

CHEMICAL. PROCESS. ENGINEERING.

GAS-LIQUID REACTIONS PHOSGENE PRODUCTION FLUORINE CHEMISTRY CHEMICAL RECYCLING



that Dynamic Phosgene Generation is the safest way to produce phosgene?

BUSS ChemTech is the leader in dynamic phosgene production technology. Our systems avoid the liquefaction or storage of phosgene and incorporate features that safeguard the health and well-being of personnel and the environment.

Our phosgene generators use CO and Cl_2 as the starting materials and can operate in a range of 10 to 100% of their nameplate capacity. Other important attributes of our phosgene generators include an "idle" function that allows them to be restarted in minutes, as well as the possibility to include safety absorption equipment.

Our phosgene generators are designed as skid mounted units and can be combined with our Advanced Phosgenation Reactors. The BUSS ChemTech project team has successfully worked through all the levels of Functional Safety documentation and procedures required for a Phosgene Generator, obtaining the *Functional Safety Assessment Certificate for Design and Engineering of the Safety Instrumented Systems of the Phosgene Generator and Safety Absorption* in a recently commissioned unit.

Reach out to learn more about our technology offering:

Gianluca Premoli / gianluca.premoli@buss-ct.com / +41 (0)61 825 6373



Phosgenation

Phosgene is a very versatile raw material commonly used in the production of many organic compounds.



Livius Cotarca, & Eckert, H. (2004). Phosgenations. John Wiley & Sons. Copyright © 2003 Wiley-VCH Verlag GmbH & Co. KGaA

The final products of a phosgenation reaction can be used in the manufacturing of adhesives, pesticides, foams, coatings, antibiotics, sugar substitutes, among others.

Some specific examples include:

| RAW MATERIAL | PRODUCT | USAGE |
|-----------------------|-------------------------------------|--|
| 2-Ethylhexanoic Acid | 2-Ethylhexanoyl Chloride | Reactive Intermediate |
| Lauric Acid | Lauroyl Chloride | Reactive Intermediate |
| Stearic Acid | Stearoyl Chloride | Reactive Intermediate |
| BenzylAlcohol | Benzyl Chloroformate | Intermediate for Synthesis of Carbonates and Carbamates |
| Propargyl Alcohol | Propargyl Chloroformate | Intermediate for Agrochemical |
| 2-Propanol | 2-Propyl Chloroformate | Intermediate for Synthesis of Carbonates and Carbamates |
| Diethylene Glycol | Diethylene Glycol Bis-Chloroformate | Intermediate for Synthesis of Carbonates and Carbamates |
| Sucrose-6-Acetate | Sucralose-6-Acetate | Sweetener |
| Toluene Diamine (TDA) | m-Toluene Diisocyanate (TDI) | Intermediate for Polyurethane |
| N-Butylamine | n-Butyl Isocyanate | Intermediate for Insecticides and/or fungicides |



ASC Expo 2025 / April 15 / Jacksonville, FL, USA

AOCS Meeting & Expo / April 27-30 / Portland, OR, USA

<u>15th ICIS World Surfactants Conference & Expo / May 7-8 / Jersey City, NJ,</u> <u>USA</u>

RACE: Recycling and Compounding Expo / May 14-15 / Mumbai, India

CPHI North America / May 20-22 / Philadelphia, PA, USA

Chemspec Europe / June 4-5 / Cologne, Germany

AMI Chemical Recycling Europe / June 25-26 / Brussels, Belgium

<u>6th International Conference on Polycarboxylate Superplasticizers (PCE</u> 2025) / July 23-25 / Bangkok, Thailand

Specialty & Agro Chemicals America / July 29-31 / Savannah, GA, USA

BUSS ChemTech AG Hohenrainstrasse 12A CH-4133 Pratteln Switzerland

You received this email because you signed up or submitted an inquiry.

Tel: +41 61 825 64 62 Fax: +41 61 825 67 37



<u>Unsubscribe</u>

mailer lite