological exposure limits noted for the ingredient(s).

#### **Exposure guidelines**

#### US - California OELs: Skin designation

Propylene Glycol Methyl Ether Acetate (CAS 108-65-6) Can be absorbed through the skin.

| Appropriate engineering<br>controls | Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. |
|-------------------------------------|---|
| -                                   | such as personal protective equipment<br>Face shield is recommended. Wear safety glasses with side shields (or goggles).  |
| Eye/face protection                 | r ace smeld is recommended. Wear safety glasses with side smelds (or goggles).  |
| Skin protection                     |   |
| Hand protection                     | Wear appropriate chemical resistant gloves.   |
| Other                               | Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.  |
| Respiratory protection              | If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.   |
| Thermal hazards                     | Wear appropriate thermal protective clothing, when necessary.   |
| General hygiene<br>considerations   | When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.   |

# 9. Physical and chemical properties

| Appearance                                 | Liquid.                                      |
|--|--|
| Physical state                             | Liquid.                                      |
| Form                                       | Liquid.                                      |
| Color                                      | Clear.                                       |
| Odor                                       | Solvent.                                     |
| Odor threshold                             | Not available.                               |
| рН   | Not available.                               |
| Melting point/freezing point               | Not available.                               |
| Initial boiling point and boiling range    | Not available.                               |
| Flash point                                | 108.0 °F (42.2 °C) Pensky-Martens Closed Cup |
| Evaporation rate                           | Not available.                               |
| Flammability (solid, gas)                  | Not applicable.                              |
| Upper/lower flammability or exp            | losive limits                                |
| Flammability limit - lower<br>(%)          | Not available.                               |
| Flammability limit - upper<br>(%)          | Not available.                               |
| Explosive limit - lower (%)                | Not available.                               |
| Explosive limit - upper (%)                | Not available.                               |
| Vapor pressure                             | Not available.                               |
| Vapor density                              | Not available.                               |
| Relative density                           | Not available.                               |
| Solubility(ies)                            |  |
| Solubility (water)                         | Not available.                               |
| Partition coefficient<br>(n-octanol/water) | Not available.                               |
| Auto-ignition temperature                  | Not available.                               |
| Decomposition temperature                  | Not available.                               |
| Viscosity                                  | Not available.                               |
| Other information                          |  |
| Density                                    | 9.30 lb/gal                                  |
| Explosive properties                       | Not explosive.                               |
| Flammability class                         | Combustible II estimated                     |
| Material name: TuffDaz 225 Desin/S         | ide A  |

| Oxidizing properties | Not oxidizing.           |
|----------------------|--------------------------|
| Specific gravity     | 1.11                     |
| VOC                  | 335 g/l Mixed components |

### 10. Stability and reactivity

| Reactivity                            | The product is stable and non-reactive under normal conditions of use, storage and transport.  |
|---------------------------------------|--|
| Chemical stability                    | Material is stable under normal conditions.  |
| Possibility of hazardous<br>reactions | Hazardous polymerization does not occur.   |
| Conditions to avoid                   | Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials. |
| Incompatible materials                | Strong oxidizing agents.   |
| Hazardous decomposition<br>products   | No hazardous decomposition products are known.   |

### 11. Toxicological information

#### Information on likely routes of exposure

| Inhalation   | Prolonged inhalation may be harmful.   |
|--|--|
| Skin contact   | May cause an allergic skin reaction.   |
| Eye contact  | Causes serious eye irritation.   |
| Ingestion  | Expected to be a low ingestion hazard.   |
| Symptoms related to the<br>physical, chemical and<br>toxicological characteristics | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis. Rash. |

#### Information on toxicological effects

| Acute toxicity                    | Not known.   |
|-----------------------------------|--|
| Skin corrosion/irritation         | Prolonged skin contact may cause temporary irritation. |
| Serious eye damage/eye irritation | Causes serious eye irritation.                         |

#### Respiratory or skin sensitization

| ·····                            |  |  |
|----------------------------------|--|--|
| <b>Respiratory sensitization</b> | Not a respiratory sensitizer.  |  |
| Skin sensitization               | May cause an allergic skin reaction.   |  |
| Germ cell mutagenicity           | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |  |
| Carcinogenicity                  | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.                                  |  |
| IARC Monographs. Overall I       | Evaluation of Carcinogenicity  |  |
| Not listed.                      |  |  |
| OSHA Specifically Regulate       | d Substances (29 CFR 1910.1001-1050)   |  |
| Not regulated.                   |  |  |
| US. National Toxicology Pro      | ogram (NTP) Report on Carcinogens  |  |
| Not listed.                      |  |  |
| Reproductive toxicity            | This product is not expected to cause reproductive or developmental effects.                                     |  |
| Specific target organ toxicity - | Not classified.  |  |

| single exposure                                    |                                      |
|--|--------------------------------------|
| Specific target organ toxicity - repeated exposure | Not classified.                      |
| Aspiration hazard                                  | Not an aspiration hazard.            |
| Chronic effects                                    | Prolonged inhalation may be harmful. |

# 12. Ecological information

| Ecotoxicity                   | Harmful to aquatic life with long lasting effects.         |
|-------------------------------|--|
| Persistence and degradability | No data is available on the degradability of this product. |
| Bioaccumulative potential     |  |
| Mobility in soil              | No data available.   |

**Other adverse effects** The product contains volatile organic compounds which have a photochemical ozone creation potential.

### 13. Disposal considerations

| Disposal instructions                    | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. |
|--|--|
| Local disposal regulations               | Dispose in accordance with all applicable regulations.   |
| Hazardous waste code                     | The waste code should be assigned in discussion between the user, the producer and the waste disposal company.   |
| Waste from residues / unused<br>products | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).   |
| Contaminated packaging                   | Since emptied containers may retain product residue, follow label warnings even after container is<br>emptied. Empty containers should be taken to an approved waste handling site for recycling or<br>disposal.   |

### 14. Transport information

| DOT  |   |
|--|---|
| UN number  | UN1263  |
| UN proper shipping name  | PAINT   |
| Transport hazard class(es)                                     |   |
| Class  | 3   |
| Subsidiary risk  | -   |
| Label(s)   | 3   |
| Packing group  | III   |
| Special precautions for user                                   | Read safety instructions, SDS and emergency procedures before handling.                     |
| Special provisions   | B1, B52, IB3, T2, TP1, TP29   |
| Packaging exceptions   | 150   |
| Packaging non bulk   | 173   |
| Packaging bulk   | 242   |
| ΙΑΤΑ   |   |
| UN number  | UN1263  |
| UN proper shipping name  | Paint   |
| Transport hazard class(es)                                     |   |
| Class  | 3   |
| Subsidiary risk  | -   |
| Packing group  |   |
| Environmental hazards  | No.   |
| ERG Code   | 3L  |
| · ·  | Read safety instructions, SDS and emergency procedures before handling.                     |
| Other information  |   |
| Passenger and cargo  | Allowed with restrictions.  |
| aircraft   |   |
| Cargo aircraft only  | Allowed with restrictions.  |
| IMDG   | 101/000   |
| UN number  | UN1263  |
| UN proper shipping name  | Paint   |
| Transport hazard class(es)                                     |   |
| Class  | 3   |
| Subsidiary risk  | -   |
| Packing group  | III   |
| Environmental hazards  | N   |
| Marine pollutant   | No.   |
| EmS  | F-E, S-E  |
|  | Read safety instructions, SDS and emergency procedures before handling.<br>Not established. |
| Transport in bulk according to<br>Annex II of MARPOL 73/78 and |   |
| the IBC Code   |   |
|  |   |



### 15. Regulatory information

| s product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication<br>ndard, 29 CFR 1910.1200.<br>(cation (40 CFR 707, Subpt. D)<br>(CAS 98-56-6) 1.0 % One-Time Export Notification only. |
|---|
|   |
| (CAS 98-56-6) 1.0 % One-Time Export Notification only   |
| List (40 CFR 302.4)   |
| tification  |
| ostances (29 CFR 1910.1001-1050)  |
| aviantian Act of 1096 (CADA)  |
| orization Act of 1986 (SARA)<br>nediate Hazard - Yes<br>ayed Hazard - No<br>e Hazard - Yes<br>ssure Hazard - No<br>activity Hazard - No   |
| substance   |
|   |
|   |
|   |
| Hazardous Air Pollutants (HAPs) List  |
|   |
| r) Accidental Release Prevention (40 CFR 68.130)  |
|   |
| regulated.  |
| espiratory Health and Safety in the Flavor Manufacturing Workplace  |
| (CAS 108-83-8) Other Flavoring Substances with OSHA PEL's   |
| RNING: This product contains a chemical known to the State of California to cause cancer  |
| 5 - CRT: Listed date/Carcinogenic substance   |
| 41-4) Listed: June 11, 2004   |
|   |

#### International Inventories

| Country(s) or region        | Inventory name  | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                        | No                     |
| Canada                      | Domestic Substances List (DSL)  | No                     |
| Canada                      | Non-Domestic Substances List (NDSL)                                       | Yes                    |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)                | Yes                    |
| Europe                      | European Inventory of Existing Commercial Chemical<br>Substances (EINECS) | No                     |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                    | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)                  | No                     |
| Korea                       | Existing Chemicals List (ECL)   | Yes                    |
| New Zealand                 | New Zealand Inventory   | Yes                    |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)         | Yes                    |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                             | No                     |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

| Issue date           | 09-09-2013   |
|----------------------|--|
| Revision date        | 09-27-2016   |
| Version #            | 03   |
| HMIS® ratings        | Health: 2<br>Flammability: 2<br>Physical hazard: 0<br>Personal protection: X   |
| NFPA ratings         | Health: 2<br>Flammability: 2<br>Instability: 0   |
| Disclaimer           | Holcim Solutions and Products US, LLC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. |
| Revision information | This document has undergone significant changes and should be reviewed in its entirety.  |