

Product	Sinopec Environmentally Friendly Engine Coolant YF-2A
Product description	Sinopec Environmentally Friendly Engine Coolant YF-2A is an Extended Life Coolant (ELC) formulated using ethylene glycol and a balanced Organic Acid Technology (OAT). Service intervals up to 6 years or 300,000 km in cars, buses and heavy-duty trucks. This environmentally friendly product contains no amines, borates, nitrites, phosphates or silicates, and is suitable for use as a coolant and antifreeze in the radiator systems of all types of internal combustion engines. This coolant is pre-mixed and could be used directly, doesn't require the addition of SCA/DCA.

Applications

Sinopec Environmentally Friendly Engine Coolant YF-2A is suitable for use in:

- Radiator systems of petrol, diesel, LPG and CNG-fuelled engines passenger cars, trucks and buses.
- Radiator systems of modern aluminium alloy engines.
- Radiator systems of diesel engines fitted with cast iron cylinder liners.

Features and benefits

- Global accepted compound technology of carboxylate corrosion inhibitor, with almost no wear and tear in use.
- No need for the addition of SCA/DCA.
- Compatible with rubber pipes and sealing materials and prolongs the service life of seals.
- Long-term corrosion protection. Complete inhibition of cavitation erosion.
- Optimal compatibility with hard water. Improved heat conductivity.
- A general-purpose coolant that meets the requirements of both light-duty vehicles and heavy-duty vehicles.
- Long service life, 6 years or 300,000 kilometres on-road use or 10,000 hours of off-highway use.
- Easy to biodegrade and environmentally friendly, low toxicity to humans and organisms.

Product Data Sheet

• Typical data

Item	Sinopec Environmentally Friendly Engine Coolant YF-2A
Color	Red
Specific gravity (20.0°C) (kg/m ³), ASTM D 1122	1080
Boiling point /°C, ASTM D 1120	112.0
Freezing point /°C, ASTM D 1177	-46.0
PH, ASTM D 1287	8.4
Reserve alkalinity /mL	5.7
Foaming of engine coolants, ASTM D 1881	
volume /mL	25
break time /s	1.6
Effect on automotive finish, ASTM D 1882	No effect
Corrosion test for engine coolants in glassware, weight loss / (mg/specimen) , ASTM D 1384	
copper	1.2
brass	0.9
steel	0.5
cast iron	0.6
solder	2.0
aluminium	1.8
Simulated service corrosion test of engine coolants, weight loss / (mg/specimen) , ASTM D 2570	
copper	2.3
brass	2.1
steel	1.5
cast iron	1.6
solder	2.9
aluminium	2.2
Corrosion of cast aluminium alloys in engine coolants at heat transfer surface (135°C±1°C, 168h±2h) /(mg/cm ²), ASTM D 4340	0.35
Cavitation corrosion and erosion-corrosion characteristics of aluminium pumps with engine coolants(113°C±1°C, 103kPa±3kPa, 100h) /rating for pitting, cavitation and erosion of the water pump, ASTM D 2809	10

These data are given as an indication of typical values, not exact specifications.

Industry and OEM specifications

Sinopec Environmentally Friendly Engine Coolant YF-2A meets the following industry specifications:	
ASTM	D 6210, D 3306, D 4985
BS	6580:2010
JIS	K2234
GB	29743-2013

Product Data Sheet

Accuracy of information

Data provided in this PDS is typical and subject to change as a result of continuing product research and development. The information given was correct at the time of printing. The typical values given are subject to variations in the testing procedures and the manufacturing process may also result in slight variations. Sinopec guarantees that its lubricants meet any industry and OEM specifications referred to on this data sheet.

Sinopec cannot be held responsible for any deterioration in the product due to incorrect storage or handling. Information on best practice is available from your local distributor.

Product and environmental safety

Safety precautions:

- Avoid long-term oral or skin contact and keep away from children;
- Sealed storage. Keep in a cool, ventilated environment and away from heat sources. Avoid direct sunlight;
- Do not discard liquid waste and packaging at will.

This product should not cause any health problems when used in the applications suggested and when the guidance provided in the Material Safety Data Sheet (MSDS) is followed. Please consult the MSDS for more detailed advice on handling; MSDSs are available from your local distributor. Do not use the product in applications other than those suggested.

As with all products, please take care to avoid environmental contamination when disposing of this product. Used oil should be sent for reclamation/recycling or, if not possible, must be disposed of according to relevant government/authority regulations.

The SINOPEC trademark is registered and protected.

Issued: July 2020

© Sinopec 2020

Sinopec Environmentally Friendly Engine Coolant YF-2A