### **VEHICLE CLEANING & DISINFECTING**

- Toyota recommends disinfecting vehicles when a vehicle is brought in for service, when it is returned to a customer, when a vehicle is taken from inventory for a test drive, and when a used vehicle is taken into the dealership as a trade or from auction.
- If a vehicle may have been exposed to someone with COVID-19 do not touch it for 24 hours, then disinfect it.
- Utilize steering wheel, seat, gear shift, and floor mat covers in customer vehicles.
- Toyota is issuing this document to provide you with guidance on products that you can use to clean and disinfect high touch areas in the interior and on the exterior of the vehicle.

## RELEVANT TERMS (Source CDC as of 4/23/20) CLICK FOR CDC LINK



#### Cleaning:

Refers to the removal of dirt and impurities, including germs, from surfaces. Cleaning alone does not kill germs. But by removing the germs, it decreases their number and therefore any risk of spreading infection.

#### **Disinfection:**

Works by using chemicals, for example EPA-registered disinfectants, to kill germs on surfaces. This process does not necessarily clean dirty surfaces or remove germs. But killing germs remaining on a surface after cleaning further reduces any risk of spreading infection.

### **CLEANING & DISINFECTING GUIDELINES**



#### Cleaning:

- Use products and procedures for cleaning the vehicle as found in the vehicle manuals.
- Follow the instructions on those products for use and any additional policies procedures instituted by your dealership, including any instructions to wear gloves or other personal protective equipment (PPE).
  - PPE can be found on the Toyota Approved Dealer Equipment site (toyotaade.snapon.com).

#### **Disinfection:**

- Use appropriate material(s) for disinfection of high-touch areas. The
  disinfection products in the "Suitable Disinfecting Product Types" have
  been selected for their compatibility with Toyota vehicle exteriors and
  interiors and based on current guidelines of the CDC and EPA.
- Follow the instructions on those products for use and any additional policies procedures instituted by your dealership, including any instructions to wear gloves or other PPE.
- Focus on the following high touch areas shown below

### **KEY INTERIOR TOUCH POINT AREAS**

- + Interior Door Levers/Window & Door Lock Controls
- + Upper Door Trims / Armrest
- + Power Seat Switches
- + HVAC Vents/Controls
- + Steering Wheel/Buttons
- + Lower IP Various Buttons
- + Hood Release
- + Ignition Switch
- + Multifunction Levers
- + Radio Various Buttons
- + Center Console & Glove Box Buttons/Handle
- + Cup Holders
- + Shift Lever
- + Seat Belt Adjusters/Buckles/Locks
- + Seats If Necessary
- +InnerMirror/Visors/AssistHandles/MoonroofShade Handle/Maps Lamps & Various Buttons (SOS/Home Link/Sunroof)

Note: IF REPAIRS ARE PERFORMED ON INTERIOR PARTS OR COMPONENTS NOT LISTED ABOVE, PLEASE ENSURE THAT THOSE SURFACES ARE ALSO WIPES DOWN FOLLOWING THE GUIDELINES PROVIDED





### **KEY EXTERIOR TOUCH POINT AREAS**

- + All Exterior Handles
- + Fuel Lid/Gas Cap
- + Trunk or Tailgate Button/Pull
- + Keyfob
- + Front Hood Area/Lever (If Vehicle Serviced)



### SUITABLE DISINFECTING PRODUCT TYPES

A. Below is a matrix of commercial and consumer product types that are suitable for cleaning (first row – detergent solution) and disinfecting (subsequent rows) vehicle interior/exterior surfaces.

#### **IMPORTANT:**

# Follow carefully the manufacturer's product label instructions for cleaning and disinfecting, as these vary by product.

Cleaning and Disinfecting Solution Matrix  Least Restrictive Cleaning and Disinfecting Solutions - SUITABLE FOR ALL INTERIOR AND EXTERIOR SURFACES											
Neutral Detergent & Water Solution	Surface-active agent with concentration of 15% or more of Linear Alkylbenzene Sulphorated (LAS) or Alkyl Ether Sulfate Sodium	5-10CC Neutral detergent per ILiter of water (1fl oz Neutral detergent per 1 Gallon of water)	Dawn Palmolive AJAX	All interior and exterior surfaces	1. Soak a clean microfiber cloth in detergently ater solution 2. Wipe high touch areas inside/outside the vehicle vigorously while being careful not to damage fragile components 3. Allow the detergently ater solution to sit on the surface for 20-30 seconds before proceeding to the next step 4. Use a fresh microfiber cloth damp with water and wipe any previously treated area to remove detergently ater solution.	<b>(2)</b>					
Quaternary Ammonium	Quaternary Ammonium	Dilutable or Ready to use - Refer to Package preparation instructions	ZEP Lysol (Spray Bottle)	All interior and exterior surfaces	Apply the ammonia disinfecting solution to a microfiber cloth     Wipe high touch areas inside/outside the vehicle     Wipe off excess disinfecting solution if necessary with a new cloth						
Silverion; Citric acid	Silver ion; Citric acid	Dilutable or Ready to use - Refer to Package preparation instructions	Axen(R) 30 Sdo3a	All interior and exterior surfaces	Apply the Silver ion/Citric Acid disinfecting solution to a microfiber cloth     Wipe high touch areas inside/outside the vehicle     Wipe off excess disinfecting solution if necessary with a new cloth	The state of the s					
			More Restrictive Disinfecting Solu	ntions - NOT FOR ALL SURFACES							
Isopropyl Alcohol (IPA) & Water Solution*	Isopropyl Alcohol (IPA	70% IPA/Water Mixture	70% Isopropyl Alcohol (IPA)	All interior surfaces EXCEPT: -Painted IP surfaces - Painted IP door trim panels - Painted center consoles panels - Touch Screens	Apply the IPA disinfecting solution to a microfiber cloth (or use ready wipe) in the IPA fivater solution     Wipe high touch areas inside the vehicle (do not use on painted surfaces)     Onot wipe more than twice on the same area or leave copious amount of solution on vehicle surface for extended time (>1 Min)						
Quaternary ammonium & Ethanol Mixture*	Quaternary ammonium; Ethanol	Dilutable or Ready to use - Refer to Paokage preparation instructions	ASEPTICARE**1BII OPTI-CIDE3	All interior surfaces EXCEPT: -Painted IP surfaces -Painted IP floor tim panels -Painted center consoles panels -Touch Screens	1. Apply the quaternary ammonium & ethanol disinfecting solution to a microfiber cloth (or use ready wipe) in the IPAIv atter solution. 2. Wipe high touch areas inside the vehicle (do not use on painted surfaces). 3. Do not wipe more than twice on the same area or leave copious amount of solution on vehicle surface for extended time (>1 Min).						
L-Lactic Acid**	L-Lactic Acid	Dilutable or Ready to use - Refer to Package preparation instructions	Fangio Gurney	All interior & exterior surfaces EXCEPT: -Synthetic leather material such as: Thermoplastic Polyurethane (TPU) Polywiyl chloride (PVC) synthetic leather seat covers	Apply the L-Lactic Acid Acid disinfecting solution to a microfiber cloth     Wipe high touch areas inside/outside the vehicle (do not use on synthetic leather seat cover material)     Wipe of sexcess disinfecting solution if necessary with a new cloth	Pared					

Isopropyl Alcohol (IPA) and Ethanol are not recommended for painted surfaces - Reduce exposure to painted surfaces as damage may occur. IPA/vater solution MUST contain 70% IPA by volume
"L-Lactic Acid is not recommended for Thermoplastic Polyurethane (TPU) or Polyvinyl chloride (PVC) synthetic leather seat covers

Ancillary Cleaning Material	Best Practice Guidelines		
<b>1</b>	1. To reduce risk of cross-contamination, do not use the same microfiber cloth/wipe on the entire vehicle; instead		
OR OR	2. It is recommended to use one microfiber cloth/wipe per vehicle occupant side (e.g., Driver side-front=1 Cloth)		
	3. If wiping excess disinfecting solution is required, use a clean microfiber cloth (do not rinse and reuse)		
	4. Dirty microfiber cloths must be washed with appropriate disinfecting laundry cleaner and dry before reusing		

#### \*\*DO NOT USE THE FOLLOWING CHEMICALS\*\*

Disinfecting product that contain Hydrogen Peroxide, Sodium Chlorite, Sodium Hypochlorite (chlorine bleach), Glycol Acid, Octanoic Acid, Hypochlorous Acid

and any cleaning solution that contains silicone are <u>not</u> recommended on Toyota vehicle surfaces.

Any disinfectant product dispersed by a pressurized aerosol container is not recommended. Similarly, the use of steam or direct spray of liquids onto vehicle's interior panels, electronics components or permeable material is not recommended.

**B.** EPA publishes a comprehensive list of registered/approved disinfecting solutions that have been deemed effective against Human Coronavirus. Because not all EPA approved disinfecting solutions are compatible with Toyota vehicle interior/exterior materials, Toyota compiled an excerpt list of EPA approved disinfecting product types that are suitable for our vehicles. An excerpt of Toyota suitable disinfecting solutions can be found below\* (PAGE 7)

<sup>\*</sup> This excerpt list was compiled on 4/21/2020. The EPA may review and modify this list from time to time. Please refer to the EPA communication channels and reference material for the most up to date information.

EPA Registration Number 10324-59	Ç <mark>-</mark>	Excerpt of EPA Approved Dis	nfecting Product Suitable for T	oyota/Lexus Vehicles*		
Number	Active Ingredient/s	Product Name	Company	Follow the disinfection directions and preparation for	Contact Time	Formulation Type
10324-59			10.000	the following virus	(in minutes)	
	Quaternary ammonium	Maquat 64	Mason Chemical Company	Human coronavirus	10	Dilutable
10324-63	Quaternary ammonium  Quaternary ammonium	Maguat 10 Maguat 280	Mason Chemical Company  Mason Chemical Company	Human coronavirus Human coronavirus	10	Dilutable Dilutable
10324-72	Quaternary ammonium	Maguat 615-HD	Mason Chemical Company	Human coronavirus	10	Dilutable
10324-80	Quaternary ammonium	Maquat 5.5-M	Mason Chemical Company	Human coronavirus	10	Dilutable
10324-81	Quaternary ammonium	Maquat 7.5-M	Mason Chemical Company	Human coronavirus	10	Dilutable
10324-85	Quaternary ammonium	Maquat 86-M	Mason Chemical Company	Human coronavirus	10	Dilutable
10324-93	Quaternary ammonium  Quaternary ammonium	Maquat 64-PD Maquat 20-M	Mason Chemical Company Mason Chemical Company	Human coronavirus Human coronavirus	10	Dilutable Dilutable
10324-96	Quaternary ammonium	Maquat 50-DS	Mason Chemical Company	Human coronavirus	10	Dilutable
10324-99	Quaternary ammonium	Maquat 10-PD	Mason Chemical Company	Human coronavirus	10	Dilutable
10324-105	Quaternary ammonium	Maquat 128 PD	Mason Chemical Company	Human coronavirus	10	Dilutable
10324-108	Quaternary ammonium	Maquat 256-MN	Mason Chemical Company	Human coronavirus	10	Dilutable
10324-112	Quaternary ammonium  Quaternary ammonium	Maquat 128-MN Maquat 64-MN	Mason Chemical Company Mason Chemical Company	Human coronavirus Human coronavirus	10	Dilutable Dilutable
10324-114	Quaternary ammonium	Maquat 32-MN	Mason Chemical Company	Human coronavirus	10	Dilutable
10324-115	Quaternary ammonium	Maquat 750-M	Mason Chemical Company	Human coronavirus	10	Dilutable
10324-117	Quaternary ammonium	Maquat 710-M	Mason Chemical Company	Human coronavirus	10	Dilutable
10324-140	Quaternary ammonium	Maquat MQ2525M- CPV	Mason Chemical Company	Human coronavirus	10	Dilutable Dilutable
10324-141	Quaternary ammonium  Quaternary ammonium	Maquat 256-NHQ Maquat MQ2525M-14	Mason Chemical Company Mason Chemical Company	Human coronavirus Human coronavirus	10	Dilutable
10324-154	Quaternary ammonium	Maquat 64-NHQ	Mason Chemical Company	Human coronavirus	10	Dilutable
10324-155	Quaternary ammonium	Maquat I 28-NHQ	Mason Chemical Company	Human coronavirus	10	Dilutable
10324-156	Quaternary ammonium	Maquat 512-NHQ	Mason Chemical Company	Human coronavirus	10	Dilutable
10324-157	Quaternary ammonium	Maquat 32-NHQ Maquat 256 PD	Mason Chemical Company Mason Chemical Company	Human coronavirus Human coronavirus	10	Dilutable Dilutable
10324-164	Quaternary ammonium  Quaternary ammonium	Maquat 256 PD Maguat 32	Mason Chemical Company  Mason Chemical Company	Human coronavirus Human coronavirus	10	Dilutable
10324-167	Quaternary ammonium	Maquat 32 PD	Mason Chemical Company	Human coronavirus	10	Dilutable
10324-177	Quaternary ammonium	Maquat 705-M	Mason Chemical Company	Human coronavirus	10	Dilutable
10324-194	Quaternary ammonium	Maquat 2420-10	Mason Chemical Company	Human coronavirus	10	Dilutable
10324-198 61178-1	Quaternary ammonium Quaternary ammonium	Maquat 702.5-M D-125	Mason Chemical Company Microgen Inc	Human coronavirus Human coronavirus	10	Dilutable Dilutable
61178-5	Quaternary ammonium  Quaternary ammonium	CCX-151	Microgen Inc	Human coronavirus  Human coronavirus	10	Dilutable
62472-2	Quaternary ammonium	Kennelsol HC	Alpha Tech Pet Inc.	Human coronavirus	10	Dilutable
67619-10	Quaternary ammonium	CPPC Everest	Clorox Professional Products Company	Human coronavirus	10	Dilutable
70385-6	Quaternary ammonium	QGC	Prorestore Products	Human coronavirus	10	Dilutable
70627-15 70627-23	Quaternary ammonium  Quaternary ammonium	Warrior Virex II/ 64	Diversey Inc	Human coronavirus Human coronavirus	10	Dilutable Dilutable
70627-35	Quaternary ammonium	Envy Foaming Disinfectant Cleaner	Diversey Inc	Human coronavirus	3	Dilutable
70627-63	Quaternary ammonium	512 Sanitizer	Diversey Inc	Human coronavirus	10	Dilutable
85343-1	Quaternary ammonium	Teccare Control	Talley Environmental Care Limited	Human coronavirus	10	Dilutable
90287-1	Quaternary ammonium	Maquat 25.6-PDX	VI-JON INC	Human coronavirus	10	Dilutable
1839-169 777-82	Quaternary ammonium	BTC 885 Neutral Disinfectant Cleaner-64	Stepan Company Reckitt Benckiser	Human coronavirus Human coronavirus	10	Dilutable Dilutable
1677-256	Quaternary ammonium  Quaternary ammonium	Lysol Brand Deodorizing Disinfectant Cleaner FSC 35K	Ecolab Inc	Human coronavirus	5	Dilutable
1839-78	Quaternary ammonium	NP 3.2 Detergent/ disinfectant	Stepan Company	Human coronavirus	10	Dilutable
1839-79	Quaternary ammonium	NP 4.5 Detergent/ disinfectant	Stepan Company	Human coronavirus	10	Dilutable
1839-81	Quaternary ammonium	NP 9.0 Detergent/	Stepan Company	Human coronavirus	10	Dilutable
1839-86 1839-94	Quaternary ammonium  Quaternary ammonium	BTC 2125 M 10% Solution NP 3.2 (D & F) Detergent/disinfectant	Stepan Company Stepan Company	Human coronavirus Human coronavirus	10	Dilutable Dilutable
1839-96	Quaternary ammonium	NP 9.0 (D & F) Detergent/disinfectant	Stepan Company	Human coronavirus	10	Dilutable
1839-155	Quaternary ammonium	BTC 2125M 20% Solution	Stepan Company	Human coronavirus	10	Dilutable
1839-166	Quaternary ammonium	BTC 885 NDC-128	Stepan Company	Human coronavirus	10	Dilutable
1839-167	Quaternary ammonium	BTC 885 Neutral Disinfectant Cleaner-64	Stepan Company	Human coronavirus	10	Dilutable
1839-168	Quaternary ammonium	BTC 885 NDC-32	Stepan Company	Human coronavirus	10	Dilutable
1839-176 1839-211	Quaternary ammonium	Liquid-pak Neutral Disinfectant Cleaner SC-AHD-64	Stepan Company	Human coronavirus Human coronavirus	10	Dilutable Dilutable
1839-212	Quaternary ammonium  Quaternary ammonium	SC-AHD-256	Stepan Company Stepan Company	Human coronavirus	5	Dilutable
1839-213	Quaternary ammonium	SC-AHD-128	Stepan Company	Human coronavirus	5	Dilutable
1839-214	Quaternary ammonium	\$C-NDC-256	Stepan Company	Human coronavirus	5	Dilutable
1839-215	Quaternary ammonium	SC-NDC-128	Stepan Company	Human coronavirus	5	Dilutable
1839-233 1839-235	Quaternary ammonium  Quaternary ammonium	SC-5:64N SC-5:256N	Stepan Company Stepan Company	Human coronavirus Human coronavirus	5	Dilutable Dilutable
1839-236	Quaternary ammonium  Quaternary ammonium	SC-5:256N SC-5:128N	Stepan Company Stepan Company	Human coronavirus Human coronavirus	5	Dilutable
1839-244	Quaternary ammonium	SC -5:64HN	Stepan Company	Human coronavirus	5	Dilutable
1839-245	Quaternary ammonium	SC-5:256HN	Stepan Company	Human coronavirus	5	Dilutable
1839-246	Quaternary ammonium	SC-5:128HN	Stepan Company ARC Compounding Co. Inc.	Human coronavirus	5	Dilutable
3862-191 6198-4	Quaternary ammonium  Quaternary ammonium	Assure Q. A. Concentrated Solution	ABC Compounding Co Inc National Chemicals Inc	Human coronavirus Human coronavirus	10	Dilutable Dilutable
6836-233	Quaternary ammonium	BARDAC 205M-50	Lonza LLC	Human coronavirus	1	Dilutable
6836-381	Quaternary ammonium	Lonzagard R-82G	Lonza LLC	Human coronavirus	1	Dilutable
10324-57	Quaternary ammonium	Maquat 42	Mason Chemical Company	Human coronavirus	10	Dilutable
10324-58	Quaternary ammonium	Maquat 128	Mason Chemical Company  North American Infection Control LTD	Human coronavirus	10	Dilutable
88494-1 4822-606	Quaternary ammonium; Ethanol L-Lactic Acid	Wedge Disinfectant Fangio	North American Infection Control LTD S.C. Johnson & Son Inc	Human coronavirus Human coronavirus	10	Dilutable Ready to Use
4822-608	L-Lactic acid	Gurney	S.C. Johnson & Son Inc	Human coronavirus	5	Ready to Use
11346-4	Quaternary ammonium	Clorox QS	The Clorox Company	Human coronavirus	2	Ready to Use
70627-2	Quaternary ammonium	Disinfectant D.C. 100	Diversey Inc	Human coronavirus	2	Ready to Use
777-66 777-91	Quaternary ammonium	Lysol® Brand All Purpose Cleaner  Lysol® Kitchen Pro Antibacterial Cleaner	Reckitt Benckiser Reckitt Benckiser	Human coronavirus	2	Ready to Use Ready to Use
1839-225	Quaternary ammonium  Quaternary ammonium	SC-RTU-TB	Stepan Company	Human coronavirus Human coronavirus	5	Ready to Use
4822-607	Quaternary ammonium	Lauda	S.C. Johnson & Son Inc	Human coronavirus	5	Ready to Use
4822-609	Quaternary ammonium	Stewart	S.C. Johnson & Son Inc	Human coronavirus	3	Ready to Use
4822-613	Quaternary ammonium	Gertrude	S.C. Johnson & Son Inc	Human coronavirus	5	Ready to Use
5813-73	Quaternary ammonium Quaternary ammonium; Ethanol	Clorox Everest Asentirare	The Clorox Company Airkem professional products	Human coronavirus Human coronavirus	0.5	Ready to Use Ready to Use
	Quaternary ammonium; Ethanol Quaternary ammonium; Ethanol	Asepticare Opti-cide Max	Airkem professional products Micro-Scientific LLC	Human coronavirus  Human coronavirus	2	Ready to Use
42964-17	Silver ion; Citric acid	Axen(R) 30	ETI H2O Inc	Human coronavirus	3	Ready to Use
		Sdc3a	ETI H2O Inc	Human coronavirus	1	Ready to Use
42964-17 70144-5	Silver ion; Citric acid			Human coronavirus	2.5	Wipe
42964-17 70144-5 72977-3	Quaternary ammonium	Caterpillar	Reckitt Benckiser	Fidinal Coronavirus	2.3	TTAC
42964-17 70144-5 72977-3 72977-5		Caterpillar Stepan Disinfectant Wipe	Stepan Company	Human coronavirus	10	Wipe
42964-17 70144-5 72977-3 72977-5 777-130	Quaternary ammonium				10 4	
42964-17 70144-5 72977-3 72977-5 777-130 1839-190	Quaternary ammonium  Quaternary ammonium	Stepan Disinfectant Wipe	Stepan Company	Human coronavirus	10	Wipe

\*This is a partial list of products pre-approved/registrated by the U.S. Environmental Protection Agency (EPA) for use against emerging serveloped viral pathogens and can be used during the 2019 novel coronavirus outbreak (COVID-19) per the Centers for Disease Control and Prevention (CDC), or EPA's Registered Antimicrobial Products for Use Against Novel Coronavirus SARS-CoV-2, the Cause of COVID-19 (List N). This list may be updated or modified by the EPA at any time. Refer to the EPA "List N" for the most updated information.