



## TECHNICAL DATA SHEET: **SILBOND 02**

### PRODUCT DESCRIPTION

**SILBOND 02 A** is a high performance collapsibility agent for the CO<sub>2</sub> process suitable in all ferrous and non ferrous foundry applications. A major problem with the CO<sub>2</sub> process is poor collapsibility of the molds and cores after pouring the casting. This leads to higher fettling time and chipping marks on the casting surface. **SILBOND 02 A** intimately mixes with sand by increasing the cold bond strength between the various aggregate particles and improves the collapsibility properties of the molds and cores. Unlike many other conventional collapsibility agents, this product does not generate any gas, and therefore gives better insurance against related defects.

### HOW TO USE

**SILBOND 02 A** is a liquid additive that has to be premixed with Sodium Silicate used for the CO<sub>2</sub> process. This liquid additive has to be premixed with the sodium silicate at the rate of 7% to 15%. However the exact percent of **SILBOND 02 A** required depends on the foundry practice. **SILBOND 02 A** when mixed with sodium silicate reduces the viscosity of silicate, there by increasing the coating efficiency of the silicate mix in the sand grains, as a result sodium silicate level can be decreased upto 10% when compared with conventional practice. The premixed silicate can then be used in the standard manner by mixing it with sand, making the cores/molds by ramming. Carbon dioxide is then passed to cores/moulds using similar techniques practiced in conventional Co<sub>2</sub> process i.e., at same pressures and flow rates.

### INDICATIVE SPECIFICATIONS

PROPERTY	RANGE
PRODUCT NAME	<b>SILBOND 02 A</b>
Appearance	Liquid
Colour	Reddish brown
Specific gravity	1.2 -1.25
B4 cup Viscosity	14 -15
Shelf life	6 months

### PACKING DETAILS

**SILBOND 02 A** is a reddish brown coloured liquid supplied in 50kg Carboys. The product should be stored in a cool and dry place.



## MATERIAL SAFETY DATA SHEET: **SILBOND 02**

1. **CHEMICAL IDENTITY**  
 Chemical Name : Inorganic additives  
 Chemical Classification : Mixture of minerals.  
 Trade Name : SILBOND 02 A
2. **PHYSICAL AND CHEMICAL DATA**  
 Appearance : Reddish brown colour liquid.  
 Physical state : Liquid  
 Odor : Odorless
3. **FIRE & EXPLOSION HAZARD DATA**  
 Flammability : No  
 Auto Ignition Temperature : None  
 Corrosive Material : No  
 Explosive Material : No
4. **REACTIVITY DATA**  
 Chemical Stability : Stable  
 Incompatibility with : Data not available  
 Other materials  
 Hazardous reaction product : None
5. **HEALTH HAZARD DATA**  
 Route of Entry : Skin  
 Effects of Exposure : Constant exposure and inhalation cause mild irritation to the nose, eyes and skin. Wash the affected area with lot of water and consult a doctor.
6. **PREVENTIVE MEASURES**  
 Personal protective equipment : Avoid direct contact with hands, use gloves wherever possible.  
 Handling & Storage precautions : Keep in a cool and dry place.
7. **EMERGENCY & FIRST AID MEASURES**  
 Fire : Use water.  
 Spillage : Wash away the spilled material.
8. **HANDLING & DISPOSAL**  
 Empty Carboys : Empty carboys may be sold as scrap. Empty carboys may retain residual quantities of the product. They are therefore hazardous if used directly for storing food stuffs or other materials meant for human and animal consumption
9. **MANUFACTURER / SUPPLIER DATA**  
 Name : Quality Technologies Private Limited  
 Address : No.34, Rd. No.1, IDA Mallapur, Nacharam,  
 Hyderabad – 500 076  
 Telephone : 040 27153888, 27155828  
 Fax : 040 27152567  
 e-mail : info@qtecindia.com
10. **DATE OF INFORMATION** : 01.01.2008.

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