SAFETY DATA SHEET

1. Identification

Product Identifier	**Fortress**
Other means of identification	CU-3009
Product code	
Recommended use	Solvent based sealer for stone and grout.
Recommended restrictions	Professional use only.
Manufacturer information	
Company name	**Chemical Universe, Inc.**
Address	1133 Saline St. North Kansas City, MO 64116
Telephone	(816) 471-3602
FAX	(816) 474-3302
Emergency phone number	PERS 24-hour Emergency (800) 633-8253

2. Hazard(s) Identification

Physical hazards	Flammable Liquids	Category 3
Health hazards	Aspiration Hazard	Category 1
Environmental hazards	Not classified.	
OSHA defined hazards	None.	
Label elements		

Signal word	**DANGER**
Hazard statement	Flammable liquid and vapor. May be fatal if swallowed and enters airways.
Precautionary statement	
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. Wear protective gloves/ eye protection/ face protection. Wash hands and exposed skin thoroughly after handling.
Response	**IF ON SKIN** (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. In case of fire: Use dry sand, dry chemical, or alcohol-resistant foam for extinction. **IF IN EYES**: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. **IF SWALLOWED**: Immediately call a POISON CENTER/doctor/medical professional. Do NOT induce vomiting.
Storage	Store in a well-ventilated place. Keep cool. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None.
Supplemental information	

3. Composition/information on ingredients

Mixture Component(s)		
Chemical Name	**CAS number**	**%**
Naphtha (petroleum), heavy alkylate	64741-65-7	90-100
Isoparaffinic hydrocarbon	64742-48-9	1-10
Other components below reportable levels		1-5

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	Rinse with water for at least 15 minutes. Remove contact lenses if present and easy to do so. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur. Only induce vomiting at the instruction of medical personnel. If vomiting occurs keep head low to prevent stomach contents entering the lungs
Most important symptoms/effects, acute and delayed	Dermatitis. Rash. May cause an allergic skin reaction.
Indication of immediate medical attention and special treatment needed	Provide general support 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 the hospital. Keep victim under observation. Symptoms may be delayed.
General information	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. Foam. Carbon dioxide (CO_2). Dry chemical powder, sand, or earth may be used for smothering small fires only.
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 or ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protecting clothing must be worn in case of fire.
Fire-fighting equipment/instructions	In case of fire and/or explosion do not breathe vapors/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. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of vapors or mists. Ensure adequate ventilation. Remove all sources of ignition. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up	Eliminate all ignition sources. Use only non-sparking tools. Take precautionary measures against static discharge. Keep combustibles away from spilled material. Large spills: Stop the flow of material if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements, or confined areas. Following product recovery, flush area with water. Small spills: Absorb with earth, sand, or other non-combustible material and transfer to container for later disposal. Clean surface thoroughly with detergent and water to remove residual contamination. Place collected residual material in a properly labeled container and secure for proper disposal. Never return spills to original container for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid release to the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air). Avoid discharge into areas not consistent with package labeling.

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. Do not smoke. Use explosion proof equipment and non-sparking tools. Take precautionary measures against static discharge. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Keep away from heat, sparks, and open flame. Ground/bond container and equipment. Store in original tightly closed container. Store away from incompatible materials (see section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US OSHA Table Z-2 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Naphtha (petroleum), heavy alkylate. Isoparaffinic hydrocarbon	PEL/TWA TWA	100 ppm 1500 mg/m^3

ACGIH Recommended Exposure Component(s)

Isoparaffinic hydrocarbon	TWA	1500 mg/m^3

NIOSH REL Values (US)

Components	Type	Value
Naphtha (petroleum), heavy alkylate	REL	100 ppm

Biological limit values

No information.

Appropriate engineering controls	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.

Individual protection measures, such as personal protective equipment

Eye/face protection	Avoid contact with eyes. Wear safety glasses with side shields (or goggles).
Skin protection	

Hand protection	The use of gloves impervious to the specific material handled is advised to prevent skin contact. Users should check with manufacturers to confirm the breakthrough performance of their products. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Suggested protective materials: Nitrile and PVC rubber.
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	In case of insufficient ventilation, wear suitable NIOSH-approved respiratory protection.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using do not smoke or use chewing tobacco. 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	
Physical State	Clear liquid.
Color	Colorless to pale amber.
Odor	Characteristic.
Odor threshold	Not available.
pH	Not available.
Melting/freezing point	Not available.
Initial boiling point and boiling range	300-410°F (148.9-210°C) estimated.
Flash point	129°F (54°C) estimated.
Evaporation rate	Not available.
Flammability	Not available.
Flammability Limits	
Upper	6% (estimated)
Lower	0.7% (estimated)
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity (water=1)	0.758
Solubility in water	Insoluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	<649°F (343°C) Estimated
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and reactivity

Reactivity	This product is stable and non-reactive under normal conditions of use.
Chemical stability	Material is stable under normal conditions. Store in a cool dark place.
Possibility of hazardous 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	Oxidizing agents, acids.

Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Expected to be low ingestion hazard.
Inhalation	Prolonged inhalation may be harmful.
Skin contact	May cause mild skin irritation.
Eye contact	Causes serious eye irritation. Wear eye/face protection.
Symptoms related to the physical, chemical, and toxicological characteristics	Dermatitis. Rash.
Acute toxicity	Not established.

Product Fortress (CAS mixture)		
Exposure Classification	**Route and Species**	**LD_{50}**
Acute	*Oral*, rat	>5,000 mg/kg estimated
Acute	*Dermal,* rabbit	>5,000 mg/kg (Literature)
*Estimates for product may be based on additional component data not shown		

Skin corrosion/irritation	Not classified.
Serious eye damage/ irritation	Not available.
Respiratory sensitization	Not available.
Skin sensitization	Not available.
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 expected to be a carcinogen.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Not Listed.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity – single exposure	Not classified.
Specific target organ toxicity – repeated exposure	Not classified.
Aspiration hazard	May be harmful or fatal if product enters airways.

12. Ecological information

Ecotoxicity		
Product Fortress (CAS mixture)		
Aquatic Receptor	**Species**	**Test Thresholds**
Crustacea	Daphnia	EC_{50} (48-hr): 200 mg/L (estimated)
Fish	Fathead minnow (*Pimephales promelas)*	LC_{50} (96-hr): 90 mg/L (estimated)
*Estimates for product may be based on additional component data not shown		

Persistence and degradability	No data available.
Bioaccumulative potential	Potential to bioaccumulation is expected to be low.
Mobility in soil	No data available. This class of chemical mixture is expected to exhibit limited mobility in saturated and semi-saturated soils. Due to oleophilic natural of a primary component, some level of phase separation can be expected with the oleophilic recoverable as a LNAPL at the piezometric surface of the water table.

Other adverse effects	May cause long lasting harmful effects to aquatic life.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. 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	As packaged, this product may meet criteria defining RCRA ignitable (D001) hazardous wastes when disposed. (40 CFR Part 261, Subpart C). Before selecting disposal method, ensure that the waste materials have been accurately assessed and, as necessary, tested to confirm regulatory status.
Waste from residues/unused product	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	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may contain product residue, follow label warnings even after container is emptied.

14. Transport information

USDOT

UN number	UN1993
UN proper shipping name	Flammable liquids, n.o.s. (petroleum distillates, butyl acetates)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packaging group	III
Special precautions for user	Read safety instructions, SDS, and emergency procedures before handling.
Marine pollutant	No
Special precautions for user	
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	This product is not intended to be transported in bulk.

USDOT Label/Placard

15. Regulatory information

US federal regulations .

SARA 302 Extremely hazardous substance Not listed.

SARA 304 Emergency release notification Not listed.

SARA 311/312 Hazard Categories

Immediate Hazard - Yes

Delayed Hazard – No

Fire Hazard – Yes

Pressure Hazard – No

Reactivity Hazard – No

SARA 313 (TRI reporting) Not listed.

TSCA – All chemical components used to manufacture this product comply with the Toxic Substances Control Act (TSCA) registry requirements and are either listed within, or exempted from, the current TSCA 8(b) inventories.

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986

This product is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to threshold determination and Safe Harbor notification (3/2021)

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

Issue date	7/8/2020
Revision date	4/19/2021
Version #	2
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge and have been obtained from resources believed to be reliable. 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 related 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 by the text.
Revision information	Sections 3, 8 updated in accordance with re-formulation. Re-formatted for clarity.