

CATALYST & ADSORBENT

Your expert for catalyst & purification!



About us

Established in 1992, Chempack as a proficient manufacturer and solution provider of catalysts, adsorbent, and support balls, tower packing, has around 30 years industrial experience of material technologies, engineering design, and technical support.

It's worth mentioning that we have more than 200 innovative products for oil refining and petrochemical like Catalyst, Purification, Grading, Catalyst Bed Support, and more.

With the rapid development of fossil fuel in China, our specialized R&D team and expert engineers have united the state-of-the-art chemical technologies and related developed catalysts and adsorbents in the industries of oil refinery, petrochemical, natural gas, coal chemical, environmental and more.



Certificate



ISO 14001: 2015



ISO 9001:2015



OHSAS 18001:2007

QUALITY ASSURENCE



WHO ARE USING



DEHYDRATION ADSORBENT

MOLECULAR SEIVES
ACTIVATED ALUMINA
ACTIVATED CARBON
SILICA GEL

SPECIALTY ADSORBENT

SPECIALTY ZEOLITE
SPECIALTY ALUMINA
SPECIALTY CARBON
SPECIALTY SILICA
SPECIALTY CLAY

BED TOPPING & GRADING

INERT TOPPING MEDIA
INERT GRADING MEDIA
ALUMINA GRADING DISK
ACTIVE GRADING MEDIA
ARSINE TRAP
SILICA TRAP

CATALYST BED SUPPORT

INERT CERAMIC BALL
INERT ALUMINA BALL
TABULAR ALUMINA
ACTIVE BED SUPPORT

PURIFICATION

SULFUR REMOVAL
CHLORIDE & HALOGEN REMOVAL
ARSINE & PHOSPHINE REMOVAL
MERCURY REMOVAL
REDUCING GAS REMOVAL
OXYGEN REMOVAL
ETHYLENE & PROPYLENE PURIFICATION
PDH/PROPANE FEED GUARD

CATALYST**REFINERY**

FLUID CATALYTIC CRACKING
CATALYTIC REFORMING
C5/C6 ISOMERIZATION
HYDROTREATING
SULFUR RECOVERY

PETROCHEMICAL

MTBE/TAME SYNTHESIS
ETHYLENE OXYCHLORINATION
POLYMERIZATION

COAL CHEMICAL

FISCHER-TROPSCH

OTHER BASIC CHEMICAL

METHANOL SYNTHESIS

FORMOX & DME

SULFURIC ACID

AMMONIA SYNTHESIS

NOBLE METAL CATALYST

NOBLE METAL CATALYST SUPPORTED ON CARBON

SYNGAS - H₂ PLANT**PURIFICATION & CATALYST**

HYDRODESULFURIZATION

DESULFURIZATION

STEAM REFORMING

CO SHIFT CATALYST

METHANATION

PSA H₂ PURIFICATION**ZEOLITE**

ZSM ZEOLITE

NaY ZEOLITE

BETA ZEOLITE

BIO-OIL & EDDIBLE OIL

ACTIVATED CLAY

SILICA

EMISSION CONTROL

AMMONIA DECOMPOSITION

VOC TREATMENT

NO_x TREATMENT

DEHYDRATION ADSORBENT				
Product Code	Materials	Application	Size, mm/mesh	Shape
DehySorb Z3S	K+	Drying natural gas, ethanol and reactive monomers	1.6-2.5, 3-5	Sphere
DehySorb Z3P	K+	Drying natural gas, ethanol and reactive monomers	1.6, 3, 2	Pellet
DehySorb Z4S	Na+	Used as a general purpose drying agent in polar & non-polar feeds	1.6-2.5, 3-5	Sphere
DehySorb Z4P	Na+	Used as a general purpose drying agent in polar & non-polar feeds	1.6, 3, 2	Pellet
DehySorb Z5S	Ca+	Removing CO ₂ , CO, H ₂ S and other weakly polar molecules, PSA	1.6-2.5, 3-5	Sphere
DehySorb Z5P	Ca+	Removing CO ₂ , CO, H ₂ S and other weakly polar molecules, PSA	1.6, 3, 2	Pellet
DehySorb Z10S	Na+	Air plant feed purification, H ₂ O, CO ₂ , H ₂ S, mercaptan removal	1.6-2.5, 3-5	Sphere
DehySorb Z10P	Na+	Air plant feed purification, H ₂ O, CO ₂ , H ₂ S, mercaptan removal	1.6, 3, 2	Pellet
DehySorb AG1	Alumina	Drying air, gas, liquid feed	1.6-2.8, 3-4, 6-7, 8-10, 12-14	Sphere
DehySorb AG2	Alumina	Dust free desiccant for air, gas, liquid feed	1.6-2.8, 3-4, 6-7, 8-10, 12-14	Sphere
DehySorb AC1	Carbon	Moisture for air, gas, liquid feed	1.5-3.0, 3-4, 4-5	Pellet
DehySorb SG	Silica gel	Silica gel for drying	2.5-5.0, 1.0-3.0	Sphere
DehySorb R	Si/Al gel	Silica alumina gel for drying	2.0-5.0, 1.5-3.4, 0.5-1.5	Sphere
DehySorb WS	Si/Al gel	Silica alumina gel for drying	2.0-5.0, 1.5-3.4, 0.5-1.5	Sphere

SPECIALTY ADSORBENT				
Product Code	Materials	Application	Size, mm/mesh	Shape
PuriSorb OX100	Zeolite	Mecial oxygen purification by VPSA process	0.4-0.8, 0.8-1.3, 1.6-2.5	Sphere
PuriSorb OX500	Zeolite	Mecial oxygen purification by PSA process	0.4-0.8, 1.6-2.5	Sphere
PuriSorb Z3S	Zeolite	Ethylene and propylene dehydration	1.6-2.5, 2.5-5.0	Sphere
PuriSorb Z3P	Zeolite	Ethylene and propylene dehydration	1.6, 3, 2	Pellet
PuriSorb Z5S	Zeolite	Removal of H ₂ O, CO ₂ , H ₂ S, CO, N ₂ , mercaptans from natural gas & other HC	1.6-2.5, 2.5-5.0	Sphere
PuriSorb Z10S	Zeolite	Removal of moisture, polar oxygenates and sulfur compounds from gas & liquid HC	1.6-2.5, 2.5-5.0	Sphere
PuriSorb AG7S	Alumina	Standard hydrogen peroxide grade activated alumina adsorbents	1.2-2.8, 3-5, 4-6, 5-7	Sphere
PuriSorb AG70S	Alumina	High Performance hydrogen peroxide grade activated alumina adsorbents	1.2-2.8, 3-5, 4-6, 5-7	Sphere
PuriSorb AG70G	Alumina	High Performance hydrogen peroxide grade activated alumina adsorbents	8x14, 14x28	Granule
PuriSorb PE	Alumina	HDPE purification processing	1.2-2.8, 2.5-4	Sphere
PuriSorb AA20	Alumina	Remove impurities from styrene (such as benzoic acid, phenol, Benzaldehyde, etc)	1.4-2.8, 2.0-4.0	Sphere
PuriSorb AA30	Alumina	Remove impurities from styrene (such as benzoic acid, phenol, Benzaldehyde, etc)	1.4-2.8, 2.0-4.0	Sphere
PuriSorb SM-2	Alumina	TBC removal from monomer, PS, styrene	1.2-2.8, 2.5-4	Sphere
PuriSorb DF200	Alumina	Removing free HF and organic fluorides	1.2-2.8, 3-4	Sphere
PuriSorb DFX200	Alumina	Removing free HF and organic fluorides, higher HF capacity	1.2-2.8, 3-4	Sphere
PuriSorb SD	Proprietary	Regenerative adsorbent for removal of acid gases & water (H ₂ O, H ₂ S, COS, CS ₂ , CO ₂)	5x8, 7x12	Sphere
PuriSorb SA	Proprietary	Regenerative adsorbent for removal of acid gases (H ₂ S, COS, CS ₂ , CO ₂)	1.2-2.8, 3-4	Sphere
PuriSorb AX600	Proprietary	Regenerative adsorbent for removal of polar compounds & oxygenated hydrocarbon	1.2-2.8, 3-4	Sphere
PuriSorb AX700	Proprietary	Regenerative adsorbent for removal of polar compounds & oxygenated hydrocarbon	1.2-2.8, 3-4	Sphere
PuriSorb DO	Alumina	DME Removal	1.2-2.8, 3-4	Sphere
PuriSorb DOX	Proprietary	DME Removal	1.5, 3, 4	Extrudate
PuriSorb AC5	Carbon	Activated carbon for PSA to remove the impurities CO ₂ , CO, N ₂ , hydrocarbon	1.5, 3, 4	Extrudate
PuriSorb AC6	Carbon	Activated carbon for odor removal	1.5, 3, 4	Extrudate
PuriSorb AC15	Carbon	Activated carbon for solvent recovery	1.5, 3, 4	Extrudate
PuriSorb CMR8	Carbon	Activated carbon for mercury(Hg) removal	1.5, 3, 4	Extrudate
PuriSorb CSR10G	CuO/AC	Impregnated activated carbon for sulfur removal	12x30, 4x10	Granule
PuriSorb CSR10E	CuO/AC	Impregnated activated carbon for sulfur removal	1.5, 3	Extrudate
PuriSorb CMS	CMS	Carbon molecular sieves for nitrogen generator	1.1-2.0	Extrudate
PuriSorb HC	Si/Al gel	Silica alumina gel for Hydrocarbon Removal from Natural Gas	2.0-5.0, 1.0-2.3, 0.5-1.5	Sphere
PuriSorb ACF25	Acti.Clay	Nitrogen compounds and olefins reduction from aromatics via chemisorption &	18-180 µm	Granule
PuriSorb ACF120	Acti.Clay	Polar contaminants removal & color reduction via chemisorption & catalysis	18-180 µm	Granule
PuriSorb ACF124	Acti.Clay	Olefins removal from aromatics	10x60	Granule

BED TOPPING & GRADING				
Product Code	Materials	Application	Size, mm/mesh	Shape
DuraTop ICT-11	Ceramic	7 hole domed tablet, high void inert topping media	30, 20, 16	Tablet
DuraTop ICT-22	Ceramic	5 hole medal, high void inert topping media for flow distribution	19, 16	Medal
DuraTop ICT-55	Ceramic	High void hold down material improved for flow distribution	25, 19, 13, 9	Medal
DuraTop ICT-66	Ceramic	Inert topping for pressure drop relief&distribution optimization	10x10	Fluted Ring
DuraTop ICT-99	Ceramic	Inert grading for pressure drop relief&distribution optimization	9, 6, 4.8, 3.2	Hollow Ring
DuraTop GCR-99	Ceramic	Inert grading for pressure drop relief&distribution optimization	3.2, 1.6	Trilobe
DuraTop GAT-99	Alumina	Inert grading for pressure drop relief&distribution optimization	3.2, 1.6	Trilobe
DuraTop GA	Alumina	Inert topping/support for pressure drop relief&distribution optimization	80x80, 38x38, 16x16	Geared Ring
PuriTrap ADM	Alumina	Mini and ultra minis filtration disks for distribution optimization	25, 19, 13, 9, 6, 3	Honeycomb
PuriTrap CFS	Alumina	Ceramic foam disks to filter fouling particles, 10/30/50/65/80/100 PPI	51x32, 44x19, 38x13	Foam Disk
PuriTrap MFR-77	Alumina	Macro porous inert topping media to filter fouling particles	10x10	Fluted Ring
PuriTrap MHR-80	Alumina	Macro porous inert topping media to filter fouling particles	9.0	Hollow Ring
PuriTrap MHR-81	NiMo	Macro porous inert topping media to filter fouling particles	9.0	Hollow Ring
PuriTrap NM	Alumina	Hollow ring grading media to reduce the rate of fouling	9.0, 6.4, 4.8, 3.2	Hollow Ring
AcTrap ABS-88	NiMo	NiMo impregnated active bed support media	13, 9, 6, 3	Sphere
AcTrap NR	NiMo	NiMo impregnated active grading media to reduce the rate of fouling	9.0, 6.4, 4.8, 3.2	Hollow Ring
AcTrap As-48	NiMo	Very high surface NiMo ring for arsine trapping of hydrotreators	3.2, 2.5, 1.6	Trilobe
AcTrap As-48	NiMo	Very high surface NiMo ring for arsine trapping of hydrotreators	3.2, 4.8, 6.4	Hollow Ring
AcTrap Si-48	Alumina	Very high surface NiMo ring for silica trapping of hydrotreators	3.2, 2.5, 1.6	Trilobe
AcTrap Si-88	NiMo	Very high surface NiMo trilobe for silica trapping of hydrotreators	3.2, 2.5, 1.6	Trilobe

CATALYST BED SUPPORT - INERT BALLS				
INERT CERAMIC BALL				
Product Code	Materials	Application	Size, mm/mesh	Shape
Ceramax ICB-17	Ceramic	Catalyst bed support, Al ₂ O ₃ : 15 - 19wt%, Al ₂ O ₃ +SiO ₂ : 92wt%	1.6, 3, 6, 9, 13, 16, 19, 25, 38, 50	Sphere
Ceramax ICB-23	Ceramic	Catalyst bed support, Al ₂ O ₃ : 19 - 30wt%, Al ₂ O ₃ +SiO ₂ : 95wt%	1.6, 3, 6, 9, 13, 16, 19, 25, 38, 50	Sphere
Ceramax ICB-40	Ceramic	Catalyst bed support, Al ₂ O ₃ : 35 - 45wt%, Al ₂ O ₃ +SiO ₂ : 95wt%	1.6, 3, 6, 9, 13, 16, 19, 25, 38, 50	Sphere
INERT ALUMINA BALL				
Alumax ASB-90	Alumina	Catalyst bed support, Al ₂ O ₃ : 90.0wt%, high operation temperature	1.6, 3, 6, 9, 13, 19, 25, 50, 76	Sphere
Alumax ASB-99	Alumina	Catalyst bed support, Al ₂ O ₃ : 99.0wt%, high operation temperature	1.6, 3, 6, 9, 13, 19, 25, 50, 76	Sphere
Alumax ASB-993	Alumina	Catalyst bed support, Al ₂ O ₃ : 99.3wt%, ultra low silica - SiO ₂	1.6, 3, 6, 9, 13, 19, 25, 50, 76	Sphere
Alumax ASB-995	Alumina	Catalyst bed support, Al ₂ O ₃ : 99.5wt%, ultra low silica - SiO ₂	1.6, 3, 6, 9, 13, 19, 25, 50, 76	Sphere
TABULAR ALUMINA GRANULES				
Alumax ASG-99	Alumina	Catalyst bed support, Al ₂ O ₃ : 99.0wt%, high operation temperature	3x6, 4x8, 8x14	Granule
Alumax ASG-993	Alumina	Catalyst bed support, Al ₂ O ₃ : 99.3wt%, ultra low silica - SiO ₂	3x6, 4x8, 8x14	Granule
Alumax ASG-995	Alumina	Catalyst bed support, Al ₂ O ₃ : 99.5wt%, ultra low silica - SiO ₂	3x6, 4x8, 8x14	Granule
Alumax ASG-997	Alumina	Catalyst bed support, Al ₂ O ₃ : 99.7wt%, ultra low silica - SiO ₂	3x6, 4x8, 8x14	Granule

ACTIVE BED SUPPORT				
Actrap AA-S1	Alumina	Active catalyst bed support, higher conversion rate for SRU	6, 9, 13, 19, 25	Sphere
PURIFICATION				
SULFUR REMOVAL, SULFUR GUARD				
Product Code	Materials	Application	Size, mm/mesh	Shape
PurCat HD-10	Alumina	COS Hydrolysis, convert COS, CS ₂ to H ₂ S, 20 - 240 deg C	3-5	Sphere
PuriSorb T-20	ZnO/Silica	H ₂ S & COS removal for gas & liquid at ambient temp - 220 deg C	1.6, 2.5, 3.2	Extrudate
PuriSorb T-30S	ZnO/Zeolite	H ₂ S & COS removal for gas & liquid at ambient temp - 220 deg C	1.6-2.5, 3-5	Sphere
PuriSorb T-30E	ZnO/Zeolite	H ₂ S & COS removal for gas & liquid at ambient temp - 220 deg C	1.6, 3.2	Extrudate
PuriSorb T-40	ZnO/Mn	H ₂ S & COS removal for gas & liquid at ambient temp - 220 deg C	4	Extrudate
PuriSorb T-90S	ZnO	H ₂ S & COS removal at high temp, 300 - 440 deg C	3-5	Sphere
PuriSorb T-90E	ZnO	H ₂ S & COS removal at high temp, 300 - 440 deg C	4	Extrudate
PuriSorb T-99S	ZnO	H ₂ S & COS removal at high temp, 300 - 440 deg C	4	Extrudate
PuriSorb T-99E	ZnO	H ₂ S & COS removal at high temp, 300 - 440 deg C	4	Extrudate
PuriSorb T-FE-1	Fe ₂ O ₃	H ₂ S removal from natural gas, CO ₂ gas at ambient temp	6	Extrudate
PuriSorb T-FE-10	Fe ₂ O ₃	H ₂ S removal from natural gas, CO ₂ gas at ambient temp	5, 7, 13	Extrudate
PuriSorb SS-10G	Fe(OH) ₃	H ₂ S removal from natural gas, CO ₂ gas at ambient temp	3x6, 8x30	Granular
PuriSorb SS-10E	Fe(OH) ₃	H ₂ S removal from natural gas, CO ₂ gas at ambient temp	5, 7, 13	Extrudate
PuriSorb SS-20G	Fe(OH) ₃	H ₂ S removal from natural gas, CO ₂ gas at ambient temp	3x6, 8x30	Granular
PuriSorb SS-20E	Fe(OH) ₃	H ₂ S removal from natural gas, CO ₂ gas at ambient temp	5, 7, 13	Extrudate
PuriSorb MS-75	MnO	H ₂ S, RSH, COS removal at 280-400 deg C	6x20	Granular
PuriSorb MS-85	MnO	H ₂ S, RSH, COS removal at 280-400 deg C	3, 4	Extrudate
PuriSorb ASR-20	Metal oxide	Sulfur, arsine, phosphine removal at	2-4, 3-5	Sphere
PuriSorb ASR-130	Metal oxide	Sulfur, arsine, phosphine removal at	2-4, 3-5	Sphere
PuriSorb ASR-135	Metal oxide	Sulfur, arsine, phosphine removal at	1.6, 3.2	Extrudate
PuriSorb CSR10E	CuO/AC	Bulk sulfur species removal like H ₂ S, ambient - 80 deg C	3	Extrudate
PuriSorb NS-75	NiO	Sulfurs & thiophenes in heavy HC at temp < 200 deg C	1.6, 2.5, 4	Extrudate
PuriSorb NS-78	NiO	Sulfurs & thiophenes in heavy HC at temp < 200 deg C	1.6, 2.5, 4	Extrudate
PuriSorb NCS	NiO, CuO	Sulfurs & thiophenes in heavy HC at temp < 200 deg C	1.6, 2.5, 4	Extrudate
PuriSorb CS-12E	CuO, ZnO	H ₂ S, mercaptan, organic sulphides from liquid phase, 80 - 200 deg C	1.6, 2.0, 2.5, 3.2	Extrudate
PuriSorb CS-12T	CuO, ZnO	H ₂ S, mercaptan, organic sulphides from liquid phase, 80 - 200 deg C	5x3	Tablet
PuriSorb CS-15T	CuO, ZnO	H ₂ S, mercaptan, organic sulphides from liquid phase, 80 - 200 deg C	5x3	Tablet
PuriSorb CS-81	CuO, ZnO	H ₂ S, mercaptan, organic sulphides from liquid phase, 80 - 200 deg C	1.8, 4.0	Sphere
CHLORIDE & HALOGEN REMOVAL, CHLORIDE GUARD				
Product Code	Materials	Application	Size, mm/mesh	Shape
PuriSorb CR-Z10	Zeolite	Organic chloride and HCl removal from various vapour and liquid streams	1.6-2.5, 2.5-5.0	Sphere
PuriSorb CR-Z30	Metal oxide	Very high chloride capacity, HCl removal from various vapour and liquid streams	3.0-4.0	Extrudate
PuriSorb CR-C30	Metal oxide	Organic chloride and HCl removal from various vapour and liquid streams	1.6-1.8, 2.5-2.8	Extrudate
PuriSorb CCR 200	Metal oxide	Very high HCl capacity, ambient - 200 deg C	4	Extrudate
PuriSorb CCR 300	CaO	Very high HCl capacity, ambient - 400 deg C	4	Extrudate
PuriSorb ACL 805	Alumina	Standard HCl adsorbent, ambient - 380 deg C	1.4-2.8, 3-5	Sphere
PuriSorb ACL 810	Alumina	Standard HCl adsorbent, ambient - 380 deg C	1.4-2.8, 3-5	Sphere
PuriSorb ACL 860	Alumina	High HCl capacity, ambient - 380 deg C	1.4-2.8, 3-5	Sphere
PuriSorb OCR 250	CuO	Very stable halogen adsorbent	2.5	Extrudate
PuriSorb OCR 400	CuO	RCI removal from liquid HC feeds, ambient - 200 deg C	4	Extrudate
PuriSorb CCR-40E	CuO, ZnO	RCI removal from liquid HC feeds, ambient - 200 deg C	4.0/2.5/1.6	Extrudate
PuriSorb NCR-50	NiO	RCI removal from liquid HC feeds, ambient - 200 deg C	1.6	Extrudate
ARSINE & PHOSPHINE REMOVAL, ARSINE GUARD				
Product Code	Materials	Application	Size, mm/mesh	Shape
PuriSorb ASR-12E	CuO, ZnO	Sulfur, arsine and phosphine removal from HC, ambient - 200 deg C	1.6, 2.0, 2.5, 3.2	Extrudate
PuriSorb ASR-12T	CuO, ZnO	Sulfur, arsine and phosphine removal from HC, ambient - 200 deg C	5x3, 5x5	Tablet
PuriSorb ASR-22E	CuO, ZnO	Removal of traces of As, P, S, CO and O ₂ from gas & HC	3	Extrudate
PuriSorb ASR-22T	CuO, ZnO	Removal of traces of As, P, S, CO and O ₂ from gas & HC	5x3	Tablet
PuriSorb LAS-20	PbO/Al ₂ O ₃	Arsine, sulfur (H ₂ S, COS & light mercaptans) & mercury from various vapour	2-4, 3-5	Sphere
MERCURY REMOVAL				
Product Code	Materials	Application	Size, mm/mesh	Shape
PuriSorb AMR-8	CuO/Al ₂ O ₃	High mercury capacity for natural gas, coal gas at ambient temp	1.6-2.5, 2-4, 3-5	Sphere
PuriSorb AMR-9	CuO/Al ₂ O ₃	High mercury capacity for natural gas, coal gas at ambient temp	3-5	Sphere
PuriSorb MR-10	CuO	High mercury capacity for natural gas, coal gas at ambient temp	4	Extrudate
PuriSorb CMR-8	S/AC	Traces of Hg from gas streams at ambient temp	5	Extrudate
PuriSorb AG-3	Ag/Zeolite	Traces of Hg from gas streams at ambient temp	1.6	Extrudate
PuriSorb AG-4	Ag/Zeolite	Traces of Hg from gas streams at ambient temp	1.6	Extrudate
REDUCING GAS REMOVAL, H ₂ , CO				
Product Code	Materials	Application	Size, mm/mesh	Shape
PuriSorb CM	CuO	H ₂ , CO removal from gas at ambient	1.6-2.8, 2-4, 3-5	Sphere
PuriSorb DR-03	Pd/Al ₂ O ₃	Removal of H ₂ /CO from nitrogen, industrial gas at ambient - 500 deg C	1.6-2.8, 2-4, 3-5	Sphere
PuriSorb DR-02	Pd/Al ₂ O ₃	Removal of H ₂ /CO from nitrogen, industrial gas at ambient - 500 deg C	1.6, 2.0, 2.5, 3.2	Trilobe
PuriSorb RR-12E	CuO, ZnO	Removal of H ₂ /CO from nitrogen, industrial gas at ambient - 250 deg C	1.6, 2.0, 2.5, 3.2	Extrudate
PuriSorb RR-12T	CuO, ZnO	Removal of H ₂ /CO from nitrogen, industrial gas at ambient - 250 deg C	5x3	Tablet
OXYGEN REMOVAL, O ₂				
Product Code	Materials	Application	Size, mm/mesh	Shape
PuriSorb DO-03	Pd/Al ₂ O ₃	Removal of O ₂ from nitrogen, hydrogen at ambient - 500 deg C	1.6-2.8, 2-4, 3-5	Sphere
PuriSorb DO-02	Pd/Al ₂ O ₃	Removal of O ₂ from nitrogen, hydrogen at ambient - 500 deg C	1.6, 2.0, 2.5, 3.2	Trilobe
PuriSorb DO-20	CuO/Al ₂ O ₃	Removal of O ₂ from ethylene, nitrogen, natural gas, and propylene	7x14, 5x8	Sphere
PuriSorb DO-12E	CuO, ZnO	Removal of traces of As, P, S, CO and O ₂ from gas & HC	1.6, 2.0, 2.5, 3.2	Extrudate
PuriSorb DO-12T	CuO, ZnO	Removal of traces of As, P, S, CO and O ₂ from gas & HC	5x3	Tablet
ETHYLENE, PROPYLENE, COS, CO ₂ , AS, SULFUR				
Product Code	Materials	Application	Size, mm/mesh	Shape
PuriCat COS	Alumina	Promoted alumina for COS hydrolysis from light HC	1.6-2.8, 2-4, 3-5	Sphere
PuriSorb COS	Alumina	Promoted alumina for trace CO ₂ removal from light HC	1.6-2.8, 2-4, 3-5	Sphere
PuriSorb CS-12E	CuO, ZnO	Sulfur, arsine and phosphine removal from HC, ambient - 200 deg C	1.6, 2.5, 4	Extrudate
PuriSorb CS-12T	CuO, ZnO	Sulfur, arsine and phosphine removal from HC, ambient - 200 deg C	5x3	Tablet
PuriSorb CS-16E	CuO, ZnO	Removal of traces of As, P, S, CO and O ₂ from gas & HC	1.6, 2.5, 4	Extrudate
PuriSorb CS-16T	CuO, ZnO	Removal of traces of As, P, S, CO and O ₂ from gas & HC	5x3	Tablet
PuriCat 205	Pd/Al ₂ O ₃	Removal of acetylene by selective hydrogenation from ethylene or other process gas	2-4, 3-5	Sphere
PDH/PROPANE FEED GUARD				
Product Code	Materials	Application	Size, mm/mesh	Shape
PuriSorb ACL810	Alumina	Chloride guard	1.4-2.8, 3-5	Sphere
PuriSorb SD-06	Alumina	Regenerative adsorbent fo removal of acid gases & water (H ₂ O, H ₂ S, COS, CS ₂ , CO ₂)	5x8	Sphere
PuriSorb SD-05	Alumina	Regenerative adsorbent fo removal of acid gases & water (H ₂ O, H ₂ S, COS, CS ₂ , CO ₂)	7x12	Sphere
PuriSorb ASR	Metal oxide	Arsine, phosphine guard	2-4	Sphere
PuriSorb AMR-8S	CuO/Al ₂ O ₃	Mercury guard	1.4-2.8, 2.5-5.0	Sphere
DehySorb Z3P	K+	Feed Drying	1.6, 3.2	Pellet

HyKat RS101	Resin	Feed guard bed, NH3 removal	0.3-1.25	Bead
PuriSorb SA	Alumina	COS/CO2 Propylene Treater	1.4-2.8, 3-5	Sphere

CATALYSTS

REFINERY

FLUID CATALYTIC CRAKING - FCC CATALYST & ADDITIVES

Product Code	Materials	Application	Size, mm/mesh	Shape
HyKat SCC-MBC	Re/Zelite	Maximm bottoms upgrading for VGO to low/medium residue feeds	-	Microspheres
HyKat SCC-UMR	Re/Zelite	Ultra heavy and Maximum metals resistance residue cracking	-	Microspheres
HyKat SCC-MGC	Re/Zelite	Maximum gasoline and conversion	-	Microspheres
HyKat SCC-MPC	Re/Zelite	Maximum propylene and conversion	-	Microspheres
HyKat SCC-MAV	Re/Zelite	Moderate activity for VGO feed	-	Microspheres
HyKat SCC-GOO	Re/Zelite	Gasoline octane optimization	-	Microspheres
HyKat SCC-MCD	Re/Zelite	Maximum diesel and conversion	-	Microspheres
HyKat SCC-MLO	Re/Zelite	Maximum light olefin	-	Microspheres
HyKat SCA-MPO	Zeolite	Maximum propylene	-	Microspheres
HyKat SCA-MPB	Zeolite	Propylene and butylene optimization	-	Microspheres
HyKat SCA-MGO	Zeolite	FCC additive for gasoline octane optimization	-	Microspheres
HyKat SCA-ICS	Zeolite	FCC additive with excellent coke selectivity	-	Microspheres
HyKat SCA-DBC	Zeolite	FCC additive for deep bottom cracking	-	Microspheres
HyKat SCA-SOx	Zeolite	FCC additive for flue gas SOx solution	-	Microspheres
HyKat SCA-NOx	Zeolite	FCC additive for flue gas NOx solution	-	Microspheres
HyKat SCA-GSR	Zeolite	FCC additive for gasoline sulfur reduction	-	Microspheres
HyKat SCA-CCP	Pt/AI2O3	FCC additive for CO combustion promoter	-	Microspheres

CATALYTIC REFORMING - CONTINUOUS & SEMI REGENERATIVE REFORMING

Product Code	Materials	Application	Size, mm/mesh	Shape
HyKat CCR-310	Pt/Sn/AI2O3	CCR to produce aromatics and hydrogen or high-octane reformat and hydrogen	1.6/1.8	Extrudate
HyKat CCR-330	Pt/Sn/AI2O3	CCR to produce aromatics and hydrogen or high-octane reformat and hydrogen	1.8	Extrudate
HyKat AR-C	Pt/Re	High selective, activity, stability for higher octane number gasoline	1.8	Extrudate
HyKat AR-D	Pt/Re	High selective, activity, stability for higher octane number gasoline	1.8	Extrudate

ISOMERIZATION - C5/C6

Product Code	Materials	Application	Size, mm/mesh	Shape
HyKat ISO-100	Pt	C5/C6 normal paraffin isomerization, higher activity, longer lifetime	2	Extrudate

HYDROTREATING - NAPHTHA, DIESEL, GAOLINE, VGO, LUBE OIL HYDROTREATING CATALYST

Product Code	Materials	Application	Size, mm/mesh	Shape
HyKat HT-851	NiMo	Optimized to improve sulfur and nitrogen removal, better HDS&HDN	1.3/1.6/2.5	Trilobe
HyKat HT-860	NiMo	Optimized to improve sulfur and nitrogen removal, better HDS&HDN	1.3/1.6/2.5	Trilobe
HyKat HT-750	CoMo	Optimized to improve sulfur and nitrogen removal, better HDS&HDN	1.3/1.6/2.5	Trilobe
HyKat HT-775	CoMo	Optimized to improve sulfur and nitrogen removal, better HDS&HDN	1.3/1.6/2.5	Trilobe
HyKat HT-740	CoMo	Optimized to improve sulfur and nitrogen removal, better HDS&HDN	1.3/1.6/2.5	Trilobe
HyKat HT-780	CoMo	Optimized to improve sulfur and nitrogen removal, better HDS&HDN	1.3/1.6/2.5	Trilobe
HyKat HDO-G15	NiMo	Optimized to improve sulfur and nitrogen removal, better HDS&HDN	1.3/1.6/2.5	Trilobe
HyKat HDO-C20	CoMo	Optimized to improve sulfur and nitrogen removal, better HDS&HDN	1.3/1.6/2.5	Trilobe
HyKat HDO-N30	NiMo	Optimized to improve sulfur and nitrogen removal, better HDS&HDN	1.3/1.6/2.5	Trilobe

SULFUR RECOVERY - CLAUS CATALYST, TAIL GAS TREATMENT CATALYST

Product Code	Materials	Application	Size, mm/mesh	Shape
PuriCat PSR-1	AI2O3	Alumina based Claus catalyst, large surface area, large pore volume	3-5, 4-6	Sphere
PuriCat PSR-21	TiO2/AI2O3	Promoted alumina Claus catalyst, improved COS/CS2 hydrolysis	3-5, 4-6	Sphere
PuriCat PSR-31E	TiO2	Titania based Claus catalyst, very high COS/CS2 hydrolysis rate	3-4	Extrudate
PuriCat PSR-31T	TiO2	Titania based Claus catalyst, very high COS/CS2 hydrolysis rate	3-4	Trilobe
PuriCat PSR-41	Fe/AI2O3	Promoted alumina catalyst, works as oxygen scavenger	3-5, 4-6	Sphere
PuriCat PSR-51S	CoMo	Tail gas treatment, maximize the total sulfur conversion to 99.5%	2-4, 4-6	Sphere
PuriCat PSR-51T	CoMo	Tail gas treatment, maximize the total sulfur conversion to 99.5%	1.6, 2.5, 3.2	Trilobe
PuriCat PSR-51R	CoMo	Low Pressure Drop, Tail gas treatment, maximize the total sulfur conversion to 99.5%	4.8	Hollow Ring
PuriCat PSR-61S	CoMo	Lower temperature tail gas treatment, higher sulfur conversion rate	2-4, 4-6	Sphere
PuriCat PSR-61T	CoMo	Lower temperature tail gas treatment, higher sulfur conversion rate	1.6, 2.5, 3.2	Trilobe
PuriCat PSR-61R	CoMo	Low Pressure Drop, Lower temperature tail gas treatment, higher sulfur conversion	4.8	Trilobe
SMAX100	Proprietary	Selective oxidation of hydrogen sulfur to element sulfur	2.5/3.2	Extrudate
SMAXB100	Proprietary	Reduction of SO2 to element sulfur	3-5	Sphere

PETROCHEMICALS

MTBE/TAME SYNTHESIS

Product Code	Materials	Application	Size, mm/mesh	Shape
HyKat RS-101	Resin	Organic reactions like alkylation, esterification, etherification, condensation hydrolysis	0.3-1.25	Bead

ETHYLENE OXYCHLORINATION

Product Code	Materials	Application	Size, mm/mesh	Shape
HyKat EO-105	Cu	Fluid bed ethylene oxychlorination process, low byproducts	-	Microspheres
HyKat EO-115	Cu	Fluid bed ethylene oxychlorination process, low byproducts	-	Microspheres

POLYMERIZATION - SOLID PHOSPHORIC ACID CATALYST

Product Code	Materials	Application	Size, mm/mesh	Shape
HyKat AC-102	Acid	The new generation of solid phosphoric acid catalyst	5	Pellet

COAL CHEMICALS

FISCHER-TROPSCH

Product Code	Materials	Application	Size, mm/mesh	Shape
HyKat FTC-80	Co	Cobalt based Fischer-Tropsch catalyst for low temp, 200 - 240 deg C	2	Trilobe

OTHER CHEMICALS

METHANOL SYNTHESIS

Product Code	Materials	Application	Size, mm/mesh	Shape
HyKat SRK-30	Cu/Zn	Combined methanol synthesis, emission convert for ammonia plant	5x5	Tablet
HyKat SRK-50	Cu/Zn	Low pressure Cu/Zn methanol synthesis catalyst	5x5	Tablet

FORMOX & DME

Product Code	Materials	Application	Size, mm	Shape
HyKat SMF-50	Fe/Mo	Formox process producing formaldehyde by methanol oxidation	5.0x3.0	Ring
HyKat SDE-13	AI2O3	Gas phase methanol dehydration to produce dimethyl ether	3	Cylinder

SULFURIC ACID

Product Code	Materials	Application	Size, mm/mesh	Shape
HyKat SAP-75	V2O5	5-ribbed ring design for high activity, high SO2 conversion	11.5	Ring
HyKat SAP-78	V2O5	5-ribbed ring design for high activity, high SO2 conversion	11.5	Ring
HyKat SAP-80	Cs/V2O5	5-ribbed ring design for high activity, high SO2 conversion	11.5	Ring
HyKat VCS-95	Cs/V2O5	5-ribbed ring design for high SO2 conversion, low SO2 emission	11.5	Ring
HyKat VCS-212	Cs/V2O5	5-ribbed ring design for high SO2 conversion, ultra high Cs & low SO2 emission	11.5	Ring

AMMONIA SYNTHESIS

Product Code	Materials	Application	Size, mm/mesh	Shape
HyKat A201	Fe	Convert synthesis gas containing hydrogen and nitrogen into ammonia	1.5-3.0, 3.0-6.0	Granule
HyKat A201R	Fe	Convert synthesis gas containing hydrogen and nitrogen into ammonia	1.5-3.0, 3.0-6.0	Granule

NOBLE METAL CATALYST

Product Code	Materials	Application	Size, mm/mesh	Shape
HyKat Pt/C	Pt/Carbon	Hydrogenation in organic synthesis	-	Powder
HyKat Pd/C	Pd/Carbon	Hydrogenation in organic synthesis	-	Powder
HyKat Ru/C	Ru/Carbon	Hydrogenation in organic synthesis	-	Powder
HyKat Rh/C	Rh/Carbon	Hydrogenation in organic synthesis	-	Powder

SYNGAS - H2 PLANT**HYDRODESULFURIZATION**

Product Code	Materials	Application	Size, mm/mesh	Shape
HyKat S-100	CoMo	Unsaturated olefin, organic sulfur hydro-conversion	1.3, 1.6	Trilobe
HyKat S-101	NiCoMo	Unsaturated olefin, organic sulfur hydro-conversion	1.8, 3.0	Sphere
HyKat S-102	NiCoMo	Unsaturated olefin, organic sulfur hydro-conversion	1.3/1.6 2.5	Trilobe
HyKat S-103	NiMo	Unsaturated olefin, organic sulfur hydro-conversion	4.8	Hollow ring
HyKat S-104	NiMo	Unsaturated olefin, organic sulfur hydro-conversion	2.5	Quadralobe

DESULFURIZATION

Product Code	Materials	Application	Size, mm/mesh	Shape
PuriSorb T-90E	ZnO	H2S & COS removal at high temp, 300 - 440 deg C	3-5	Extrudate
PuriSorb T-90S	ZnO	H2S & COS removal at high temp, 300 - 440 deg C	4	Sphere
PuriSorb T-99E	ZnO	H2S & COS removal at high temp, 300 - 440 deg C	4	Extrudate

STEAM REFORMING

Product Code	Materials	Application	Size, mm/mesh	Shape
HyKat SPR-304	NiO	Pre-reforming process taking nature gas, refinery gas, LPG, naphtha as raw material	12x8	4 Holes
HyKat SPR-306	NiO	Pre-reforming process taking nature gas, refinery gas, LPG, naphtha as raw material	12x8	4 Holes
HyKat SPR-337	NiO	Pre-reforming process taking nature gas, refinery gas, LPG, naphtha as raw material	16x10	7 Holes
HyKat SPR-50	NiO	High nickel, high activity pre-reforming catalyst for hydrocarbon	5x5	Tablet
HyKat SR-201	NiO	Nickel based steam reforming catalyst for upper section	16x10	6 Holes
HyKat SR-202	NiO	Nickel based steam reforming catalyst for bottom section	16x16	6 Holes
HyKat SR-212	NiO	Alkali promoted Nickel based steam reforming catalyst for upper	16x10	6 Holes
HyKat SR-212	NiO	Alkali promoted Nickel based steam reforming catalyst for bottom	16x16	6 Holes
HyKat SR-D37	NiO	Ni-based high active catalyst supported on alumina loaded at the top of the tube	32x20	6 Holes
HyKat SR-D38	NiO	Ni-based semi-active catalyst supported on magnesium oxide loaded at the middle	32x28	6 Holes
HyKat SR-D39	NiO	Inert alumina raschiq ring loaded at the bottom of the tube	32x32	Hollow Ring

CO SHIFT CATALYST

Product Code	Materials	Application	Size, mm/mesh	Shape
HyKat ST205	Cu/Zn	Low temperature CO shift catalyst	5x5	Tablet
HyKat ST213	Fe/Cr	Nickel based steam reforming catalyst for upper section	6x6, 9x6-9	Tablet

METHANATION

Product Code	Materials	Application	Size, mm/mesh	Shape
HyKat MJ103S	Nickel	Nickel based methanation catalyst	3-5	Sphere
HyKat MJ103H	Nickel	Nickel based methanation catalyst	5X5-20	Extrudate
HyKat MJ103T	Nickel	Nickel based methanation catalyst	5X5	Tablet

PSA H2 PURIFICATION

Product Code	Materials	Application	Size, mm/mesh	Shape
PuriSorb AA30	Alumina	High surface PSA grade activated alumina desiccant	3-5	Sphere
PuriSorb AC5	Carbon	Coconut based PSA grade activated carbon, bulk CO2 adsorption	1.6, 3, 4	Extrudate
PuriSorb 5A	Ca+	PSA grade 5A molecular sieve	1.6-2.8	Sphere
PuriSorb 5A	Ca+	PSA grade 5A molecular sieve	1.6, 3.2	Pellet

ZEOLITE

Product Code	Materials	Application	Size, mm/mesh	Shape
ZeoKat Y	Y	Y-type crystal sodium zeolite, include NaY, HY, REY	-	-
ZeoKat Z5	ZSM-5	ZSM-5 is an aluminosilicate zeolite	-	-
ZeoKat B	Beta	Beta zeolite with high activity and selectivity	-	-

BIO-OIL & EADDIBLE OIL

Product Code	Materials	Application	Size, mm/mesh	Shape
PuriSorb ACF120	Acti. Clay	Purification of benzene, toluene, xylenes, cumene, kerosene, jet fuel, bio diesel	18-180 µm	Granule
PuriSorb SOR-370	Silica	Animal, vegetable oils, refining processes to remove polar impurities, colour reduction	0.5 mm	Granule
PuriSorb SOR-380	Silica	Animal, vegetable oils, refining processes to remove polar impurities, colour reduction	7-15 µm	Granule

EMISSION CONTROL

Product Code	Materials	Application	Size, mm/mesh	Shape
EnvCat AD-910	Nickel	Ammonia decomposition/cracking to produce hydrogen	19x19	Hollow Ring
EnvCat AD-946	Nickel	Ammonia decomposition catalyst at high working temp	20x20x4	Cylinder
EnvCat VOC-20	Pd/AI2O3	Catalytic combustion of volatile organic compounds (VOCs)	3-5	Sphere
EnvCatt VOC-21	Pt/AI2O3	Catalytic combustion of volatile organic compounds (VOCs)	3-5	Sphere
EnvCat DN-V16	V2O5/AI2O3	Medium temperature NOx selective catalytic reduction	4-6	Cylinder
EnvCat DN-V18	V2O5/TiO2	Low temperature NOx selective catalytic reduction	4-6	Cylinder