

Cosmo Oil Group Environmental Technologies and Products

• Automobile Oil Products (Cosmo Oil Lubricants Co.)



Cosmo Rio Grand Road



Cosmo Rio Neo Road

Oils for gasoline engines, "Cosmo SM⁺1 Road"

Oil for diesel engines, "Shinsei"

ECO diesel, "Kaisei"

Oil for natural gas engines, "Cosmo CNG Oil"

• Oil Products for Other Uses (Cosmo Oil Lubricants Co.)



Cosmo Terra Grease UR



Cosmo Terra Fluid E

Biodegradable lubricant, "Cosmo Terra Series"

Hydraulic oil, "Cosmo Super Epoch UF46"

Metal cutting oil, "Cosmo Clean Cut Cool Series"

Lubricating oil for food and drug processing machinery, "Cosmo Underroll Series"

• Coating Agent (Cosmo Trade and Service Co.)

Heat insulating coatings, "Super Therm"

Concrete protector and strengthener, "Ashford Formula"

• Plant Facilities



Hydrocarbon vapor recovery unit



Excess sludge reduction unit



Biofloura Zero One

Hydrocarbon vapor recovery unit (Cosmo Engineering Co.)

VOC (volatile organic compound) recovery unit (Cosmo Engineering Co.)

Excess sludge reduction unit (Cosmo Engineering Co.)

Dioxin removal unit for wastewater (Cosmo Engineering Co.)

Wastewater treatment technology (Cosmo Engineering Co.)

Wastewater treatment system, "Bioflora 01" (Cosmo Eco Support Co.)

Cleaning agent, "New Safezol" (Cosmo Eco Support Co.)

• Natural Gas Fuels (Cosmo Oil Gas)

Home-use LP gas engine /
cogeneration system (Ecowill)



Liquefied Petroleum Gas

LP gas engine cogeneration system for home use, "ECOWILL⁺4th"

• Other (Cosmo Matsuyama Oil Co.)



Aromatic extraction unit

Base material for neutrino detector, "Pseudocumene"

Effective use of benzene

Environmentally conscious solvents

*1 SM:SM is the newest grade in the international engine oil standards set forth by the API (American Petroleum Institute).

*2 DPF:Abbreviation for Diesel Particulate Filter. This is a filter that eliminates soot in the exhaust gas from diesel-powered vehicles.

*3 DH-2:DH-2 is a vehicle-use mobiloil standard set forth by JASO (an association that promotes spreading of engine oil standards).

*4 ECOWILL:ECOWILL is the brand name of 3 municipal gas companies, and with the approval of Osaka Gas Company, Cosmo Oil gas uses this brand name. The product is produced by Honda Motor.

This gasoline engine oil has sustainable fuel-saving performance which enhances durability and stability, takes into consideration exhaust gas cleaning, and responds to the various needs of an automobile society.

The chlorine content in the oil has been reduced to less than one-tenth of the generally available product. This oil also increases the diesel engine's life and increases oil exchange distance.

This diesel engine oil responds to DPF*² (DH-2*³) and realizes heat resistance and wear resistance.

This oil for exclusive use with natural gas and LP gas fueled automobiles has superior heat resistance, high temperature cleaning, and is wear resistant. This oil also increases the diesel engine's life and increases oil exchange distance.

This lubricant is broken down into water and CO₂ by micro organisms and obtained the "Eco mark (Japan Environment Association)" designation. This is used for port industry equipment, construction equipment, agriculture equipment, railway vehicles, outboard motors, chainsaws, etc.

This non-zinc, high ignition point, wear resistant hydraulic oil has an electricity saving effect and can control industrial waste generation (prolongs life).

This chlorine free cutting oil can help resolve problems caused by chlorine during the waste oil processing process or cleaning process.

This lubricant has cleared the global standard for safety, "USDA (U.S. Department of Agriculture)/ NSF H-1". It has many proven uses in HACCP certification, etc. in drug/ food factories in the United States, Europe, and Japan.

This heat insulating coating agent was developed from NASA technology in the U.S. for commercial use. In addition to insulating roofs, ductwork, etc., its use is also being studied for applications related to railway vehicles, buses, and trucks.

This formula prolongs the life of concrete floors, and prevents the generation of grain dust. It is used in places such as transportation hubs, home centers, and factories.

This is an absorption/ adsorption unit for recovering hydrocarbon vapors such as gasoline. This recovery equipment which functions on our exclusive "Cosmo adsorption method" is used not only by Cosmo Oil but at petroleum terminals of other companies as well.

This VOC adsorption equipment applies hydrocarbon vapor recovery technology. The high recovery rate, high safety, and conservation of space have been highly evaluated, and it is used in places such as chemical, printing, and drug factories.

This facility can be added to already existing active sludge facilities to reduce the amount of excess sludge generation. To date, it has reduced surplus sludge that had been treated as industrial waste by 90%, thereby contributing to the reduction of waste.

This system using our own activated charcoal was developed in order to treat wastewater that contains dioxin. It contributes to the elimination of dioxin from wastewater that is generated by the final treatment location of waste, or from wastewater generated by the scrapping of incinerators.

This technology combines the high efficiency activated sludge equipment, desulfurization equipment, and dephosphorization equipment. It is used, of course, for wastewater treatment at refineries, but also for high level treatment of waste at places such as hog farms.

This system breaks down oil content and organic material in wastewater into water and CO₂ by using micro organisms. It does not require chemical drugs or filters.

This is a cleaning agent for industrial use which offers an alternative to chlorofluorocarbon or trichloroethane, and which does not contain substances that would be subject to the PRTR Law or the regulation to prevent poisoning by organic solvents.

We supply LP gas which is a green energy similar to natural gas that has little impact on the environment. In addition to developing advanced LPG automobiles, personal LPG auto stands, and LP gas co-generators for household use, we are also working to expand LPG demand by developing LP gas fuel cell systems for household use. In the future, we will develop other clean energies such as DME and LNG, and promote the stable supply of comprehensive gas energies that are environmentally conscious.

"ECOWILL", by generating electricity with clean LP gas, and by utilizing the heat generated by power generation to hot water or heating, reduces primary energy consumption by approximately 20%. It also reduces CO₂ by approximately 30%. Energy availability is 85%, over twice as efficient as prior art electricity supply systems. In Fiscal 2005, we will continue to promote the development of LP gas special agents and to focus on contributing to the preservation of the environment through our products.

Pseudocumen is used as a base material for neutrino detector at "Kam LAND", a neutrino measurement facility at which Tohoku University Team is taking place the research.

We accept from each of the refineries benzene which is separated by benzene eliminating equipment, and upgrade it to raw material for chemical products by way of aromatic extraction equipment.

As solvents that have little impact on the environment, we manufacture isohexane (aerosol, soldering flux), methyl cyclohexene (printing ink solvent for use with food packaging), and ethyl cyclohexene (stationary solvents, reactive solvents for medical/ agricultural manufacturing use), as well as non-chlorine/ low aromatic cleaning solvents and paint solvents.