

Formulation guidelines for aqueous black pigmented systems

Lankem have developed a new range of dispersing agents based on our new BioLoop technology that offers improved labelling and environmental profiling.

This guide covers three areas:

- The new BioLoop dispersing agents
- Traditional dispersing agents
- Additives to produce Universal Tinting

BioLoop Dispersing Agent

The following formulations are based on our BioLoop technology and will produce compatible, stable aqueous dispersions.

The benefits of using a BioLoop product are:



Black 7	%
Pigment Black 7	42
Lansperse LT87	11
PEG 400	4
Biocide	As required
Monoethanolamine	1
Dfoam AR2	0.1
Water	41.9

Black 7	%
Pigment Black 7	30
Lansperse LT87	11
PEG 400	3
AMP 80	0.2
Biocide	As required
Dfoam AR2	0.01
Water	55.79

Key Features

- » No skin or eye irritancy
- » Good ecotoxicity
- » Based on the BioLoop technology
- » Powerful dispersing properties
- » Low flocculation
- » VOC free

Traditional Surfactant Systems

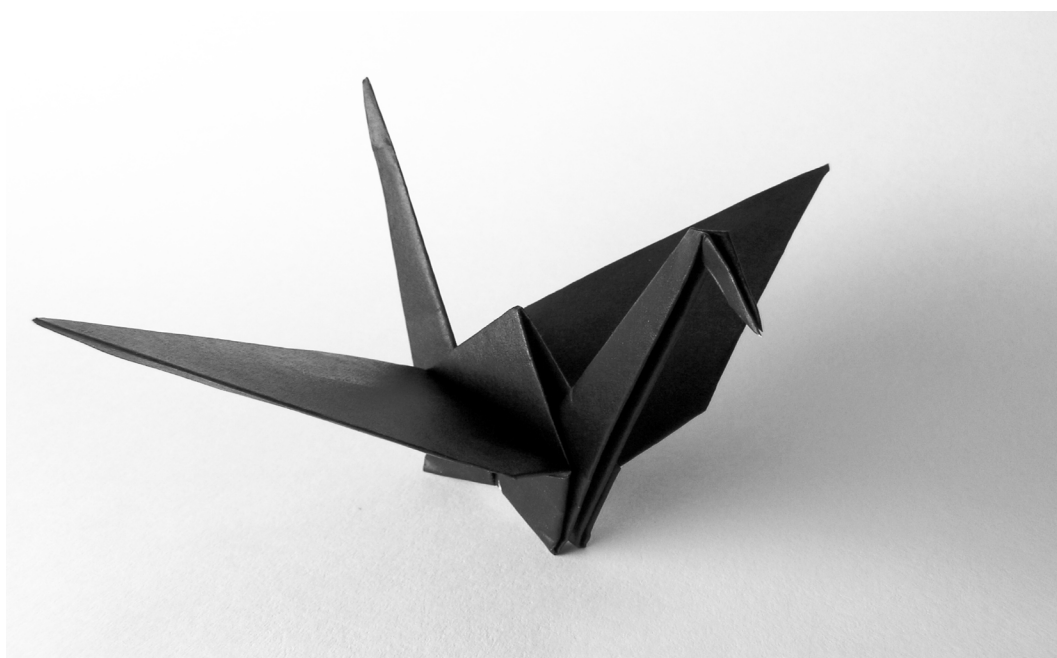
Our traditional range of dispersing agents have a proven track record in terms of high performance.

Black 7	%
Pigment Black 7	42
Lansperse DS200W	11
PEG 400	4
Monoethanolamine	1
Biocide	As required
Dfoam AR2	0.1
Water	41.9

Anionic surfactant system

The anionic formulation will produce pigment dispersions suitable for the mass colouration of paper, the colouration of soaps and cosmetics, household cleaners etc.

Black 7	%
Pigment Black 7	16
Lansperse DIS145	3
Monoethanolamine	1
Biocide	As required
Water	80



Universal Tinting

The following Universal Tinting formulation guide will produce an aqueous-based tinter that will be compatible with both aqueous and solvent-based decorative coatings.

Black 7	%
Water	31.5
Smectite Clay	0.5
Lansperse DS80	2.8
Lansperse DS200W	4.5
Dfoam AR2	0.1
PEG 400	13.5
Biocide	As required
Pigment Black 7	15
China Clay	14.5
Barium Sulphate	14.5
Lansperse UT57	3
Monoethanolamine	0.1



Product Profiles

- [Lansperse LT87](#) is a 80% active BioLoop dispersing agent.
- [Lansperse DS80](#) is a 80% active traditional anionic dispersing agent.
- [Lansperse DS200W](#) is a 80% active traditional nonionic dispersing agent.
- [Lansperse DIS145](#) is an anionic powder - 100% active.
- [Lansperse UT57](#) is a powerful compatibilizer to aid dispersion - typically 93% active.
- [Dfoam AR2](#) is a non-silicone based defoamer.

These recommendations are for guidance only and the formulator should use a ladder approach to find optimum addition levels of the dispersing agents due to difference in pigment types.