PRODUCT SPECIFICATION REPORT

FS AMINE Z is a concentrated water-based blend of four distinct quaternaries designed as a food surface sanitizer with no potable rinse required.

FS AMINE Z

PROD. #Q094

Food Surface Sanitizer

FEATURES/BENEFITS:

Concentrated	Dilutes at 1:500 parts water for low end use cost.
Effective	At 2ml per liter of water (200 ppm active quat) eliminates 99.99% of the following bacteria in 60 seconds based on 500 ppm of hardness: Campylobacter Jejuni, Salmonella Enteritidis, Escherichia Coli, Shigella Dysenteriae, Escherichia Coli 0157:H7, Staphylococcus Aureus, Listeria Monocytogenes, Yersinia Enterocolitica, Salmonella Choleraesuis.
Deodorizes	Kills most organisms that cause odors. Deodorizes quickly and effectively without leaving a strong, masking odor of its own.
Versatile	Can be used as a hard surface sanitizer as well as for fogging operations.
CFIA Accepted	Accepted for use as a food contact surface sanitizer with no potable water rinse.
Colour-Coded	Product labeling is colour coded red for easy use with other colour coded Zep food system products.
Accepted	This product has been deemed acceptable for use in food establishments.

APPLICATIONS:

For use in food processing plants and facilities, hog farms, poultry producing establishments and institutional kitchens. Dilute at 1:500 parts water and spray surface to be sanitized. Do not rinse off with water. Surfaces to be sanitized should be thoroughly cleaned before application of FS Amine Z

COMPANION PRODUCTS:

Process Cleaner HW, FS Formula 4489, Applaud

SPECIFICATIONS:

Physical Form	Liquid
Color	Red
Odour	Non-Distinct
pH (concentrate)	6.0 – 7.0
Specific Gravity	1.000
Shelf Life	2 years minimum
Flash Point	None
WHMIS	Class D2B
TDG	Non-regulated

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FICHE TECHNIQUE

FS Amine Z est un mélange concentré à base d'eau de quatre quarternaires distincts conçu comme assainissant pour surfaces alimentaires, sans rinçage requis à l'eau potable.

FS AMINE Z — PROD. #Q094

Assainissant pour surfaces alimentaires

CARACTERISTIQUES/AVANTAGES:

Concentre	Dilution à 1:500 parts d'eau pour un faible coût d'utilisation
Efficace	A 2ml par litre d'eau (200 ppm quat actif,) ce désinfectant élimine 99,99% des bactéries suivantes en 60 secondes, selon une dureté de 500 ppm: Campylobacter Jejuni, Salmonella Enteritidis, E. Coli, Shigella Dystenteriae, E. Coli 0157:H7, Staphylococcus Aureus, Listeria Monocytogenes, Yersinia Enterocolitica, Salmonella Choleraesuis.
Désodorise	Tue la plupart des organismes qui causent les odeurs. Désodorise rapidement et efficacement sans laisser une forte odeur de masquage.
Polyvalent	Peut être utilisé comme assainissant de surfaces dures ainsi que pour les opérations de brumisation.
Homologué par l'ACIA	Accepté comme assainissant de surfaces en contact avec les ailments, sans rinçage requis à l'eau potable.
Chromocodé	L'etiquette du produit est codeé par la couleur rouge pour une utilisation facile avec les autres produits codés par couleur du système alimentaire de Zep.
Accepted	Ce produit a été jugé acceptable pour atilisation dans les établissements alimentaires.

APPLICATIONS ET DILUTIONS:

Pour une utilization dans les installations et usines de traitement des aliments, exploitations porcines, établissements de production de voilaille et cuisines instiutionelles. Diluer à 1:500 parts d'eau et pulvériser sur la surface à assainissante. Ne pas rincer à l'eau potable. Les surfaces à désinfecter doivent être nettoyées rigoureusement avant l'application de FS Amine Z.

COMPANION PRODUCTS:

Process Cleaner HW, FS Formula 4489, Applaud

CARACTERISTIQUES PHYSIQUES:

Présentation physique	Liquide
Couleur	Rouge
Odeur	Indistinguable
pH (concentre)	6,0 a 7,0
Densité	1,000
Durée de stockage	Minimum de 2 ans
Point d'éclair (TCC)	Aucun
SIMDUT	Classe D2B
TMD	Non-réglementé

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Section 5. Fire Fighting Measures

Flash Point Not available.

Flammable Limits Not available.

Flammability Non-flammable.

Auto-ignition Temperature

Fire-Fighting Procedures Use an extinguishing agent suitable for the surrounding fire. Fire-fighters should wear appropriate protective equipment.

Fire hazard In a fire or if heated, a pressure increase will occur and the container may burst.

Products of Combustion carbon oxides (CO, CO_2) and nitrogen oxides (NO, NO_2 etc.)

Explosion hazard Not available.

Section 6. Accidental Release Measures

Spill Clean up Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and Storage

Handling Put on appropriate personal protective equipment (see section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Do not reuse container. Apply this product only as specified on the label.

Storage Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store between the following temperatures: 40°F - 120°F (4.4°C - 49°C). Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection

Product name	Exposure limits
ethanol	**CA Alberta Provincial (Canada, 4/2009).** 8 hrs OEL: 1000 ppm 8 hour(s). 8 hrs OEL: 1880 mg/m³ 8 hour(s). **CA Quebec Provincial (Canada, 6/2008).** TWAEV: 1000 ppm 8 hour(s). TWAEV: 1880 mg/m³ 8 hour(s). **CA British Columbia Provincial (Canada, 9/2010).** STEL: 1000 ppm 15 minute(s). **CA Ontario Provincial (Canada, 7/2010).** STEL: 1000 ppm 15 minute(s).

Personal Protective Equipment (PPE)

Eyes Recommended: Chemical splash goggles. or face shield

Hands and Body Wear appropriate protective clothing to prevent skin contact.
Recommended: Rubber gloves. Nitrile gloves. or Neoprene gloves.

Respiratory A respirator is not needed under normal and intended conditions of product use.

Section 9. Physical and Chemical Properties

Physical State Liquid.

pH 6.0 - 7.0

Boiling Point 100°C (212°F)

Specific Gravity 1

Solubility Soluble in the following materials: cold water and hot water.

Freezing Point

Color Clear. Red.

Odor Mild.

Vapor Pressure Not determined.

Vapor Density Not determined.

Evaporation Rate 1 (Water = 1)

VOC (Consumer) 12 (g/l). 0.1 lb/gal (1.2%)

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.

Incompatibility Slightly reactive or incompatible with the following materials: oxidizing materials.

Hazardous Polymerization Under normal conditions of storage and use, hazardous polymerization will not occur.

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

Section 11. Toxicological Information

Carcinogenicity No known significant effects or critical hazards.

Acute Toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	LD50 Dermal	Rabbit	204 mg/kg	
	LD50 Dermal	Rabbit	645 mg/kg	
	LD50 Oral	Rat	250 mg/kg	
	LD50 Oral	Rat	366 mg/kg	
ethanol	LC50 Inhalation Vapor	Rat	20000 mg/m³	
	LD50 Oral	Rat	7 g/kg	

Section 12. Ecological Information

Environmental Effects Harmful to aquatic organisms.

Aquatic Ecotoxicity

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	-	Acute EC50 670 ug/L Fresh water	Algae - Green algae - Chlorella pyrenoidosa - Exponential growth phase	96 hours
	-	Acute EC50 5.9 ppb Fresh water	Daphnia - Water flea - Daphnia magna - <24 hours	48 hours
	-	Acute LC50 0.28 ppm Fresh water	Fish - Fathead minnow - Pimephales promelas	96 hours
ethanol	-	Acute EC50 17.921 mg/L Marine water	Algae - Green algae - Ulva pertusa	96 hours
	-	Acute EC50 2000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	-	Acute LC50 25500 ug/L Marine water	Crustaceans - Brine shrimp - Artemia franchiscana - Larvae	48 hours

Section 13. Disposal Considerations

Waste Information

Waste must be disposed of in accordance with applicable regulations. Consult your local or regional authorities for additional information.

Waste Stream

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
TDG Classification	Not regulated.	-	-	-		-
IMDG Class	Not available.	Not available.	Not available.	-		-

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment. Limited Quantity: Small quantities of controlled goods are not regulated as Dangerous Goods according to TDG regulations.

PG* : Packing group

Section 15. Regulatory Information

Canada

WHMIS (Canada) Class D-2B: Material causing other toxic effects (Toxic).

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.