



TASCO CHEMICAL CORPORATION



TASCO

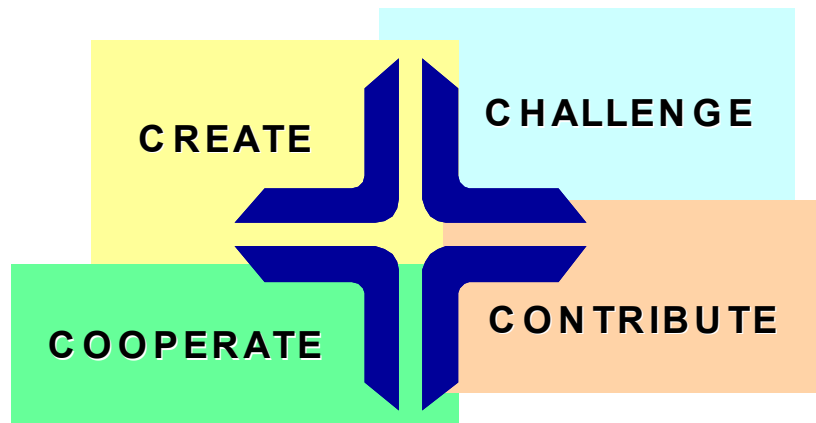
enriching splendid future.....



INTRODUCTION



Since founded in March of 1982, TASCO has been a leading petrochemical company in Taiwan with a competitive advantage in technology innovation, and a prominent specialist in C4 chemicals. Our core business started from C4 chemicals and has been diversified in recent years. Our goal is to develop new and valuable technologies and products for a better future of our society. In many years, we are growing very steadily and now seeking to internationalize for widening our fields.

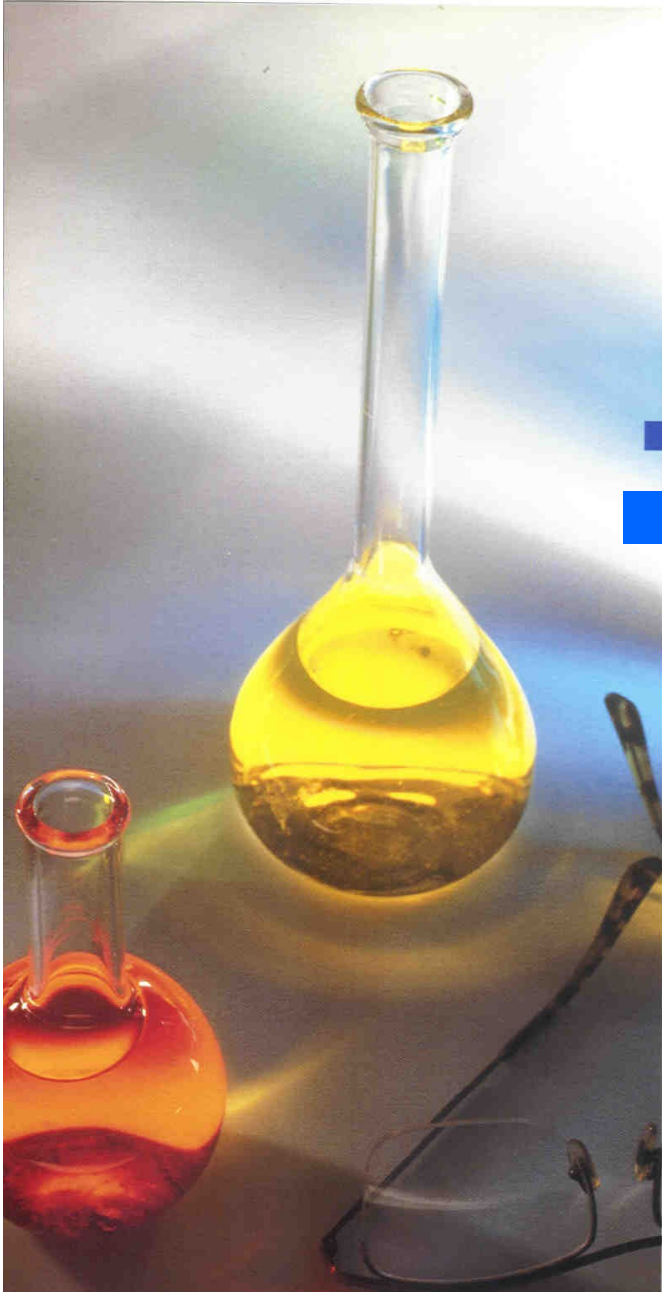


THE SPIRIT OF TASCO – 4C

The logo of TASCO is composed by 4 Cs that symbolize not only our C4 chemical products but also our 4C spirits -- to create , to challenge, to cooperate, to contribute.

- To **CREATE** new technologies for high quality chemicals
- To **CHALLENGE** the difficulties for improvements
- To **COOPERATE** between internal and external elements of our company
- To **CONTRIBUTE** our results and achievements to the nation and the public





*enriching
splendid
future.....*

Petrochemical

MTBE (methyl *t*-butyl ether)

is a colorless liquid with high Octane Number (RON 117) as a perfect gasoline additive that prevents engine knock. The most important current use of MTBE is as an environmentally safer gasoline additive to replace lead organic additive compounds in the unleaded gasoline for minimizing pollution.

The production of MTBE was the first step of TASCOW toward to improving Taiwan's air quality and environment. MTBE is manufactured from raffinate-1, a mixture of C4. Its current capacity in TASCOW is 250,000 metric tons per year. TASCOW, as the first

company in Asia Pacific region to produce MTBE and had been the only manufacturer in Taiwan for decades, is proud of serving our society with cleaner air.





Petrochemical

MEK (methyl ethyl ketone)

is an important organic solvent with excellent solubility and the use in synthetic leather, synthetic resin, paint and many computer related products. Since Taiwan is a world leader in the production of synthetic leather, the synthetic leather industry in Taiwan consumes most of TASCO's MEK production.

As the only producer of MEK in Taiwan with most of the market share, TASCO has 120,000 metric tons per year capacity to meet the need of its customers. TASCO is continuing to improve its production process and to develop high quality products.

Butene-1

serves as the most important co-monomer for producing linear low density polyethylene (LLDPE) and high density polyethylene (HDPE). TASCO developed its own process to produce butene-1 from mixed C4 streams and started its production in 1988. Now TASCO had produced high quality of butene-1 in the capacity of 40,000 metric tons per year.

MA (maleic anhydride)

In 1990, TASCO began the production of maleic anhydride (MA) which is an important raw material for unsaturated polyester resin and alkyl resin. MA is also used as base material for production of BDO, THF, NMP, 2-pyrrolidone, γ -butyrolactone and other fine chemicals. Instead of toxic benzene, n-

butane is used as a feed stock in TASCO for 40,000 metric tons per year of MA production in high quality. With self owned technology, MA from TASCO meets the rigid purity and other specifications required by many customers.

IPA (Isopropanol)

IPA (isopropyl alcohol) is similar to ethyl alcohol in solvent properties and evaporation rate. IPA is useful in lacquers, inks and thinners. TASCO successfully started up IPA production unit in 2007 by self-developed technology. TASCO had produced IPA in the capacity of 30,000 metric tons per year.





Fine Chemical

DAA (diacetone alcohol)

is made from aldol condensation reaction of acetone. It is colorless liquid with pleasant odor. DAA is a good solvent used in acrylic painting, can coating, CD-R and DVD-R manufacturing. To support CD-R and DVD-R manufactures in Taiwan to keep their leading position worldwide, TASCOC had given her effort to develop her own process to produce high purity grade of DAA to support this IT industry. Our DAA plant has capacity of 10,000 metric tons per year.



IPHO (Isophorone)

Isophorone (IPHO) is one of the important derivatives of acetone. IPHO is a colorless and low-volatile liquid, with camphor odor. The main application of IPHO is the excellent industrial solvent with low volatile and high boiling point physical properties. IPHO can be further reacted to alcohol, amine, ester and isocyanate and other products by its conjugated ketone structure. It is widely used in polyurethane elastomers PU, medicine, spices, coatings, adhesives and other industrial fields. TASCOC had built a plant for production 15,000 metric tons per year by self-developed technology.

MCH (methyl-cyclo hexane)

is a product made by hydrogenation of toluene. It is widely used as solvent but has much lower hazardous tendency to health than Toluene. It is colorless liquid with aromatic odor. MCH had replace part of application of hazardous solvent such as tri-chloro ethane. It is also applied as dye solvent for CD-R-Pt and solvent for adhesive. Base on common platform of hydrogenation technology which TASCOC owns, we had built a compact plant for producing 5,000 metric tons MCH per year.



Fine Chemical

▼ **TBA (tertiary butyl alcohol)**
high purity isobutylene
DTBP (di-tertiary butyl phenol)
PTBP (para-tertiary butyl phenol)
OTBP (ortho-tertiary butyl phenol)

24 DTBP and 26 DTBP are isobutylene based alkyl-phenol and are key raw materials for anti-oxidant of plastic compound. In response to the rapidly growing demand of these two products in Taiwan and Asia Pacific area, TASCOS had launched a research program and realized the commercial operation successfully in 2004 by self-developed technology which include process units of TBA (tertiary butyl alcohol), high purity isobutylene, 24 DTBP and 26 DTBP units. TBA is made from hydrolysis of mixed C4 raffinate-1 and high purity isobutylene is made from TBA dehydration. The individual capacities are:

TBA: 70,000 MTY	Isobutylene: 50,000 MTY
26DTBP: 42,000 MTY	24DTBP: 42,000 MTY

Total DTBP capacity of 84,000 metric tons per year is a world scale production plant in this field. In 2008, TASCOS commercialized PTBP production unit with the present capacity of 10,000 MTY by our own developed technology.

PTBP is mainly used in the manufacture of PTBP formaldehyde resins for surface coating applications. In addition, PTBP can be used as UV absorbent, anti-chaps for pesticide, rubber, coatings and as effective antioxidant for lubricating oil. In 2011, TASCOS's PTBP product has been qualified for application in PC (Polycarbonate) optical grade. TASCOS continuously commercialize OTBP production in 2009 by self-developed technology with annual capacity of 5,000 tons. OTBP is raw materials for oil soluble synthetic resins, insecticides and other agro products. OTBP is also widely used to manufacture perfumery intermediates.



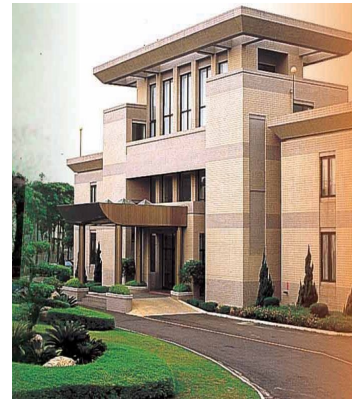


Petrochemical

PTA (purified terephthalic acid)

In 2004, TASCOS extended its petrochemical products beyond C4 chemical category by merging Tuntex Petrochemicals, Inc., a purified terephthalic acid (PTA) producer in Taiwan. The rapid growth of PTA, especially in Mainland China, in the use of manufacture of polyester filament/fiber, polyester film and PET resin make the future of TASCOS's petrochemical business more diversified, competitive and profitable. TASCOS's PTA plant, started to be built in 1989, has been successfully and continuously operated since 1991. With its design capacity of 285,000 MTY, the plant has been revamped and modified by using the most efficient manufacturing technology and the most safe and reliable equipments to reach a current capacity of 500,000 MTY.





Petrochemical

Industrial Gas

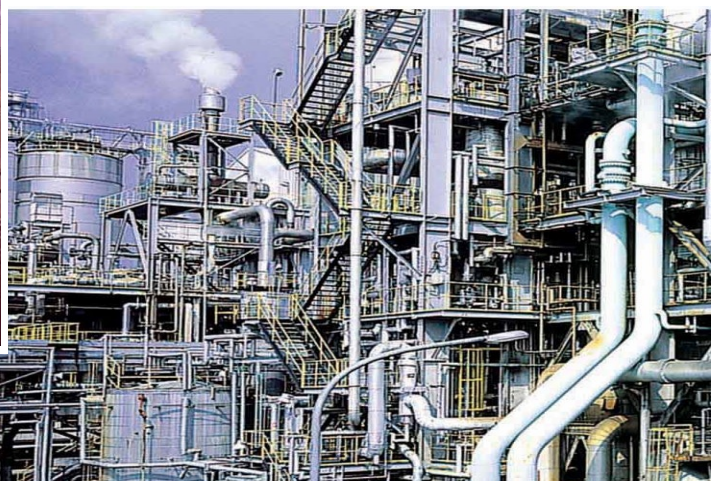
TASCO's PTA plant has a self-sustained co-generation unit to ensure uninterrupted supply of electricity. The plant also has a H₂ generation unit and an air separation unit (ASU) to provide H₂ and O₂ for the PTA production. ASU also produces industrial gases such as N₂ and Argon for sale. Also our MEK unit produced high quality Hydrogen for industrial use.

H₂ : 34,000,000 NM³/Y

O₂ : 80,000,000 NM³/Y

N₂ : 280,000,000 NM³/Y

Ar : 3,000,000 NM³/Y





LPG

LPG

TASCO had extended her business into LPG since 1995. TASCO is the leader of LPG business in Taiwan and has the most integral network of LPG distribution including import, wholesale, bottle filling, bottle inspecting, retail and transportation.

WHOLESALE

- Total Sales Volume: 800,000 MTY
- Total Market Share in Taiwan: 65%

BOTTLE FILLING

- 10 Filling Plants in Taiwan Islandwide
- Total Filling Capacity: 400,000 MTY





LPG

BOTTLE INSPECTION

- 6 Bottle Inspecting Plants
- Total Inspecting Capacity: 1,300,000 bottles/Y

RETAIL

- 60 Retailers in Taiwan Islandwide

TRANSPORTATION

- 20 High Pressure Tank Lorries
- 20 Chemicals Tank Lorries
- 150 Trucks





Research, Development and Technology

▼

In today's competitive industrial world, technological improvements and new developments in manufacturing are not only necessary but also timing important. TASC0 has emphasized on the "defensive" R&D programs to in-plant the technology and to improve the quality of our existing manufacturing processes and products. Diverse researches of new products are done in TASC0's R&D as well as the cooperation with many research laboratories and universities in Taiwan. Successes in automation of our offices and plant sites help us become more competitive in the fast growing petrochemical industry. The great achievement in the technical improvements of manufacture processes is well done by TASC0's engineers in the past years. New products development has also achieved satisfactory results and the future looks even more blooming. From technology transfer to technology development, TASC0 has moved herself forward in firm steps.





Creating a Better Future

In recent years, energy saving become an important issue about our environment. Considering about this, TASCOS's engineers have improved several manufacture processes into energy saving procedures. The production of MTBE is another example of TASCOS's contribution to our society for cleaner air and a better environment. The improvement of the waste water treatment is also the evidence of TASCOS's environmental efforts. All of these offer the public to enjoy an improved life with higher quality high-tech products and a better environment.

TASCOS believes that research , development and technical innovation are essential for social progress and economic growth. With new projects being developed, TASCOS will keep her efforts in cooperating all these elements together and creating newer processes to challenge the 21st century and contribute more to our society.

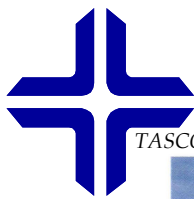
Contributions

TASCO believes that what is taken from society shall also be given back to society.

TASCO provides scholarships to students majoring in Chemical Engineering and Chemistry at thirteen universities in Taiwan. The local residents of Lin-Yuan, Kaohsiung County, the site of our production plants, enjoy a social relief fund provided by TASCO for those in need of help.

Our production of MTBE has improved the quality of the environment, protected public health and helped dampen the effects of serious environmental pollution. We will continue to do our best along these lines to contribute to our people and our





TASCO CHEMICAL CORPORATION



TASCO

TAIPEI OFFICE :

25-11FL SEC. 4, JEN-AI RD.

TAIPEI, TAIWAN, R.O.C.

TEL. 886-2-2741-5577

FAX. 886-2-2771-7331, 886-2-2776-5043