

Belasol[®] S16

antiscalant for oil and gas

Product Description

Bellasol S16 is a proprietary polycarboxylate chemistry developed for cost effective management of calcium and magnesium carbonate, calcium sulfate and barium sulfate in oil & gas applications.

Bellasol S16 provides:

- superior thermal resistance and iron tolerance versus traditional phosphonates.
- both threshold and crystal growth modification properties.

Typical Properties

Product specification is available on request. The following should be regarded as specification limits for Bellasol S16.

Appearance Clear amber liquid
 pH 8.0 to 8.5
 Specific gravity at 20°C 1.11 to 1.16
 Freezing point range 0 to -5°C

Chemical Reactivity

Under normal conditions of use, Bellasol S16 is not affected by chlorine, other oxidising biocides and reducing agents, such as oxygen scavengers.

Application and Dose Level

Bellasol S16 is a neutralized aqueous solution of polycarboxylic acids. There are no special requirements regarding materials of construction of a dosing system.

Bellasol S16 is miscible with water in all proportions. It may be applied as the neat product, or as a dilution. Bellasol S16 should be dosed continuously and proportionately to the feed flow to maintain the recommended dose level.

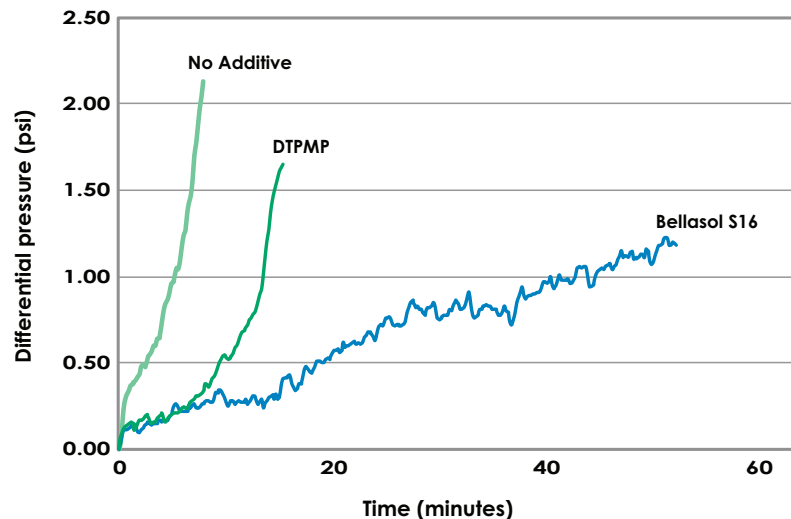
Typical dosage recommendations range between 15 to 30 ppm. The dose level required is dependent on the indices of various scale forming species present. Product dose recommendation is available upon request through your BWA representative.

Bellasol S16 works at high temperatures for downhole applications where standard phosphonate antiscalants fail.

Dynamic Scale Loop Test

Dosed at 20 mg/L as solids after aging at 180°C for 7 days

Water Chemistry	
Ca ²⁺	3,409 mg/L
Mg ²⁺	1,276 mg/L
HCO ₃ ⁻	2,220 mg/L
SO ₄ ²⁻	1,000 mg/L
Fe ³⁺	10 mg/L
Na ⁺	22,865 mg/L
Cl ⁻	43,000 mg/L
TDS	73,781 mg/L
Temp	70°C
pH	7.11
Oddo & Tomson SI (calcite)	2.39



Our wide selection of biocide chemistry can be tailored for any treatment scenario.

Learn more at www.wateradditives.com

Bellasol® S16

Bellasol S16 is used as a general purpose antiscalant for oil & gas applications. Bellasol S16 has a lower use-cost compared with standard phosphonate programs, and is effective where phosphonates will fail, such as conditions of high temperature and high scaling severity.

Bellasol Product	Attributes	Benefits
S50	Premium performance, multi- purpose product against mixed scales	Highly effective against most scales including BaSO ₄ , Ca ₃ (PO ₄) ₂ , CaSO ₄ , SrSO ₄ , CaCO ₃ even in high TDS. Excellent brine compatibility and ease of detection.
S30	Superior calcium scale control	High performance severe scale control against CaSO ₄ & CaCO ₃ .
S65	Superior environmental profile	Strong scale performance with excellent biodegradability profile.
S28	General purpose antiscalant	Excellent CaCO ₃ performance.
S16	General purpose antiscalant	Cost effective alternative to traditional phosphonates.



www.wateradditives.com

Americas

1979 Lakeside Parkway,
Suite 925
Tucker, GA 30084, USA
Phone +1 678 802 3050
Or 800 600 4523
Americas@wateradditives.com

Asia Pacific

No. 1 Magazine Road
#04-01, Central Mall Office Tower
Singapore 059567
Phone +65 9745 3227
AsiaPacific@wateradditives.com

Europe

2 Brightgate Way
Stretford, Manchester M32 0TB
United Kingdom
Phone +44 161 864 6699
Europe@wateradditives.com

MENA

DMCC Dubai Branch
Office 1802, Level 18
Jumeirah Bay X3 Tower, Cluster X
Jumeirah Lake Towers
P.O. Box 263164, Dubai, UAE
Phone +971 4 880 7336
MiddleEast@wateradditives.com

Patents:

BWA Water Additives (BWA) owns or is the licensee of patents and patent applications, which may cover the products and/or uses described in this case study. The following are registered trademarks of BWA Bellacide, Drop and Swirl logo. © Registered US Patent and Trademark Office. © 2016 BWA, All rights reserved.

The information contained in this case study is based on data available to BWA Water Additives and is thought to be correct. Since BWA has no control over the use of this information by others, BWA does not guarantee the same results described herein will be obtained, and makes no warranty of merchantability or fitness for a particular purpose or any express or implied warranty. This information is intended for use by technically trained personnel at their discretion and risk.

BWA Water Additives UK Limited is a private limited company registered in England and Wales at 2 Brightgate Way, Manchester M32 0TB, Registered No.5657343.