

## RAW MATERIALS FOR RESIN INDUSTRY

**PRODUCTS** 

PRECISION MATTERS: ELEVATE YOUR RESIN FORMULATIONS WITH OUR RAW MATERIALS





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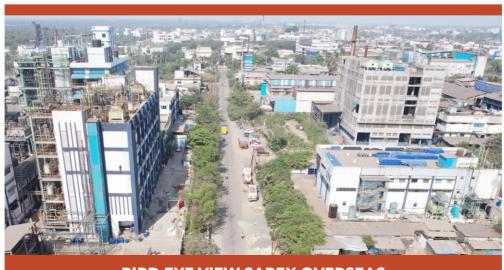


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BIRD EYE VIEW SAREX OVERSEAS MANUFACTURING COMPLEX, TARAPUR, INDIA

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20+

200+

20+

Year of Experience

No. of Customers Served

Countries Served

## **About Sarex**



arex Overseas is a Mumbai Based Company, manufacturing Fine Chemicals and Specialty Chemicals. Sarex Overseas is a division of Sarex Organics Pvt Ltd, Mumbai, India.

Sarex overseas is a leading manufacturer of Fine Chemicals and API Intermediates in India.

Sarex Overseas has corporate office in Mumbai. Sarex Overseas has its Manufacturing and R&D facility in Tarapur which is 100 Km from Mumbai.

Sarex Overseas manufacturing facility is GMP complied, but not certified. Many multinational companies have audited its facility and Sarex is their approved Vendor. Sarex is certified by ISO 9001, ISO 14001, and OHSAS 45001 by URS, UK. Besides Sarex has Ecovadis accreditation for business sustainability.

Sarex Overseas believes that People are their biggest strength and has most of the people working for many years at Sarex. Sarex Overseas has nearly 400 employees at various locations.

Over the years Sarex Overseas has become one of the largest leading manufacturer of Triazine based UV absorbers and light stabilizer and intermediates which are used in many Industries used as additive in plastics and coatings, Textile industry, Agro films, personal care industry to enhance their durability, colour fastness and performance. These UV absorbers are superior in their class as these have very low volatility at high process temperature of the plastics.

Sarex specializes in producing high value fine chemicals. Besides regular products, Sarex develop new products based on customer's requirements. R&D centre plays crucial role in handling complex chemistry and developing newer technologies. Other than additives for Plastic and Coatings Sarex Overseas also manufacture some API Intermediate as well as the contract manufacturer of the Fine Chemicals. Sarex is the market leader in Pharmaceutical intermediates of anti-diabetic API Pioglitazone Hydrochloride in India.

Sarex has a state of the art manufacturing facility with variety of unit operations. The entire plant operations is automated except solid charging / discharging using control system. Sarex Overseas have total 52 Reactors, in which 26 are Glass lined Reactors and 26 are Stainless Steel Reactors having 630 lit to 10kl capacity. Sarex Overseas have in house Primary, Secondary & Tertiary Effluent Treatment facility with Zero Liquid Discharge arrangement for liquid effluent.

Sarex has in-house Quality control development with HPLC, GC, UV-Vis Spectrophotometer, FTIR and many more analytical instruments with trained and skilled workforce. Sarex has in-house R&D facility with 8 fume hoods, rotary evaporator, Glass reactor etc. with high skilled & qualified manpower.



Sarex is having adequate scrubbing arrangement to entrap gaseous emission.

Safety is one of the most important culture of Sarex. Utmost care has been taken while designing, operating and maintaining the plant. Majority of the safety is already built in the design of the plant and automation. Sarex is concerned with environment and committed to EHS (Environment, Health and safety).

Intellectual property rights and confidentiality is on the top priority list of Sarex.



## Sarex Overseas is engaged in the Bulk manufacturing and

- Our company is largest manufacturer of antidiabetic Pioglitazone Hydrochloride intermediates 5 Ethylpyridine-2-ethanol and 2,4-Thiozolidenedione in India.
- Our company is Largest manufacturer of Triazine UV absorbers for Plastics, coatings additive, Textile industry and personal care industry India.
- Bulk chemical manufacturer for Pharmaceuticals, Plastics, Coatings, Electronics, Dyes & Pigment industries, Photoinitiator, Resin Raw materials, Antioxidants and Flame retardants.

Sarex not only avails you with the exceptional chemicals, but also shoulders the responsibility of after sales service. Thus, we provide thorough going service through our Technical support. Our quality analysts scrutinize each & every product before its delivery. We value your money & endeavour to bring you the optimum product service in exchange of that.

We are one of the India's largest chemicals exporter & major portion of our produce is exported to more than 40 countries, primarily to the USA & Europe where our products have been well received & we have been successful in nurturing excellent relationships with our clients. We have been acclaimed a lot many times for our noteworthy range of chemicals.





### Sarex stands for quality products!

# Importance of Raw Materials for Resin Industry



he resin industry plays a crucial role in the manufacturing of various products used in everyday life. Resins are synthetic or naturally occurring compounds with a wide range of applications, such as in plastics, adhesives, coatings, and composites. These versatile materials are derived from a variety of raw materials, each contributing unique properties to the final resin product.

Resin raw materials offer versatility in their applications. They can be synthesized to have specific properties, making them suitable for various purposes, such as adhesion, insulation, and protection. This versatility allows manufacturers to tailor resins to meet the specific requirements of different industries.

Resins can provide exceptional strength and durability when used in composite materials.

Resins are widely used in the production of coatings, which provide protection to surfaces against corrosion, abrasion, weathering, and chemical exposure. This is crucial in extending the lifespan of various products and structures.

Monomers are the building blocks of resins and polymers. They are small, reactive molecules that can undergo polymerization, a chemical process in which monomers link together to form long chains or networks, creating the solidified resin or polymer. The choice of monomers plays a significant role in determining the properties and characteristics of the final resin.

Photoinitiators are crucial components used in resin formulations for photopolymerization, a process in which the resin solidifies or cures upon exposure to ultraviolet (UV) light or visible light. When photoinitiators absorb light energy, they undergo a chemical reaction, generating free radicals or initiating a chain reaction that triggers the curing process of the resin. This enables rapid and controlled curing of the resin, making it ideal for various applications such as coatings, adhesives, and 3D printing.

#### TYPE I PHOTOINITIATORS (NORISHERS)

Type I photoinitiators are also known as "norishers" because they absorb light energy and directly transfer it to the reactive species (typically a monomer) to initiate the polymerization reaction. The excited photoinitiator molecule reacts with the monomer, generating free radicals that trigger the chain polymerization. These types of photoinitiators are mainly used in UV-curable systems.

#### TYPE II PHOTOINITIATORS (INITIATORS)

Type II photoinitiators act as initiators for a chain reaction without direct interaction with the monomer. Instead, they absorb light energy and produce excited-state species (often free radicals) through a photoreaction. These excited-state species then react with a separate initiator (usually a hydrogen donor) to generate radicals that start the polymerization process. Type II photoinitiators are commonly used in visible light curing systems.

#### CAMPHORQUINONE (CQ)

CQ is a Type II photoinitiator frequently used in dental materials, where visible light is used for curing.

Let's explore some of the raw materials and photoinitiator used in the resin industry.



#### 4BB (2-(4-Phenylbenzoyl)benzoic acid)

**Product Code** : 001279 CAS No : 42797-18-2 Molecular formula: C20H14O3 Molecular weight : 302.32

Safety &

Ω1

02

03

Transit hazards : Non Hazardous Substance

Application : This product is used in Industrial

use for Resin and Polymer.

#### **Typical Properties**

Physical Appearance: White Powder Moisture Content (KF): NMT 0.50%

Solubility (10% In N,N

-dimethylacetamide) : Clear Solution Iron (FE) Content : NMT 25 PPM : NLT 99.0% Purity (HPLC)

**Annual Capacity** : 150 MT

#### CBBA (2-(4-Chlorobenzoyl) Benzoic Acid)

Product Code : 001195 CAS No : 85-56-3 Molecular formula: C14H,ClO3 Molecular weight : 260.67

Safety &

Transit hazards : Non Hazardous Substance

**Application** : It Is used as Industrial fine chemical raw material for Resins & Polymer Industry.

**Typical Properties** 

Physical Appearance: White To Off White Powder

Solubility (5 % W/v

In Acetonitrile) : Clear Solution Melting Point : 146,0 To 150,0°C Moisture Content (KF): NMT 0.50% Purity (HPLC) : NLT 98.0% Assay (Titration) : NLT 98.0% APHA Colour : NMT 100.0

**Annual Capacity** : 150 MT

#### **CAMPHORQUINONE**

**Product Code** : 003290 : 10373-78-1 CAS No Molecular formula: C<sub>10</sub>H<sub>14</sub>O<sub>2</sub> Molecular weight : 166,22

CH

CH.

Safety &

Transit hazards : Non Hazardous Substance

**Application** : They are used in Resin based composites (RCB), which are frequently used in Denstry.

> These Resins are cured by LED lights, which are activated by Photo initiators additive.

**Typical Properties** 

Physical Appearance: Yellow Powder : 201-203°C Melting Point Moisture Content (KF): NMT 0.5%

Solubility 2.5% in

: Clear Solution Methanol

Selenium Content

: NMT 10 PPM (AAS / IPC)

Identity (FTIR) : Comparable with Std.

Purity (GC) : NLT 99%

: 12 MT **Annual Capacity** 

#### Disclaimer

Typical properties should not be considered as specification.

Product covered by valid patents are not offered or supplied for commercial use. The Patent position should be verified by the customer.

Products currently covered by valid US patents are offered for R&D use in accordance with 35 USC 271 (e) (l).

Above information is given in good faith and without warranty

Given end use / API available in public domain, customer need to verify.



SR. NO.	PRODUCT CODE	PRODUCT NAME	CAS NO.
1	002546	5-ETHYL PYRIDINE-2-ETHANOL	5223-06-3
2	000868	2,4-THIAZOLIDINEDIONE	2295-31-0
3	000022	1-PHENYL-1-CYCLOPENTANECARBOXYLIC ACID (1P1C)	77-55-4
4	002855	ALPHA-CHLORALOSE (AC)	15879-93-3
5	002776	ANTHRANILAMIDE	88-68-6
6	001279	2-(4-PHENYLBENZOYL)BENZOIC ACID (4BB)	42797-18-2
7	001195	2-(4-CHLOROBENZOYL) BENZOIC ACID	85-56-3
8	005409	MEHTYL 4-BROMOCROTONATE	1117-71-1
9	003234	BENZOPHENONEIMINE	1013-88-3
10	002694	6-NITRO-7-CHLORO-4-HYDROXY QUINAZOLINE	53449-14-2
11	002987	BENZOIC HYDRAZIDE	613-94-5
12	004808	HOMOPHTHALIC ACID	89-51-0
13	003290	CAMPHORQUINONE	10373-78-1
14	000030	1,1-DIPHENYLACETONE	781-35-1
15	002102	4-ACETYLBENZONITRILE	1443-80-7
16	011111	DMBA [5-[4-(DIMETHYLAMINOBENZYLIDENE) BARBITURIC ACID]]	1753-47-5
17	010995	PYCLEN TRIHYDROBROMIDE	189757-45-7
18	001579	3-BROMOACETYLPYRIDINE HBR	17694-68-7
19	001376	2,2'-DIHYDROXY-3,3',5,5' TETRA TERT BUTYL BIPHENYL	6390-69-8
20	002427	4-(2-HYDRAZINO-2-OXOETHYL)-4-METHYLMORPHOLINE -4-IUMCHLORIDE (HMMC)	876-57-3

#### Disclaimer

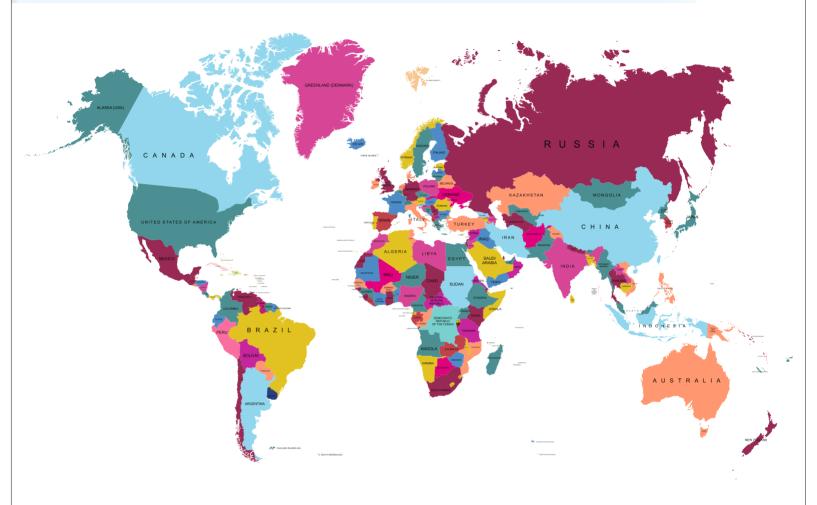
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## **COUNTRIES / REGIONS WHERE SAREX IS SELLING**



- 01. Germany
- 02. Switzerland
- 03. USA
- 04. Netherlands
- 05. Indonesia
- 06. China
- 07. South Korea
- 08. Belgium
- 09. Taiwan
- 10. Italy

- 11. Spain
- 12. Hong Kong
- 13. Turkey
- 14. France
- 15. Japan
- 16. Brazil
- 17. United Kingdom
- 18. Colombia
- 19. Slovakia
- 20. Portugal and many more..

## **EQUIPMENT SUMMARY**REACTORS, FILTRATION EQUIPMENTS & DRYERS

SR. NO.	EQUIPMENT DETAILS	CAPACITY	QUANTITY	
REACTORS - GLR				
01	Glass Lined Reactors	5KL & above	09	
02	Glass Lined Reactors	Less than 5KL	17	
		Total	26	
REACTORS - SLR				
01	SS316 Reactors	5KL & above	11	
02	SS316 Reactors	Less than 5KL	15	
		Total	26	
		Grand Total	52	

SR. NO.	EQUIPMENT DETAILS	CAPACITY	QUANTITY
FILTRATION EQUIPMENTS			
01	Centrifuge (Halar Coated)	48"	07
02	Centrifuge (SS316)	-	07
03	Agitated Nutsche Filter (Halar Coated)	6 to 8 KL	07

SR. NO.	EQUIPMENT DETAILS	CAPACITY	QUANTITY	
DRYERS				
01	Tray Dryers	96 Trays	04	
02	Rotary Vacuum Paddle Dryer	3 to 5 KL	07	



APART FROM ABOVE MENTIONED RESIN & PHOTO INITIATOR PRODUCTS, SAREX DOES CONTRACT MANUFACTURING FOR LARGE MULTINATIONAL COMPANIES UNDER SECRECY AGREEMENT. THOSE PRODUCTS ARE NOT LISTED.

In today's rapidly evolving industries, the demand for specialized chemicals continues to grow. Fine chemicals play a pivotal role in various sectors, including pharmaceuticals, agrochemicals, electronics, and more. However, developing and manufacturing these chemicals require substantial resources, expertise, and infrastructure. This is where contract manufacturing of fine chemicals steps in as a strategic solution.

#### STATE-OF-THE-ART INFRASTRUCTURE

Our cutting-edge manufacturing facility is equipped with the latest technologies, enabling us to handle a diverse range of projects. From small-batch productions to large-scale manufacturing, our capabilities are designed to accommodate your requirements.

- Sarex has developed new products based on customer's requirements worldwide.
- R&D centre plays crucial role in handling complex chemistry and developing newer technologies.
- We develop & manufacture products under non-disclosure agreement.
- 50+NDA's/CDA's signed.
- 30+ Products Commercialize.
- We have manufactured compounds as per customer's requirement which is useful in semiconductor industry, organic light emitting diodes.

#### **REACTIONS WE CAN HANDLE**

Sarex offers over specialized reaction chemistry as below;

- Fridel Craft
- Condensation
- Catalytic Reduction (Hydrogenation) under pressure
- Grignard
- Oxidation

- Reduction
- Bromination
- Chlorination
- Acylation

and many more..

We are approved vendor of many European customers and regularly being audited by them for their stringent quality standard & EHS requirements.

## **THANK YOU**

GET IN TOUCH WITH US



#### **CERTIFICATES OF ACCREDITATION**













UN GLOBAL COMPACT

ISO 45001:2018

ISO 14001:2015

ISO TWO STAR ECOVADIS 9001:2015 EXPORT HOUSE SILVER STAR



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