

METHANOL FACTS

NOVEMBER 2015

TITLE HERE

SUB TITLE:

Ficipsu sanders pernatque volor adiam quibus ea dolenis serunt eum quis aut ditium que voluptati vel mo valoribus verferc ipient.

Igendi nate doloribus niendaero maximus, od maximi, eumquid mo quos doluptat iuremporem. Nequi blab intissit, utest et, simil maximiliciam ilitate mpostestis aut pos eos parum faccae omniminctus doluptas dem nustiandeste parchiciur molor molorrum ent explaut remquid.

SUB TITLE:

Bisi rem. It, am quam ut velia parum fuga. Ut fuga. Sed unt derrorem enihillut voluptius dessimus apitati blabo. Ped ullitatur sa simendi voloreius aped que pratatur apicitatem quo cuptae nonectem quis am iuribernam debis eum ut faccus, si simaxim olupta conem eniam lantus volupid ellestempore idessim fugiasintia vero omnit haribus voluptatur, tem volorerat in pre pratem. Nusandit, coratet et aut ducit, nonse sant re nis porias ut omnianda audis vendani mincias eum quiaae volo coriossequo mod quidemp oribeate essitatet quo dia etur aut earum quatur sum qui optatiatibus ime di dolut aboreni comnihi llecabo reprat faces pelisquist, odit quisquissi sinihit aut ut aspiti vel et laborum alitio.

Nam quunt haribus amusdant re endaepe rescidus nima iducia vel ipsus dolorro earcipientur ant, simaxim nullute eumet parum as alitactetur sedi voluptatam quiat offic tem im estrum vit, autem nonsent andit ipsantotas maximincius essit ut pra cus derates et ma dus escil illab illam nimusapercid et, coratio rionseque non pore intotaque serrum exerias nes dia sitae nihil moluptate veribus apienihit, nis et ex estrum velecto odipiti odit quosant faccati aacceptaspit, ulluptas volupta temqui ium quae valoratio volupta tiatem quodici psaectotatin nossit rem rempel in corro eat.

In consend erovidebisci utem ium voluptaque cor alit, temquunde cusantur magniscim fuga. Arum velest aut faceria testioatio beaturi onsequias id quuntiscima alita sequi velique et ditaque acimus.

Nam et que sitatus ari cum archilitatem fuga. Nam aut esto offic tem et untorenia quibus eumet excere am utem nobitas dolorro esti aborporem il ma quundaeperae odis nus es everspel erfernam, volupta doluption reiunt.

Onsent quas mos reperovitint verferi arciam dunt et autatur aditio. Excest voluptatur? Ratquiatecto et volorrorem sit quia dunte nus perit abo. Ad quam delest aspel molupiet ant molorunt.

SIDE NOTE

**PA PLACEPE VENTO CUS,
EX ES ET RERCIMO LENDIS
NISQUE QUE PE PEDI ANT
ES ETIPIENT QUODIPSUM,
CUMQUAM DOLUPTAQUI
OMNIENDENT. GENI
DOLECTISQUIASSE SI
TO DOLORPORE, NIA
DOLUPICIDUNT EOSAMET
ESEQUIATEMAXIMAIO EUM
EA VITIIS RE SEQUI.**

SINGAPORE (HQ):

10 Anson Road, #32-10
International Plaza,
Singapore 079903
+65 6325 6300

WASHINGTON DC:

225 Reinekers Lane, Suite 205,
Alexandria, VA 22314 USA
+1 703 248 3636

BRUSSELS:

Square de Meeûs 38/40
B-1000 Brussels, Belgium
+32 241 6151

BEIJING:

#511, Pacific Sci-Tech Development
Center, Peking University
No. 52 Hai Dian District,
Beijing 100871, China
+86 10 6275 5984

FORMALDEHYDE: A KEY METHANOL MARKET

THE BASICS:

Methanol is a principal ingredient used in the production of formaldehyde, a colorless, flammable, odorous gas. Formaldehyde is produced by the catalytic oxidation and dehydrogenation of methanol using either a silver catalyst or a metal oxide catalyst. The wide range of uses for formaldehyde make it essential for the operations of nearly 50,000 product manufacturing facilities in the U.S. alone. Worldwide, one-third of the demand for methanol is for formaldehyde production. At about 10 million metric tons, this is the largest single market for methanol.

HEALTH EFFECTS:

Formaldehyde is produced naturally in small amounts in plants, animals and even the human body, through normal metabolic processes. However, formaldehyde metabolizes at a rate fast enough to prevent it from accumulating in the body. At exposures of more than 0.1 ppm, some individuals may experience symptoms including watery eyes, burning sensation of eyes, nose and throat, coughing, nausea or skin irritation.

On June 10 2011, the National Toxicology Program (NTP) released a report for the U.S. Dept. of Health and Human Services adding formaldehyde, among other chemicals, to the list of known carcinogens. The formaldehyde industry has argued that typical exposure levels do not pose a risk to the general population, nothing that the NTP report disregards other world regulatory bodies that have deemed the chemical safe. Also defending the chemical, the American Chemistry Council (ACC) claims that HHS made unfounded classifications that will harm consumers. ACC CEO Calvin Dooley said the report, "ignores the finding from the independent, government-mandated National Academy of Sciences report which strongly questioned whether the scientific evidence supports a connection between formaldehyde and leukemia."

As the single largest market for methanol, rising demand for formaldehyde means a growing market for methanol.

USES:

CONSUMER PRODUCTS

- *Photographic Film*
- *Paper Towels*
- *Cosmetics*
- *Carpeting*
- *Furniture*
- *Cabinets*
- *Paint*

AUTOMOTIVE INDUSTRY

- *Under-the-hood Components*
- *Fuel System Components*
- *Brake Pads*

HEALTH CARE APPLICATIONS

- *Vaccine Manufacturing*
- *Hard Gel Capsule Manufacturing*
- *Pharmaceutical Research*

CONSTRUCTION INDUSTRY

- *Carpet Underlay*
- *Structural Wood Panels*
- *Particle Board*
- *Plywood*

SINGAPORE (HQ):

10 Anson Road, #32-10
International Plaza,
Singapore 079903
+65 6325 6300

WASHINGTON DC:

225 Reinekers Lane, Suite 205,
Alexandria, VA 22314 USA
+1 703 248 3636

BRUSSELS:

Square de Meeûs 38/40
B-1000 Brussels, Belgium
+32 241 6151

BEIJING:

#511, Pacific Sci-Tech Development
Center, Peking University
No. 52 Hai Dian District,
Beijing 100871, China
+86 10 6275 5984