

Divervin Manual

Hygiene Service and Support to the Wine Industry



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EXCEEDING YOUR WINERY HYGIENE NEEDS

The purpose of this manual is to provide a general guideline for your winery hygiene program.

Section 1: Winery Hygiene Program

1. Wine Harvesting

- Buckets, baskets, boxes, tubes, back baskets, gondola trucks, receiving bins, conveyor belts, screws, crushers, stemmers, strainers, all systems of press, press bottoms, sieves, outside of vats, outside of tanks and casks, outside of rinser, outsides of bottling apparatus, outside of liquefying machines, supports of plate and frame filters, floors, wall and gutters...

2. Tanks - Stainless steel, polyester, raw concrete, concrete, glass, ceramic
3. Coated steel vats and tanks
4. Large asks and wooden fermenters
5. Piping circuits, sleeves, filler bowl, filters sedimentation, rotating drum filters, pumps, centrifuges, installation of heat treatments
6. Final filtration system
7. Ceiling, walls, floors

Section 2: Product listing

Section 3: Product Data Sheets, CFIA (Canadian Food Inspection Agency) Approval Letters & Material Safety Data Sheets (Diversey will supply as requested).

Please consult your local Diversey Technical Representative who can provide a customized winery cleaning program for your operations.









Section 1: Winery Hygiene Program







Due to the sensitivity of chlorinated cleaning and sanitizing products in the wine industry, Diversey has compiled two cleaning programs (1) With Chlorine (2) Without Chlorine.

1. Wine Harvesting:





- Buckets, baskets, boxes, tubes, back baskets, gondola trucks, receiving bins, conveyor belts, screws, crushers, stemmers, strainers, all systems of press, press bottoms, sieves, outside of vats, outside of tanks and casks, outside of rinser, outsides of bottling apparatus, outside of liquefying machines, supports of plate and frame filters, floors, wall and gutters...





WITHOUT CHLORINE

Daily Cleaning Program					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse	CONTACT TIME 	RINSING 
VIPER	At least once a day	VIPER 5 % solution cold water	Spray or Foam  	15-20 minutes	Until foam disappears
HD PLUSFOAM	At least once a day	HD PLUSFOAM 5 % solution cold water	Foam 	15-20 minutes	Until foam disappears

End of Vintage - Remedial Cleaning Program (if daily cleaning program is not sufficient)					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse	CONTACT TIME 	RINSING 
VIPER	At the end of harvest or wine making	VIPER 5-10 % solution cold water	Spray or Foam  	15-20 minutes	Until foam disappears
HD PLUSFOAM	At the end of harvest or wine making	HD PLUSFOAM 5-10 % solution water cold	Foam 	15-20 minutes	Until foam disappears






WITH CHLORINE





Daily Cleaning Program					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse	CONTACT TIME 	RINSING 
ENDUROCHLOR	At least once a day	ENDUROCHLOR 5 % solution cold water	Foam 	15-20 minutes	Until foam disappears





End of Vintage - Remedial Cleaning Program (if daily cleaning program is not sufficient)					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse	CONTACT TIME 	RINSING 
ENDUROCHLOR	At the end of harvest or wine making	ENDUROCHLOR 5-10 % solution cold water	Foam 	15-20 minutes	Until foam disappears

2. Tanks - Stainless steel, polyester, raw concrete, concrete, glass, ceramic.

WITHOUT CHLORINE





Tank Cleaning – Descaling (tartar less than 1 mm)					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse	CONTACT TIME 	RINSING 
PLASTREN H	Right after each use	PLASTREN H 1-2 % solution cold water	 Closed Circuit	10-20 minutes	Until negative test
LIQUID BRIL TAK	Right after each use	LIQUID BRIL TAK 2-5 % solution cold water	 Closed Circuit	10-20 minutes	Until negative test





Descaling and Red color removal (tartar less than 1-3 mm)					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse	CONTACT TIME 	RINSING 
LIQUID BRIL TAK + TRIAX III	Annually	LIQUID BRIL TAK 2-5 % solution cold water + TRIAx III 1-2 % solution	 Closed Circuit	10-20 minutes	Until negative test





Annual Descaling and Red color removal (tartar greater than 3 mm)					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse	CONTACT TIME 	RINSING 
SINGLEX + TRIAX III	When surfaces haven't been descaled annually	SINGLEX 50-100g solution cold water + TRIAx III 1-2 % solution	 Closed Circuit	20-40 minutes	Until negative test

* Removal of limestone and iron oxides: use the acid PASCAL once a year to 100 g / l in cold water spray (or as a foam with Foam Base addition of 5%). Leave on for 10 hours. Rinse until rinse test negative.

WITH CHLORINE

Tank Cleaning – Descaling (tartar less than 1 mm)					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse	CONTACT TIME 	RINSING 
BENEFIT	Right after each use	BENEFIT 1-2 % solution cold water	 Closed Circuit	10-20 minutes	Until negative test

Descaling and Red color removal (tartar less than 1-3 mm)					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse	CONTACT TIME 	RINSING 
LIQUID BRIL TAK + DIBAC	Annually	LIQUID BRIL TAK 2-5 % solution cold water + DIBAC 1-2 % solution	 Closed Circuit	10-20 minutes	Until negative test






Annual Descaling and Red color removal (tartar greater than 3 mm)					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse	CONTACT TIME 	RINSING 
SINGLEX	When surfaces haven't been descaled annually	SINGLEX 50-100g solution cold water	 Closed Circuit	20-40 minutes	Until negative test






* Removal of limestone and iron oxides: use the acid PASCAL once a year to 100 g / l in cold water spray (or as a foam with Foam Base addition of 5%). Leave on for 10 hours. Rinse until rinse test negative.

3. Steel Coated Vats and Tanks.

Steel coated vats and tanks make reference to a kind of enameled steel with formo-phenolic coating. Caustic Soda may destroy this formo-phenolic coating; therefore, the following recommended chemistry that has been recommended does not contain sodium hydroxide (Caustic Soda).





WITHOUT CHLORINE





Tank Cleaning – Descaling (tartar less than 1 mm)					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse 	CONTACT TIME 	RINSING 
KEEGO	Right after each use	KEEGO 50-100 g/L solution cold water	 Closed Circuit	10-20 minutes	Until negative test

Descaling and Red color removal (tartar less than 1-3 mm)					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse 	CONTACT TIME 	RINSING 
KEEGO + TRIAx III	Annually	KEEGO 20-50g/L cold water + TRIAx III 1-2 % solution	 Closed Circuit	10-20 minutes	Until negative test

4. Large Casks and Wooden Fermenters.





WITHOUT CHLORINE






Tank Cleaning – (tartar less than 2 mm)					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse	CONTACT TIME 	RINSING 
LIQUID BRIL TAK	Immediately after each use	LIQUID BRIL TAK 2-5 % solution cold water	 Closed Circuit	10-20 minutes	Until negative test





Descaling and Red color removal (tartar greater than 2 mm)					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse	CONTACT TIME 	RINSING 
LIQUID BRIL TAK + TRIAX III	Annually	LIQUID BRIL TAK 2-5 % solution cold water + TRIAx III 1-2 % solution	 Closed Circuit	10-20 minutes	Until negative test

5. Piping circuits, sleeves, filler bowl, sedimentation filters, rotating drum filters, pumps, centrifuges, installation of heat treatments.


WITHOUT CHLORINE



Line Cleaning and Red color removal					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse	CONTACT TIME 	RINSING 
LIQUID BRIL TAK + TRIAX III	Immediately after each use	LIQUID BRIL TAK 2-5 % solution (20-50 C) + TRIAIX III 1-2 % solution	 Closed Circuit	10-20 minutes	Until negative test


Exterior Cleaning of Filler and Rinsers					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse	CONTACT TIME 	RINSING 
VIPER	Immediately after each use	VIPER 5 % solution cold water	Spray or Foam 	15-20 minutes	Until foam disappears
HD PLUSFOAM	Immediately after each use	HD PLUSFOAM 5 % solution cold water	Foam 	15-20 minutes	Until foam disappears

Sanitizing Step for Filling Caps and Exterior of Equipment					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse	CONTACT TIME 	RINSING 
DIVOSAN PLUS	After cleaning step	DIVOSAN PLUS 2.0 – 3.5 mL/L solution cold water	Spray 	15-20 minutes	Drip dry

WITH CHLORINE





Line Cleaning and Red color removal					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use	APPLICATION -always after pre-rinse	CONTACT TIME	RINSING
BENEFIT	Right after each use	BENEFIT 1-2 % solution	 Closed Circuit	10-20 minutes	Until negative test





Exterior Cleaning of Filler and Rinsers					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use	APPLICATION -always after pre-rinse	CONTACT TIME	RINSING
ENDUROCHLOR	Right after each use	ENDUROCHLOR 3-5 % solution cold water	Spray or Foam  	15-20 minutes	Until foam disappears

Sanitizing Step for Filling Caps and Exterior of Equipment					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use	APPLICATION -always after pre-rinse	CONTACT TIME	RINSING
DIBAC	After cleaning step	DIBAC 2 mL/L solution cold water	Spray 	15-20 minutes	Do not rinse

6. Final filtration system.

As approved by manufacturers specification.







Filter Cleaning					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse	CONTACT TIME 	RINSING 
	Right after each use		 Closed Circuit	10-20 minutes	Until negative test






Filter Sanitizing					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse	CONTACT TIME 	RINSING 
	After cleaning step		 Closed Circuit	10-20 minutes	Until negative test

* In January 2012, Diversey will be launching a complete line of cleaning products (chlorinated and non-chlorinated) approved for membrane application.





7. Ceilings, walls, and floors.





WITHOUT CHLORINE

Cleaning Program					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse	CONTACT TIME 	RINSING 
VIPER	At the end of production	VIPER 5 % solution cold water	Spray or Foam  	15-20 minutes	Until foam disappears
FATSOLVE	At the end of production	FATSOLVE 5 % solution cold water	Foam 	15-20 minutes	Until foam disappears

Sanitizing Step					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse	CONTACT TIME 	RINSING 
SPECTRUM	At the end of harvest or wine making	SPECTRUM 2 mL/L solution cold water	Spray 	15-20 minutes	Until foam disappears
DIVOSAN PLUS	After cleaning step	DIVOSAN PLUS 2 – 3.5 mL/L solution cold water	Spray 	15-20 minutes	Until foam disappears

WITH CHLORINE

Daily Cleaning Program					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre-rinse	CONTACT TIME 	RINSING 
ENDUROCHLOR	At least once a day	ENDUROCHLOR 5 % solution cold water	Foam 	15-20 minutes	Until foam disappears

Sanitizing Step					
PRODUCT	FREQUENCY	PREPARATION -only dilute prior to use 	APPLICATION -always after pre- rinse	CONTACT TIME 	RINSING 
DIBAC	At the end of harvest or wine making	DIBAC 2 mL/L solution cold water	Spray 	15-20 minutes	Until foam disappears

SECTION 2: Product Listing

Reference Product Identification Matrix – With/without Chlorine

APPLICATION	PRODUCT	WITH CHLORINE	WITHOUT CHLORINE
CIP Cleaner	Liquid Brill Tak		
	Plastren H		
	Keego		
	Benefit		
	Triax III		
	FP Destainer		
Sanitizer	Divosan Plus		
	Spectrum		
	Dibac		
	SU393		
Foam Products	HD Plusfoam		
	Fatsolve		
	Viper		
	Endurochlor		

Product Listing and Available Sizes

PRODUCT	Description	Unit Size
Liquid Brill Tak	Heavy Duty Caustic Cleaner	4X5 L, 208 L
Plastren H	Medium Duty Caustic Cleaner with additive	208 L
Keego	Powder non-chlorinated caustic CIP Cleaner	185 Kg
Benefit	Chlorinated alkali CIP cleaner	208 L
Triax III	Caustic and Acid cleaning booster	208 L
FP Destainer	Caustic and Acid cleaning booster	185 Kg
Divosan Plus	Sanitizer - peracetic acid	18.9 L, 208 L
Spectrum	Sanitizer - quaternary ammonium (quat)	4X5 L, 18.9 L
Dibac	Sanitizer - chlorine	18.9 L, 208 L
SU393	Sanitizer - alcohol sanitizer	4X5 L, 18.9 L
HD Plusfoam	Heavy Duty Foam Cleaner	18.9 L, 208 L
Fatsolve	General purpose cleaner	18.9 L, 208 L
Viper	General purpose cleaner	208 L
Endurochlor	Extended foam cleaner	18.9 L, 208 L