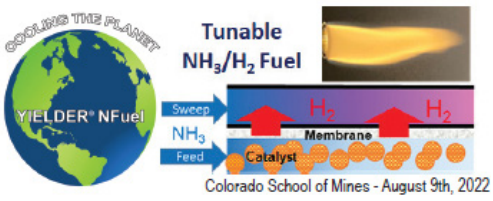
Green Play Ammonia, Product Specifications, Deliveries, Storage, Yielder NFuel, Product Specifications, Applications to Engines, Combined Heat and Process. Green Hydrogen.



Product Data Sheet
GREEN HYDROGEN, H2, GREEN ANHYDROUS AMMONIA, FC NH3
The New Era, Spec Label,Yielder NFuel Energy Zero Carbon.

Yielder ® NFuel Energy. Zero Carbon, Green Anhydrous Ammonia, FC

Guaranteed Analysis
Total British Thermal Units Per Ton NH3……15,755,727 BTU.
Total British Thermal Units Per Gallon NH3 at 60 degrees F……40,570 BTU.
Made from Wind, Solar, Water, and Air.

Yielder NFuel Energy --- Zero Carbon, Green Hydrogen. FC.

Guaranteed Analysis.
For Fuel Cells, H2 has Less than .1 ppm NH3 meeting Fuel Cell Quality.
Total British Thermal Units Per Gallon H2 at 3,000 psi……6,500 BTU.
Made from Wind, Solar, Water, Air and Zero Carbon Anhydrous Ammonia.

Yielder NFuel Energy **Zero Carbon Kilowatt Hours Electrical Recharge**

Guaranteed Analysis.
Local built EV battery charging KVA electricity is 100% sourced from Green Zero Carbon Ammonia…… 33.33 KWh per Kilogram H2.

Yielder NFuel is Zero Carbon. Why a New Era?
A steady price over 7 years, at zero carbon emission. Employment is local building Green Ammonia and Green Hydrogen at 2,000 plants.

DOT transport delivery is made from the local Green Play Plant.
Composition is 82.42 percent Nitrogen, dull. 17.58 percent Hydrogen with 1 gallon H20 added per 999 gallons of sharp NH3 to delay Hydrogen embrittlement.
Pounds of Nitrogen per gallon at 60 degrees F. 4.2436 lbs. N.
Weight Per Gallon, dull, 5.15318 lbs. at 58 to 60 degrees F.
Weight Per Cubic Foot. 38.4 lbs./cu. ft.
Specific Gravity at 60 degrees F. .617 SG.
Viscosity Centipoise. .1184 cP @ 60 degrees F.
Gallons per US Short ton. 388.1099 gallons@60 degrees F.
Mass Flow readout accuracy in all temperature and pressure ranges.
+-20 lbs. in 10,000 lbs. applied.
pH alkaline at 14.
Tank Pressure at 32 degrees F. 47.5 psi.
Tank Pressure at 60 degrees F. 92.5 psi.
Tank Pressure at 77 degrees F. 130 psi.
Tank Pressure at 100 degrees F. 197.2 psi.
Less Than 5 ppm oil.
New tanks have trace amounts of steel, and rouge. It is found in100 mesh filters and magnetic strainers.

How To Use Yielder NFuel
Non-Flammable, Inhalation hazard.
Authorized Trained Personnel and Hazmat driver's license required to handle and transport.
Goggles and Gloves required at all transfers and field use.
DOT Number 1005.

Can be controlled and mixed with air at 16% to 23% mix for burning.
Can be used to control plant and engine emissions in SCR, selective catalytic reaction.
Can be used for reciprocating engine power 2024.
Pressure Vessel delivery to pressure vessel storage, ASME Tanks required under the rule of 1544 and rule 3088.
ASME Pressure Vessel, 70,000 psi Steel Tanks are rated at 250 psi storage, tender and application.
ASME Interstate Transport Rated Steel Tanks are rated at 265 PSI for long distance transfer between states.
Hoses are designed for 350 psi operation pressure, Burst Pressure 1,750 psi.
Yielder® NFuel Energy. Zero Carbon BTU's from the wind and solar.
Binary Fueling NH3 and H2.
Can be used as a hydrogen source for fueling hydrogen engines.
Can be used as an Anhydrous Ammonia source for fueling ammonia engines.
Can be used for Building Heat, Grain Dryers, Cement Kilns, Asphalt Plants, Rotary Kilns,

Ethanol and Biodiesel plants as a zero carbon heat source.
Kilograms H2 per Ton NH3 delivered. 160 Kilograms H2 /Short Ton.
British Thermal Units (BTU) at 60 degrees F per ton of NH3: 15,755,727 BTU.
Gallons NH3 per Ton at 60 degrees F: 388.3495 gallons.
Pounds of H2 in a green zero carbon ton of NH3: 352 pounds of H2.
Green Ammonia Zero Carbon BTU per gallon of NH3 at 60 degrees F: 40,570 BTU.
Standard ASME 250 psi rated tanks. Meets all current codes at the state fire marshals office.
Code Welders note: Infrastructure, Insurance and tank repairs are covered by the National Board of Review and Hartford Steam and Boiler Insurance Co.
Code Welders note: Lowest storage, transportation and plant construction cost as zero carbon
fueling with either NH3 or H2.
Crackers are used to deliver hydrogen to the hydrogen engines built by major firms in Japan, USA and Europe.
Crackers are not required with Ammonia fueled engines built in Japan, USA and Europe.
Hydrogen Engine Launch Caterpillar.
May 31, 2022 Cat G3516H Demonstration project CHP 1540 kVA
Revised 06/30/2022 - 2022 Projects/Product Data Sheet

Special Note.

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At one ton Fossil ammonia built from Steam Methane Reformation uses 33,575,000 million BTU of natural gas, $40 to $80 of coal fired electricity and 1.7 tons of CO2 lost at the plant. The oilfield is other part of the factoid of another 33% loss.

The actual CO2 emission at fossil natural gas ammonia is 2.2 tons. The calculation includes the mining and exploration loss of Methane, CO2 combined. Coal Methane based Ammonia with Steam Methane Reformation is 4.4 tons of CO2 without the mining loss of coal.

China has 83 fossil ammonia plants of which 64 are coal fired. They now produce 40% of the all the ammonia in the world.

Nitrous Oxide loss comes from agricultural tillage application of all nitrogen sources. Mostly second and third nitrogen products such as Urea, UAN and URAN) produce 62.5% of the nitrous oxide emission that comes from agriculture.

*Fungible Certificate