RAVENOL

ADDITIVE CATALOGUE







RAVEDOL

RAVENOL - PREMIUM QUALITY AND INNOVATION "MADE IN GERMANY" FOR THE HIGHEST DEMANDS

RAVENOL is known worldwide for quality, innovation, and reliability. Our lubricants deliver outstanding performance and maximum protection for vehicles, machinery, and demanding applications. With a global presence in over 100 countries and close collaboration with motorsport teams, RAVENOL has become a leading global brand.

The production of premium products "Made in Germany" represents the highest quality, precision, and innovative technology, which is ensured at every step of the production process. Through strict quality controls and the use of the latest manufacturing methods, we set new standards in the industry and enjoy a worldwide reputation as a renowned lubricant manufacturer.





Additives

are special substances added in small quantities to fuels, lubricants, and coolants to enhance operational performance.

Additives can have various properties, including:

- Cleaning
- Restoration of the normal condition
- Antioxidation
- Flow improvement
- Smoke prevention

- Wear protection
- Dispersion
- Combustion optimisation
- Corrosion protection

Areas of application for additives



Fuel system



Additives are used to IMPROVE FUEL QUALITY (increase of octane/cetane number, improvement of lubricating properties, fuel stabilisation during



They clean the fuel system, such as the injection systems, intake valves, piston rings, and combustion chambers



They protect the fuel system from CORROSION AND WEAR



Additive



Cooling system



CLEANING OF THE COOLING SYSTEM. Removes rust, grease, and lime deposits from the cooling system, restores the normal coolant cycle, and prevents engine overheating



SEALING OF THE COOLING SYSTEM

Seal micro-cracks and leaks permanently, thus preventing coolant loss



Oil system



Most oil additives serve to CLEAN THE ENGINE of carbon and sludge and are applied before an oil change. These residues are flushed into the oil sump and carried out of the engine with the used oil



PERFORMANCE INCREASE and REDUCED FRICTION of engine components





FUEL ADDITIVES (PETROL)

Why you should use fuel additives



When you refuel with low-quality fuel,

Carbon deposits form on valves, nozzles, and the crankshaft, preventing proper engine operation and significantly affecting its lifespan.

Contamination of the injectors (injectors)



Carbon deposits on valves



Deposits and corrosion of the valves





Typical problems caused by low-quality fuel include:



- · Starting difficulties
- Rough engine operation
- Loss of performance
- Increased fuel consumption
- Insufficient compression
- Higher pollutant levels in exhaust



Range of fuel additives (Petrol)















• Competitive advantages of RAVENOL fuel additives



- Use of highly efficient and advanced technologies (e.g., DCA Deposit Control Additives)
- Development and production according to the highest German quality standards
- · Guaranteed application safety



IMPROVED CLEANING EFFECT



REDUCED FUEL CONSUMPTION



FEWER POLLUTANT EMISSIONS



EXTENDED LIFE OF A VEHICLE



MAXIMIZED NGINE PERFORMANCE



SMOOTHER ENGINE RUNNING

Range of fuel additives (Petrol)



RAVENOL Petrol POWER PERFORMANCE

COMPLEX PETROL ADDITIVE Art. 1390206 / 300 ml



RAVENOL Petrol POWER PERFORMANCE is a highly effective fuel additive for all petrol engines to clean and maintain the entire fuel system. It ensures technically safe and economical operation, enabling proven savings in fuel consumption and increased performance.

RAVENOL Petrol POWER PERFORMANCE guarantees ideal combustion. This prevents deposits and oxidation by-products on fuel lines, injectors, cylinders, spark plugs, and in the combustion chamber.

ADVANTAGES:

- Supports stable cleanliness of the fuel system "keep clean" effect
- Protects against corrosion and oxidation
- Reduces fuel consumption and pollutant emissions
- Ensures optimal engine performance
- Improves the lubricating properties of the fuel
- \bullet Ideal for both GDI and PFI injection systems to improve efficiency and operational reliability

RAVENOL Petrol CLEAN EXTREME



CLEANING ADDITIVE FOR PETROL ENGINE FUEL SYSTEMS Art. 1390207 / 300 ml

RAVENOL Petrol CLEAN EXTREME is a highly effective fuel additive for all types of petrol engines for intensive cleaning of the entire fuel system from tank to combustion chamber.

RAVENOL Petrol Clean Extreme effectively removes microscale deposits from injectors and fuel distributors, ensuring precise injector control. The formation of new deposits is prevented.

ADVANTAGES:

- Intensive cleaning "clean up" effect
- Restores original engine performance
- Ideal for both GDI and PFI injection systems
- Intensive cleaning of injectors and the entire fuel system

GGTAM ROOM

RAVENOL Petrol OCTANE BOOSTER

AN ADDITIVE TO INCREASE OCTANE RATING Art. 1390209 / 300 ml



RAVENOL Petrol Octane Booster is an additive that increases the octane rating by up to four points, making it ideal for low-quality fuel. It improves combustion and thus increases the lifespan of the entire fuel system.

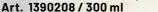
ADVANTAGES:

- Increase of octane rating (RON)
- Prevents engine knocking and pre-ignition
- Increases engine performance



RAVENOL Petrol QUALITY PROTECT

CORROSION PROTECTION, START OPTIMISATION





RAVENOL Petrol Quality Protect is an additive to secure fuel quality, especially when storing and winterising vehicles. It reliably protects against age-related deposits and corrosion in the fuel system. Improves starting behavior after long idle periods. Also suitable for: lawnmowers, vintage cars, boats, and chainsaws.

ADVANTAGES:

- Improved starting behavior after idle periods
- Excellent corrosion protection
- Prevents premature fuel aging and deposit formation
- Suitable for all 2-stroke and 4-stroke engines

Overview table of properties of fuel additives (Petrol)

| RAVERDL | Petrol CLEAN EXTREME | Petrol POWER PERFORMANCE | Petrol OCTANE BOOSTER | Petrol QUALITY PROTECT |
|--|-------------------------|-----------------------------|--------------------------|---------------------------|
| Cleaning | * * | * | | * |
| Reduction of pollutant content in exhaust gases | * | * * | * | |
| Protection of the fuel system from wear, corrosion, and deposits | * | * * | | * * |
| Improvement of the lubricating properties of the fuel | | * | | |
| Protection from aging | | * * | | * * |
| Improvement of engine performance | * * | * | * | |
| Increase in octane rating | | | * * | |
| Preventive measures | | * | | * |
| Optimisation of fuel consumption | * | * * | | |

• Instructions for use and dosing of fuel additives (Petrol and Diesel):



Add the contents of one can to the empty fuel tank before refueling.



ONE CAN (300 ML) is optimal for 60 to max. 75 L of fuel.



FUEL ADDITIVES (DIESEL)



 Problems arising from operating with poor diesel fuel and the reasons for it



Carbon deposits on valves

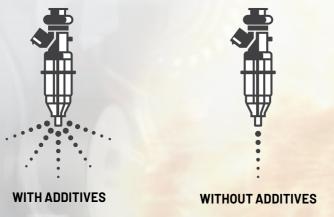


Carbon deposits on pistons



Carbon deposits on the nozzles

ATOMIZATION AT THE INJECTOR



SOLUTION THROUGH HIGH-QUALITY FUEL ADDITIVES

The best and most user-friendly response to these challenges and the cost-effective solution are high-quality fuel additives with special cleaning agents, known as Deposit Control Additives (DCA). These not only effectively remove existing deposits of any kind and composition (CLEAN UP), but also delay or prevent the formation of new deposits (KEEP CLEAN).

By removing deposits in the intake tract and injection systems, optimal combustion is ensured, restoring the original engine performance intended by the manufacturer. At the same time, a clean combustion means a significant reduction in pollutant emissions and fuel consumption.

Range of fuel additives (Diesel)









• The function of additives in diesel fuel



(Diesel) ADDITIVES

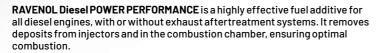
Range of fuel additives (Diesel)



RAVENOL Diesel POWER PERFORMANCE

COMPLEX DIESEL FUEL ADDITIVE

Art. 1390246 / 300 ml



- Supports stable cleanliness of the fuel system "keep clean" effect
- Increases the cetane number
- Protects against corrosion and oxidation
- Reduces fuel consumption and pollutant emissions
- Ensures optimal engine performance
- Improves the lubricating properties of the fuel



RAVENOL Diesel CLEAN EXTREME

CLEANING ADDITIVE FOR DIESEL SYSTEMS Art. 1390247 / 300 ml



RAVENOL Diesel CLEAN EXTREME is a fuel additive for all diesel engines for intensive cleaning of the fuel system, suitable for both electronically and mechanically controlled injectors. It effectively removes deposits from the injectors, ensuring optimal fuel atomization for soot-free and particle-free combustion. The formation of new deposits is prevented.

- Intensive cleaning \"clean up\" effect
- Restores original engine performance
- Suitable for all types of injection systems
- Intensive cleaning of injectors and the entire fuel system



RAVENOL Diesel CETANE BOOSTER

ADDITIVE FOR INCREASING THE CETANE NUMBER

Art. 1390249 / 300 ml



RAVENOL Diesel CETANE BOOSTER is a fuel additive for all diesel engines to improve ignition behavior, thereby increasing engine performance. It ensures optimal combustion and reduces engine noise.

ADVANTAGES:

- Increase in cetane number
- Improvement of cold start behavior and ignition quality
- Increase in engine performance



RAVENOL Diesel DPF CLEANER

ADDITIVE FOR CLEANING AND PROTECTING THE **DPF FILTER**

Art. 1390250 / 300 ml



RAVENOL Diesel DPF CLEANER is a high-performance additive for reducing soot emissions in diesel vehicles with DPF. With regular use, it reduces exhaust emissions and maintains engine performance.

ADVANTAGES:

- Cleans the entire fuel system
- Protects the diesel particulate filter (DPF) and supports its continuous regeneration, even during short trips and stop-and-go traffic
- Ensures optimal combustion
- Cleans the diesel particulate filter and other parts of the fuel system

Overview table of fuel additive properties (Diesel)

| RAVENDL | Diesel CLEAN EXTREME | Diesel POWER PERFORMANCE | Diesel DPF CLEANER | Diesel Cetane Booster |
|--|-------------------------|-----------------------------|-----------------------|--------------------------|
| Cleaning | * * | * | * | |
| Reduction of pollutant content in exhaust gases | * * | * * | * * | * |
| Protection of the fuel system from wear, corrosion, and deposits | * | * * | * | |
| Improvement of the lubricating properties of the fuel | | * | | |
| Combustion of soot and other carbon deposits | * | * | * * | |
| Protection from aging | | * * | | |
| Improvement of engine performance | * * | * * | * | * |
| Increase in cetane number | | * | | * * |
| Preventive measures | | * | * | |
| Optimisation of fuel consumption | * | * * | * | * |





RAVENOL AdBlue® Clean &Protect Concentrate

Art. 1390601 / 1 L



RAVENOL AdBlue® Clean & Protect Concentrate is an active ingredient for regular use in systems with SCR catalysts. The specially developed formulation cleans AdBlue®/urea dosing systems and SCR catalysts, effectively preventing crystal formation. This helps to prevent damage caused by clogging.

- Protects the AdBlue® dosing system and SCR catalyst from crystallization and deposits
- Cleans the AdBlue® dosing system and SCR catalyst from crystallization
- Ensures fine atomization of the urea solution



RAVENOL AdBlue® Clean & Protect **Premix**

Art. 1390602 /50 ml



RAVENOL AdBlue® Clean & Protect Premix is an active ingredient for regular use in systems with SCR catalysts. The specially developed formulation reliably cleans AdBlue®/urea dosing systems and SCR catalysts from crystal formation. A 50 ml bottle is sufficient for 12.5 L of AdBlue®.

- Protects the AdBlue® dosing system and SCR catalyst from crystallization and deposits
- Cleans the AdBlue® dosing system and SCR catalyst from crystallization
- Ensures fine atomization of the urea solution
- Sufficient for 12.5 L of AdBlue®



COOLING

ADDITIVES FOR COOLING SY

Even when cooling system maintenance conditions are followed, problems can still arise under difficult operating conditions.



One of the problems that can occur is minor radiator damage caused by stones or pitting corrosion. In this case, small coolant leaks occur, which are often difficult to locate.





Solve the problem with a radiator sealant and repair small damages quickly and reliably.





Another problem can arise from irregular maintenance of cooling systems. When the change interval is exceeded, the components of the coolant can break down, and the additives used for corrosion protection can precipitate. Additionally, wear and rust particles, as well as sludge, dirt, and oil, accumulate. These residues and particles can clog the cooling circuit, significantly impairing the cooling system's function.





The solution to this problem is to regularly flush the cooling system with a highly effective cleaner and completely replace the coolant.



This impairs heat exchange and heat dissipation from the engine.

The following consequences can occur:

- Damage to seals (e.g. cylinder head gasket)
 - engine block
 - - fatigue and cracks
 - Increased wear due to reduced engine cooling efficiency
 - engine block due to corrosion damage

 - total failure

Reduced heating performance in the

Range of additives for cooling systems



RAVENOL Professional Radiator Stop Leak



SEALANT FOR THE COOLING SYSTEM.

Art. 1390301 / 300 ml

RAVENOL Professional Radiator Stop Leak seals small leaks in the radiator, porosities of metal at soldered joints, and hairline cracks. RAVENOL Professional Radiator Stop Leak seals damage that is often hard to locate (usually only detectable by a drop in coolant level). RAVENOL Professional Radiator Stop Leak is sufficient for 10 L of coolant.

It is also suitable for closed cooling systems.

ADVANTAGES:

- Protection from leaks
- Long-term, reliable sealing of cracks and small leak areas



RAVENOL Professional Radiator Cleaner

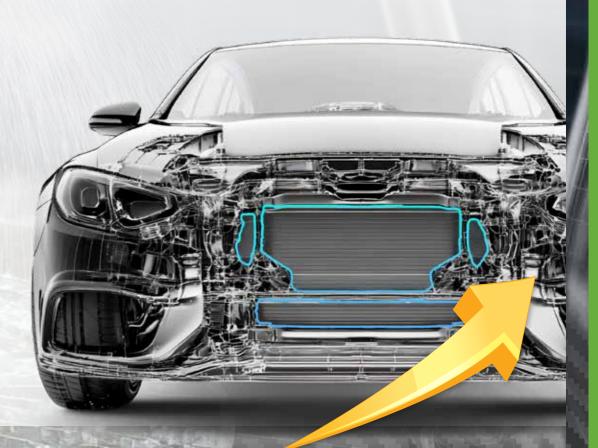


CLEANING AGENT FOR THE COOLING SYSTEM. Art. 1390302 / 250 ml

RAVENOL Professional Radiator Cleaner is an additive for cleaning cooling circuits that effectively dissolves foam and oil-based contaminants in radiators, nozzles, and engine water cooling systems. RAVENOL Professional Radiator Cleaner is a cleaner that removes these deposits and ensures normal engine temperature and reliability. It is suitable for all

Application: RAVENOL Professional Radiator Cleaner is sufficient for up to 10 L of coolant.

- · Cleaning of the cooling and heating systems
- Protection from contamination of the new coolant by impurities
- Removal of sludge and corrosion deposits





Deposits narrow the cooling channels and reduce coolant flow.

- - Deformation or cracking of parts such as the cylinder head or
 - Engine failure due to prolonged overheating
 - Local overheating (hotspots) causing material
 - · Holes or leaks in radiators, hoses, or the
 - Damage to the water pump, leading to its

 - cabin

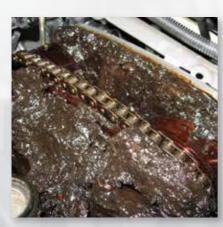
OIL SYSTEM ADDITIVES

SERVICE PRODUCTS FOR PROFESSIONAL OIL CHANGE

Motor oil

- How do deposits form in the engine?
- EXTREME TEMPERATURES, HIGH RPMS, AND HARSH OPERATING CONDITIONS CAN Cause oil to age faster and break down.
- OIL AGING: Even the best motor oil has a limited lifespan. Over time, it loses its protective properties, leading to the accumulation of contaminants and deposits.
- 3. LOW-QUALITY FUEL CAN LEAD to incomplete combustion, producing soot and other residues.









- 3. ENGINE WEAR: Over time, parts of the engine can wear down, leading to metal abrasion and other contaminants in the oil. These particles can deposit in the engine.
- 4. INADEQUATE OIL CHANGE INTERVALS: If oil change intervals are not followed, the oil can become contaminated and form deposits over time.
- AN ENGINE THAT IS NOT REGULARLY MAINTAINED or is in poor condition can also lead to increased deposit formation.

OIL SYSTEM:

Advantages and disadvantages

| RAVERDL | Flushing with fresh oil | Flushing with special Flushing oil | Flushing with Ravenol Engine Cleaner |
|---------------|--|---|---|
| PROCEDURE | Drain used oil Fill the oil system with new oil Let the engine run for 20 minutes Drain oil Fill with new oil | Drain used oil Fill the oil system with flushing oil Drain oil Fill with new oil | Add Engine Cleaner to warm engine oil. Minimum oil level must not be below the required level. Let the engine run for 10 minutes Drain oil Fill with new oil |
| ADVANTAGES | Most of the old oil is removed from the system The oil system always contains only the correct oil Prevents dirt deposits that could not be absorbed by the used oil | Old oil is removed from the system almost 100% Also dissolves solid deposits in the oil system Flushing oil is very easy to drain | Short oil change process Prevents dirt deposits that could not be absorbed by the used oil ALSO DISSOLVES SOLID DEPOSITS II THE OIL SYSTEM Small, handy container Facilitates draining the used oil Compatible with all common motor oils |
| DISADVANTAGES | Double the amount of oil required Solid deposits are only partially dissolved Deposits that cannot be dissolved by the engine oil are also not removed | Additional product required in the same amount as the fill amount Residues of the flushing oil cannot be completely removed Does not reach everywhere due to the lack of engine running | Minimal residues from Engine Cleand remain in the fresh oil |
| cost | very high | • high | • affordable |





RAVENOL Professional ENGINE CLEANER

MOTOR OIL CLEANING ADDITIVE Artikel No. 1390323 / 300 ml



RAVENOL Professional Engine Cleaner is an active concentrate for longer oil purity in all gasoline and diesel engines (with and without catalyst). It can also be used in motorcycles. RAVENOL Professional Engine Cleaner effectively breaks down dirt accumulation and sludge deposits in the engine by using intensive cleaning surfactants, and removes them thoroughly when draining the used oil. RAVENOL Professional Engine Cleaner cleans and flushes the entire engine system.

Dosage: 300 ml of RAVENOL Professional Engine Cleaner is sufficient for an application with approx. 5L of oil, regardless of manufacturer and engine size.

DVANTAGES:

- Effective cleaning of the oil system from sludge and dirt deposits
- Restoration of compression
- Reduction of oil consumption and wear

OIL SYSTEM ADDITIVES

SERVICE PRODUCTS FOR PROFESSIONAL OIL CHANGE

AUTOMATIC TRANSMISSION OIL

THE AUTOMATIC TRANSMISSION IN THE CAR IS SUBJECTED TO HIGH MECHANICAL AND THERMAL LOADS DURING OPERATION.

This is why the lubricating ability of automatic transmission oil decreases over time. The oil also undergoes a natural aging process and picks up wear from the clutch plates and gears. Therefore, every vehicle with an automatic transmission needs a transmission oil change at certain intervals.



AN AUTOMATIC TRANSMISSION OIL CHANGE WITHOUT FLUSHING, HOWEVER, MAKES LITTLE SENSE.

When draining the used oil, around half of the oil remains in the torque converter and transmission cooler due to the design. When new oil is added, it mixes with the old oil, and the viscosity improves only partially. Residues, deposits, and wear from the clutch plates remain in the transmission oil and continue to affect its function.



SOLUTION:

AN AUTOMATIC TRANSMISSION OIL CHANGE WITH FLUSHING

| RAVEDOL | Flushing with fresh oil | Professional flushing with a flushing device + Ravenol ATF Flush |
|---------------|---|--|
| PROCEDURE | Drain used oil Fill the oil system with new oil Let the engine run for 20 minutes Cycle through all gears once Drain oil Fill with new oil | Before the oil change, add 300 ml of RAVENOL ATF Flush to the warm transmission oil and let it run for 15 minutes Operate the flushing device according to the manufacturer's instructions Perform flushing/oil change |
| ADVANTAGES | Most of the old oil is removed from the system The oil system always contains only the correct oil Prevents deposits of dirt that could no longer be absorbed by the used oil | Almost 100% of the old oil is removed from the system Lower flushing volume required Effectively prevents deposits of dirt that could no longer be absorbed by the used oil |
| DISADVANTAGES | At least double the oil amount required Old oil is not completely removed from the transmission | Special equipment and accessories required |





RAVENOL ATF FLUSH

TRANSMISSION OIL CLEANING ADDITIVE Artikel No. 1390501 / 300 ml

RAVENOL ATF Flush is an active concentrate for cleaning all types of automatic transmissions. It protects against corrosion and premature wear. The cleaner effectively dissolves dirt and sludge deposits in the automatic transmission using cleaning-intensive surfactants and removes them effectively when draining the old

RAVENOL ATF Flush extends the life of the automatic transmission and ensures optimal shifting performance.

Dosage: 300 ml of RAVENOL ATF Flush is sufficient for an application of up to 8L of transmission oil, regardless of the manufacturer.

ADVANTAGES:

- Removes residues in the transmission
- Ensures optimal shifting performance
- Extends the lifespan of the automatic transmission
- Protects against corrosion and wear in the transmission
- Suitable for use with ATF cleaning devices like the RAVENOL Dynamic Exchanger

RAVENOL ATF Flush can also be used in a manual flush with fresh oil to support the cleaning process and improve the result.

For the best results, we recommend a professional flush with a flushing device (e.g., Ravenol Dynamic Exchange 2.0) and RAVENOL ATF Flush.



ATF Professional Line Dynamic Exchanger 2.0



MOTORCYCLE SYSTEM ADDITIVES

MOTOBIKE

PROBLEM:

PROBLEMS MOTORCYCLISTS FACE:

Contaminants and deposits in the engine:

Over time, dirt, carbon deposits, and sludge accumulate in the engine, reducing performance and impairing the oil's effectiveness. This happens especially with irregular oil changes.

Engine performance issues:

Deposits in the engine can lead to higher fuel consumption, reduced performance, and increased wear of parts, shortening the engine's lifespan.



Harmful acids can form in the engine, damaging the lubricating oil and reducing engine performance.

Reduced catalyst effectiveness:

Deposits in the engine can impair the catalyst's performance and shorten its lifespan.

Compression loss in the engine:

Contaminants between the piston rings can lead to a loss of compression, affecting engine performance.









CLEANS AND PROTECTS THE FUEL SYSTEM. Art. 1390401 / 100 ml

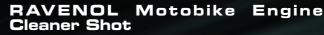
RAVENOL Motobike System Cleaner Shot is a fuel additive with a high content of cleaning and corrosion-protecting additives for cleaning all motorcycle gasoline injection engines, thus cleaning the fuel system from the tank to the combustion chamber.

RAVENOL Motobike System Cleaner Shot always ensures optimal mixture formation and protects all components of the fuel system from corrosion.

Dosage: The ideal dosage is one can of RAVENOL Motobike System Cleaner Shot per 20 liters of gasoline. Mixing ratio 1:200.

ADVANTAGES:

- Optimisation of engine performance, increased operational reliability
- Corrosion protection
- Suitable for catalysts
- Optimisation of fuel consumption and improvement of exhaust values
- Cleaning of the fuel system from the tank to the combustion chamber, removes residues
- Lubrication of the upper



CLEANS AND PROTECTS THE ENGINE. Art. 1390402 / 100 ml

RAVENOL Motobike Engine Cleaner Shot is an active ingredient concentrate with highly effective lubricating components for all motorcycle engines (with and without catalyst) for cleaning the oil circuit.

RAVENOL Motobike Engine Cleaner Shot can be used in all motorcycles.

Dosage: 100 ml of RAVENOL Motobike Engine Cleaner Shot is sufficient for approximately 1.5L of oil. Mixing ratio 1:15.

DVANTAGES:

- Neutrality towards sealing materials
- Improved engine performance through deposit removal
- Extended engine lifespan
- Cleaning of the entire oil and lubrication system
- Neutralisation and protection of the lubrication system from harmful

With the additives and cleaners for motorcycles, RAVENOL MOTOBIKE ENGINE CLEANER SHOT and RAVENOL MOTOBIKE SYSTEM CLEANER SHOT, all the mentioned problems such as deposits in the engine, performance issues, harmful substances in the lubrication circuit, reduced catalyst efficiency, and compression loss can be avoided.

The products effectively clean the engine, oil circuit, and fuel systems. They improve performance, reduce wear, and extend the lifespan of important engine components.









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