

Quality People. Building Solutions.

Comfort Systems USA (Arkansas), Inc.
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Date: 5/17/2024

Return Request: 5/27/2024

Project: CALS Main Library Renovations

Supplier: Steamatic

Manufacturer: N/A

Submittal: HVAC Air Distribution System Cleaning

Submittal Number: 23 01 30.51-01

Drawing # and Installation: Mechanical Drawings

ARCHITECT

Polk Stanley Wilcox
801 South Spring St.
Little Rock, AR 72201
501-378-0878

ENGINEER

Bernhard
1 Allied Drive, Bldg. 2, Suite 2600
Little Rock, AR 72202
501-666-6776

GENERAL CONTRACTOR

CDI
3000 Cantrell Rd.
Little Rock, AR 72202
501-5666-4300

MECHANICAL SUBCONTRACTOR

Comfort Systems USA (Arkansas), Inc.
9924 Landers Rd.
N. Little Rock, AR 72117
501-834-3320

Notes:

CSUSA PROJECT NO.

23-8016

dpierce@comfortar.com

9924 Landers Rd.
No. Little Rock, AR 72117

Steamatic of Arkansas

112 Jefferson Street, Hot Springs, AR 71901
Hot Springs (501) 321-1191
Little Rock (501) 565-0922
www.steamatichs.com



Submittal

Rooftop Units, Fifth Floor, Fourth Floor, Third Floor, Second Floor, First Floor, and Basement
The following Scope and Estimate is recommended to thoroughly clean and decontaminate the HVAC ductwork.

Air Handlers

1. Blower fan assembly will be cleaned in place using air washing tools along with HEPA vacuum and hand tools.
2. Evaporator coils will be dry vacuumed, air washed with compressed air, washed with coil cleaner, and rinsed with water.
3. Condensation drain pan and drain line will be flushed and cleared of any blockage.
4. All internal wires and piping will be wiped down.
5. Inside and outside of the AHU housings will be vacuumed and wiped down.

Ductwork

Supply/Return

1. Source removal process will be used to clean supply ductwork.
2. Debris, dust and particulates will be removed by physical contact with a mechanical rotary brush System in conjunction with a Negative Air Machine and air washing devices.
3. Access holes will be cut as needed to provide entry points for source removal, visual inspection sights and treatment of potential biological contaminants.
4. Treat all duct work with an antimicrobial. Galaxy 54 Neutral Disinfectant (SDS attached)

Supply/ Return Registers

1. All accessible supply register will be hand cleaned and sanitized. If either is affixed to structure or non-accessible then it will be cleaned in place.
2. Area around supply register will be HEPA vacuumed.

Sheet Metal Access Panels

1. Access panels will be cut as required using cold cutting method-hand operated power tools.
2. Sheet metal patches will be galvanized 24 gauge or heavier.
3. Gasket sealer will be used with sheet metal screws to anchor patches.
4. Insulation removed during creating access openings will be replaced.
5. Existing access holes will be used when possible.

Chemicals

1. All chemicals used shall be environmentally safe and EPA registered.
2. Safety Data Sheets for all chemicals used will be issued upon customer's request.

Equipment

1. Negative Air Machine
2. Air Washing Equipment
3. HEPA Vacuum
4. Brush Attachments
5. Mechanical Rotary Brush

Safety

1. Steamatic and its employees will be familiar with and adhere to all appropriate OSHA and NIOSH safety procedures. This includes working conditions, power equipment, and safety equipment.
2. Lock-Out/Tag-Out procedures will be used on any equipment that is energized during the project.

Special Points

1. Client will be responsible for providing adequate power, lighting, and water for the duration of the project.
2. Steamatic cannot be held responsible for recontamination of supply air ducts and/or mechanical units due to filter maintenance, improper air mixture and/or contaminated dead air space.
3. Steamatic recognizes NADCA Standard ACR 2013 which addresses the mechanical cleaning of air conveyance system.
4. All ductwork to be visually clean

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Code 27241
Product Name Galaxy 54 Neutral Disinfectant

Other means of identification

Recommended use of the chemical and restrictions on use

Use only for the purpose on the product label.

Details of the supplier of the safety data sheet

Manufacturer / Manufactured For

Seatex, LLC
445 TX Hwy 36
Rosenberg, TX 77471
Phone: (713) 357-5300

Emergency telephone number

24 Hour Emergency Phone Number: 1-800-535-5053

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity - Oral	Category 5
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1

Label elements

Emergency Overview

Danger

Hazard statements

May be harmful if swallowed
Causes severe skin burns and eye damage



Appearance Clear, Yellow

Physical state Liquid

Odor Lemon

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician. Specific treatment (see .? on this label).

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing. Immediately call a POISON CENTER or doctor/physician.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed. Do not store near feed. Keep out of reach of children.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)

Other Information

Unknown Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Didecyl Dimethyl Ammonium Chloride	7173-51-5	3-7	*
Alkyl (C12-16) dimethyl benzyl ammonium chloride	68424-85-1	1-5	*
Tetrasodium EDTA	64-02-8	1-5	*
Ethanol	64-17-5	1-5	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. If irritation persists or burns occur, get medical attention.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. If eye irritation persists: Get medical advice/attention.

Inhalation

Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion

Rinse mouth. Drink plenty of water. Do NOT induce vomiting. If symptoms persist, call a physician.

Self-protection of the first aider

Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms

No Information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No Information available.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Avoid contact with eyes and skin. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Use with local exhaust ventilation. Do not breathe dust/fume/gas/mist/vapors/spray.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children.

Incompatible materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethanol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³

NIOSH IDLH *Immediately Dangerous to Life or Health*

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls Showers, Eyewash stations & Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles. Face protection shield.

Skin and body protection Wear chemical resistant gloves.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators or air purifying respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear, Yellow
Odor	Lemon
Odor threshold	No Information available

Property	Values	Remarks • Method
pH	6.0 - 8.0	
Specific Gravity	No Information available	Remarks
Viscosity	No Information available	
Melting point/freezing point	No Information available	
Boiling point / boiling range	> 212 / ° F Degrees	
Flash point		
Evaporation rate	No Information available	
Flammability (solid, gas)	No Information available	
Upper flammability limit:	No Information available	
Lower flammability limit:	No Information available	
Vapor pressure	No Information available	
Vapor density	No Information available	
Water solubility	No Information available	
Partition Coefficient (n-octanol/water)	No Information available	
Autoignition temperature	No Information available	
Decomposition temperature	No Information available	

Other Information

Density Lbs/Gal	No Information available
VOC Content (%)	1.26

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition ProductsCarbon monoxide. Carbon dioxide (CO₂). Toxic chloride vapors.**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

Product Information	No data available
Inhalation	Causes burns.
Eye contact	Corrosive to the eyes and may cause severe damage including blindness.
Skin Contact	The product causes burns of eyes, skin and mucous membranes.
Ingestion	Causes burns. May be harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ethanol 64-17-5	= 7060 mg/kg (Rat)	-	= 116.9 mg/L (Rat) 4 h = 133.8 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms No Information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Corrosivity Causes burns. Extremely corrosive and destructive to tissue. Risk of serious damage to eyes.

Sensitization No Information available.

Germ cell mutagenicity No Information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ethanol 64-17-5	A3	Group 1	Known	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - *Animal Carcinogen*

IARC (International Agency for Research on Cancer)

Group 1 - *Carcinogenic to Humans*

NTP (National Toxicology Program)

Known - *Known Carcinogen*

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - *Present*

Reproductive toxicity No Information available.

STOT - single exposure No Information available.

STOT - repeated exposure No Information available.

Chronic toxicity Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.

Aspiration hazard No Information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.
The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION**Ecotoxicity**

0% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Didecyl Dimethyl Ammonium Chloride 7173-51-5	-	0.97: 96 h Danio rerio mg/L LC50 semi-static	-
Alkyl (C12-16) dimethyl benzyl ammonium chloride 68424-85-1	-	0.223 - 0.46: 96 h Lepomis macrochirus mg/L LC50 static 0.823 - 1.61: 96 h Oncorhynchus mykiss mg/L LC50 static 1.3: 96 h Poecilia reticulata mg/L LC50 semi-static 2.4: 96 h Oryzias latipes mg/L LC50 semi-static	-
Tetrasodium EDTA 64-02-8	-	41: 96 h Lepomis macrochirus mg/L LC50 static 59.8: 96 h Pimephales promelas mg/L LC50 static	-
Ethanol 64-17-5	-	12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static	9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static
Citric Acid 77-92-9	-	1516: 96 h Lepomis macrochirus mg/L LC50	-
Trisodium nitrilotriacetate 5064-31-3	-	175 - 225: 96 h Lepomis macrochirus mg/L LC50 static 560 - 1000: 96 h Oryzias latipes mg/L LC50 560 - 1000: 96 h Oryzias latipes mg/L LC50 semi-static 560 - 1000: 96 h Poecilia reticulata mg/L LC50 560 - 1000: 96 h Poecilia reticulata mg/L LC50 semi-static 72 - 133: 96 h Oncorhynchus mykiss mg/L LC50 static 93 - 170: 96 h Pimephales promelas mg/L LC50 flow-through 114: 96 h Pimephales promelas mg/L LC50 252: 96 h Lepomis macrochirus mg/L LC50 470: 96 h Pimephales promelas mg/L LC50 static	560 - 1000: 48 h Daphnia magna mg/L LC50
Sodium Hydroxide 1310-73-2	-	45.4: 96 h Oncorhynchus mykiss mg/L LC50 static	-

Persistence and degradability

No Information available.

Bioaccumulation

No Information available.

Chemical Name	Partition coefficient
Didecyl Dimethyl Ammonium Chloride 7173-51-5	2.58
Alkyl (C12-16) dimethyl benzyl ammonium chloride 68424-85-1	2.75
Ethanol 64-17-5	-0.35

Other adverse effects

No Information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Ethanol 64-17-5	Toxic Ignitable

14. TRANSPORT INFORMATION

The shipping classification information in this section (Section 14) is meant as a guide to the overall classification of the product. However, transportation classifications may be subject to change with changes in package size. Consult shipper requirements under 49 CFR, IATA and IMDG to assure regulatory compliance.

DOT Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory.

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List.

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances.

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations**California Proposition 65**

This product has been evaluated and does not require warning labeling under California Proposition 65.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ethanol 64-17-5	X	X	X
Trisodium nitrilotriacetate 5064-31-3	-	X	-
Sodium Hydroxide 1310-73-2	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number 10324-155-42403

EPA Statement

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. See the product label for the FIFRA hazard information as required on the pesticide label.

16. OTHER INFORMATION

HMIS Health hazards 2 Flammability 0 Physical hazards 0 Personal protection X

Legend

N/A - Not Applicable
N/E - Not Established
N/D - Not Determined
N/K - Not Known

Revision Date 15-May-2023
Revision Note No Information available

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.

End of Safety Data Sheet