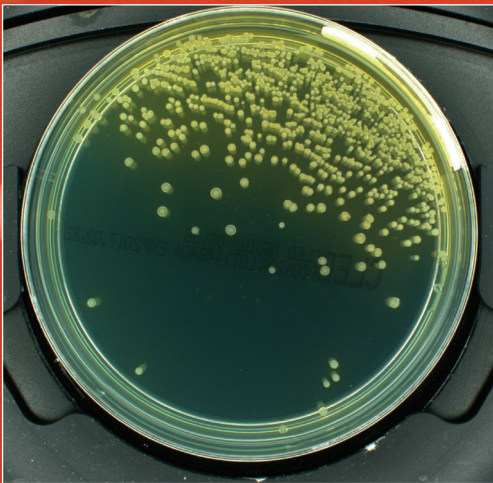


# Sigma SP<sup>TM</sup>

Patent Pending

**Fast simple preparation of sputum for automated and manual inoculation.**



- Powerful mucolytic
- Effective recovery of respiratory bacteria
- Ready to use
- Neutral pH
- Use directly with automated processing
- Convenient for manual processing
- Ambient storage



# Sigma SP™ Patent Pending

A novel reagent in ready to use liquid format for fast and effective preparation of sputum specimens. Particularly suited for automated processing platforms delivering single colonies for rapid identification.

**Sputum is an important biological material for the investigation of respiratory disease. It is not easy to work with because of the considerable variation in the viscosity and purulence of specimens.**

Various methods have been used over the years to liquefy sputum specimens to render them suitable for inoculation onto agar. Some of the reagents used such as dithiothreitol (DTT) and N-acetyl –L cysteine –sodium hydroxide (NALC/ NaOH) are prepared in caustic solutions, are unsafe and unpleasant to handle, and have limited shelf-life in solution. They normally have to be stored as lyophilised until required.

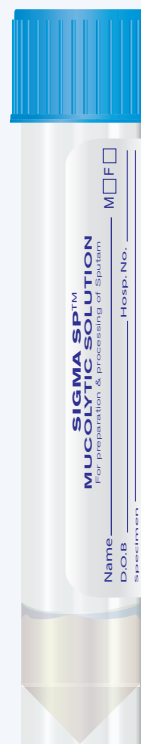
Modern microbiology laboratories are increasingly using automated processing platforms for the inoculation of agar plates, but the current methods of preparation of sputum specimens are not well suited to such processing. Specimens are loaded in large numbers onto the equipment, but can have to wait for several hours before their turn comes for processing. Reagents such as DTT can be detrimental to the survival of important respiratory pathogens such as *Haemophilus influenzae*.<sup>1</sup>

Sigma SP™ from MWE resolves all of these issues. Sigma SP™ contains a novel reagent which is not only a powerful mucolytic, but comes in a simple, ready to use liquid format, ready to load onto the automated platforms.<sup>2</sup> It is not

directly harmful to any of the target bacteria, so specimens can be safely left in the queue for several hours. The solution has a neutral pH, and can be safely stored prior to use at ambient temperature for many months.

### Molecular compatibility

Initial studies show that Sigma SP™ liquid does not interfere with molecular diagnostic test systems.



- **Powerful mucolytic**
- **Effective recovery of respiratory bacteria**
- **Ready to use**
- **Neutral pH**
- **Use directly with automated processing**
- **Convenient for manual processing**
- **Ambient storage**

Simply add 1 ml of sputum directly to the Sigma SP™ vial (e.g. with pipette). Replace cap, vortex and allow to stand at room temperature for 15 minutes. The sample is then ready for processing either using automated or manual methods.



### References

1. Hammerschlag, M.R., et al, 1980, Bacteriology of Sputum in Cystic Fibrosis; Evaluation of Dithiothreitol as a Mucolytic Agent, *J. Clin. Microbiol.* 11:552-557
  2. Laughlin, J. & K. Khan, 2017, Efficacy of the Sigma SP™ Liquid Collection Device for Liquefaction of Respiratory Specimens and Workflow/standardization on the BD Kiestra® FA InoqUA, KNVM & NVMM Scientific Spring Meeting 2017, Papendal, Netherlands, Poster P101
- \*UK PATENT APPLICATION NUMBER 1705662.3

### Order Information

Product No.	Description	Fill Volume	Pack
MWSP	Sigma SP™ Liquid Mucolytic Reagent for Sputum	1ml.	50