

The Definitive Program for Spray Booth Sludge Pool Paint Detackification Treatment



For
Automotive Manufacturers
By

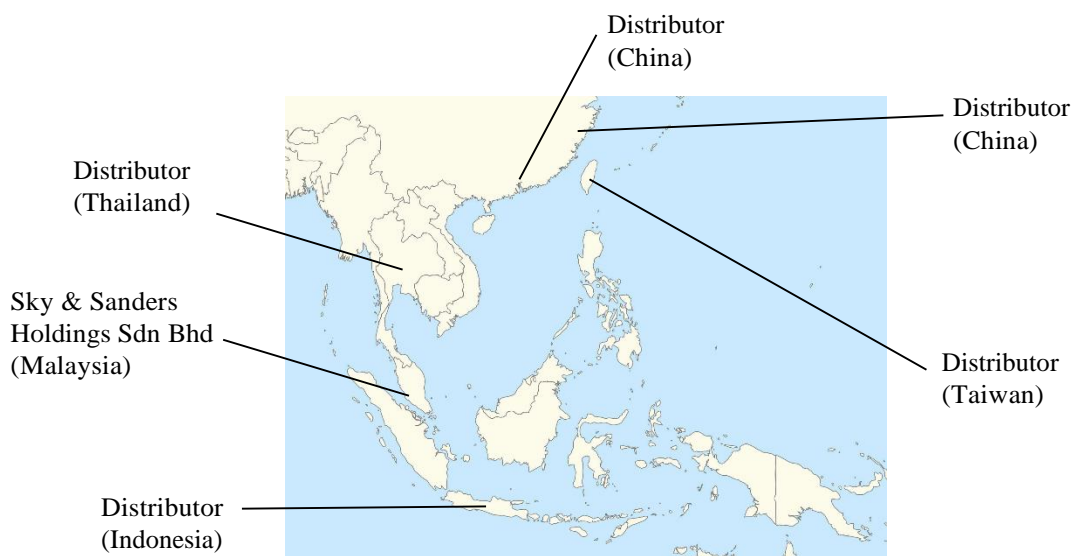
SKY & SANDERS HOLDINGS SDN BHD

About Us



Sky & Sanders Holdings Sdn Bhd's key customers and distributors revolves around industrial sector companies within the Asian-Pacific Hemisphere such as China, Thailand, Taiwan and Indonesia.

Sky & Sanders is an international company that is committed to seek for distributors from other countries that focus in spray booth water treatment and industrial water treatment (boiler, cooling tower and industrial effluent)



With 30 years of experiences in spray booth water treatment, Sky & Sanders focuses on innovating and developing new environmental friendly chemicals to achieve the optimum water quality result. One of our greatest achievements over the years is the commitment in providing the best manufactured products, services and competitive values to our customers. We are eager to provide and ensure robust customer support services, technical know-how coupled with superior chemical knowledge to improve customer satisfaction.

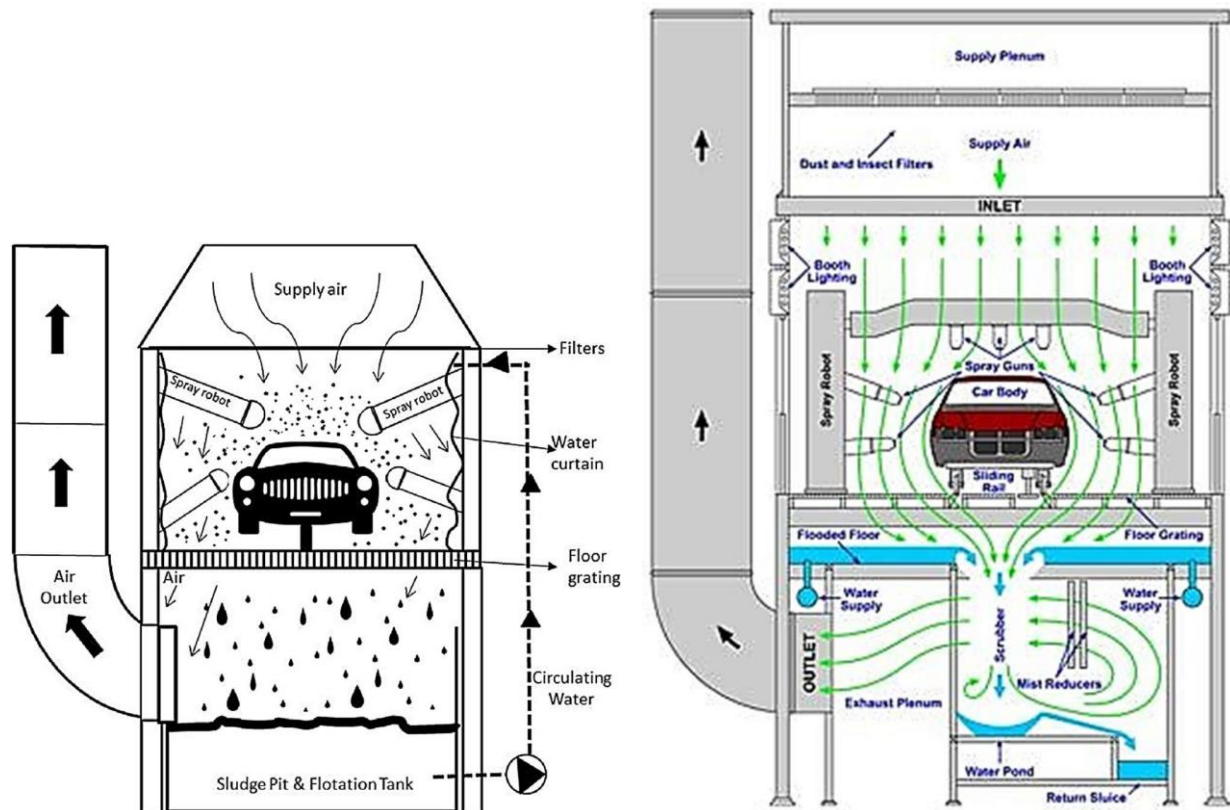
Sky & Sanders are specialists in handling both solvent borne and water borne paint treatment. By combining solid knowledge, experience and advance expertise in chemical, Sky & Sanders help clients to save up to 10-20% of spray booth water treatment cost, achieve high quality water and more solid sludge.



Spray Booth Operation

As the paint sludge water comes out of the spray booth, there are 2 common factors that can affect the paint water's concentration and quality.

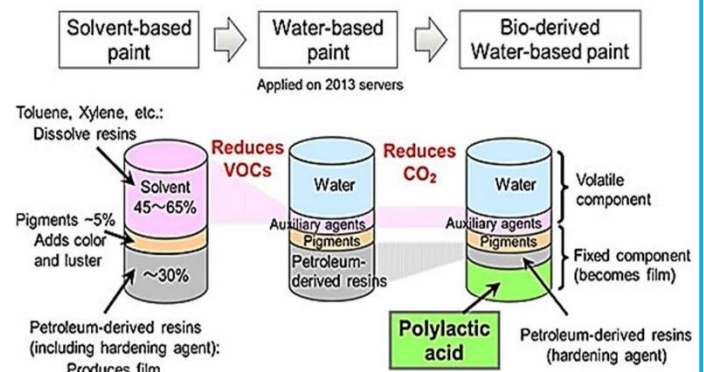
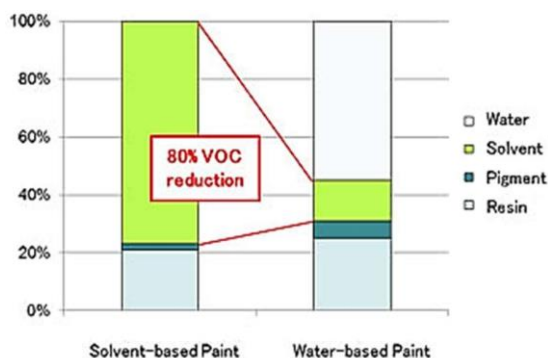
Air Flow Distribution



Uneven air flow distribution will result in heavy loads of overspray paint contained in the spray booth, increasing paint usage and car rejection. Besides that, it will cause the paint to stick onto the robotic arms or walls which will encourage unwanted high maintenance cost. Due to an increase in paint usage and an indirect increase of overspray paint, more paint particles will flow into the circulation water resulting in high chemical consumption.

Type of Paint

Paint characteristics play an important role in impacting the spray booth water treatment because different paint requires different chemical treatments.



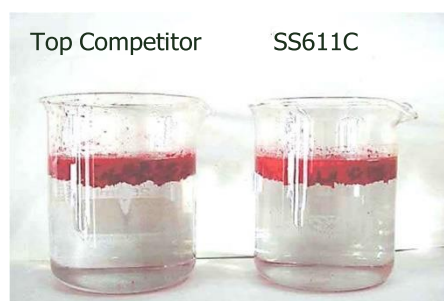
Chemical Test Summary

Product Code:

SS 611C (paint detackifier / paint killer)

- Latest technology for modern high solids paint.
- Instant paint detackification/killer.
- Reduce odour.
- Minimises Biological problems.
- Maximises solids capture.
- Low consumption

Evaluation Test 1



Able to capture and float all types of paint.
Clear water detected



Well Conditioned Paint Sludge treated with SS611C

Evaluation Test 2



Before

SS611C
0.82ml

Competitor
0.82ml



SS611C
0.82ml

Competitor X
0.82ml

Competitor Y
0.94ml

Result

- Consumption reduced by 12%.
- Crystal clear water detected.
- Big/dense floc detected

Cost Analysis

- More cost-effective program.
- Savings over 12% comparing with top competitor products.

Key Benefits

- Higher quality products.
- Lower chemical consumption.
- More cost-effective program.
- Higher profitability for Automotive Manufacturing

Product Code:

SS 711 (paint flocculant)

- Group up paint for easy disposal
- High removal in sludge moisture content

Good solid capture



Easy handling for paint sludge



Sludge with less moisture



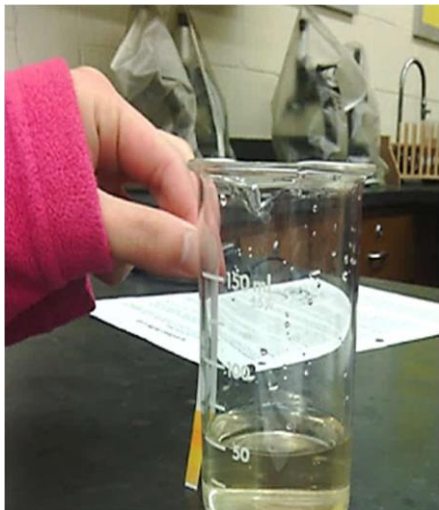
Sludge easily dewater and dry



Product Code:

SS pH plus (pH buffer)

- Adjust and maintain the pH
- Reduce chemical usage with optimum pH adjustment



Product Code:**ECO 650K, ECO 303A (paint detackifier / paint killer)**

- Eco-friendly product
- Instant paint detackification/killer.
- Reduce odor.
- Minimizes Biological problems.
- Maximizes solids captured.
- Very low consumption



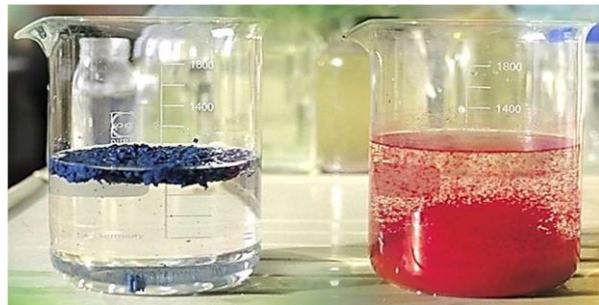
The sludge on the left was completely detackified as it has been treated with our products ECO650K & ECO303A. It is well conditioned with a high solid mass that is easy to handle and dewater.

While the sample paint on the right remains tacky due to the usage of metal salts contained in our competitor's products.

Product Code:**ECO 712 (paint flocculant)**

- Eco-friendly product
- Groups up paint for easy disposal
- Strong removal in sludge moisture content

The result of ECO product (ECO650K, ECO303A and ECO712) in chemical summary test and site result are shown as follow:

Laboratory test result

On the left:
Laboratory test on ECO650K, ECO303A and ECO712

On the right:
Competitor's product

On-Site Test Result

Clear Water

Compact &
Capture high
solid paint
sludge



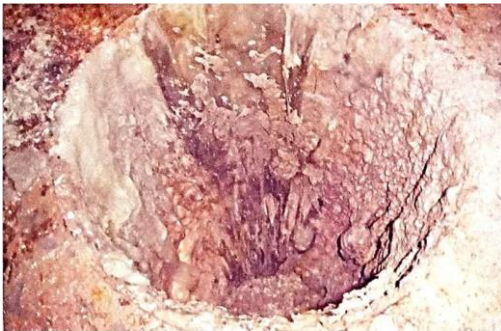
Client Benefits:

1. Improved Booth Operation

SS611C, ECO650K and ECO303A are Paint Detackifiers that are effective in all booth types, including waterwall, upflow, center slot down draft or down draft dynatube.

- Paint particles are completely detackified the moment they hit the booth water.
- Built up spray paint will be minimized
- The booth stays cleaner.

Because the booth stays in balance, your paint system performs at its best. You enjoy better paint jobs, fewer rejection product, fewer re-do jobs and reduced production costs.



Improper Treatment
(Before Treatment)



After cleaning



After apply SS611C

Superior Results on a Wider Range of Paints

Solvent borne, high solids, water borne, primers, basecoats, metallics, clear coatings - any and all combinations of paints are easily handled by the SS611C and ECO products range because:-

- It completely and instantly detackifies all types of paint solids in treated water.
- Produces dense buoyant sludge with maximum solids captured and removed, keeping the booth water cleaner.
- Minimizes foaming and biological problems, reducing the need for defoamers and biocides.



Clear Water and High Solid Paint sludge Captured

Client Benefits:

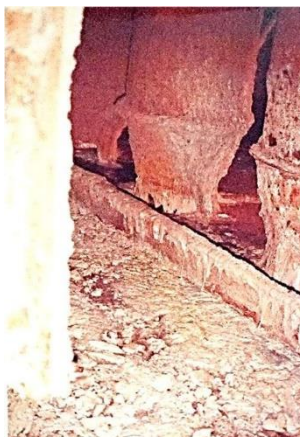
2. Reduce Cost of Maintenance and Treatment

Booth cleanup is easier and less frequent. Some customers have cut down booth cleaning's frequency by half.

Underbooths (Undersection) stays cleaner, longer. Some customers have extended intervals between each cleaning job up to 2 years.

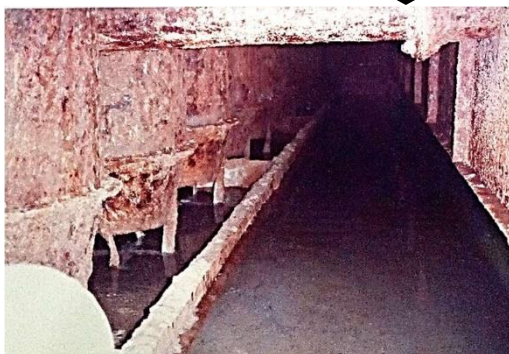
Simplifies product requirements. The S&S definitive programs only uses two products, compared to five or six products required in other programs.

Once you specify to our system, you will experience an immediate reduction in maintenance costs, handling, storage, inventory and administrative requirements, contributing to a cut in disposal costs.



← Paint stick around waterway and all undersection (Before treatment)

Clean undersection and clear waterway (After Treatment)



3. Reduce Disposal Cost



High Solid paint sludge is easily dewatered for disposal.

Products SS611C, SS711 and ECO work well in any sludge removal systems (natural flotation, air flotation or sedimentation collection systems)

It reduces dewatering time, because sludge treated with the SS 611C dewateres faster, you can either increase throughput or reduce the amount of time required for dewatering in all types of systems such as Hydropac/bag systems, horizontal filters, vacuum filters and filter press units.

Furthermore, the product SS611C and ECO products are organic, adding only small amount of solids to the system thus reducing total sludge volume at the outset. Therefore, you can avoid the heavy system loading and high disposal costs of using metal salts and clay-based treatment programs.

Because you add fewer solids, and sludge is easily dewatered, you will have less sludge and drier sludge. Moreover, the transportation costs will be minimized, regardless of the sludge disposal method used.

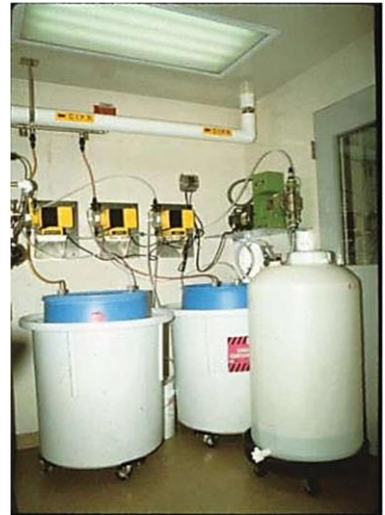
Greater paint solids will be captured, and recovery improves your dryingtime and moisture content.

The sludge also has a higher BTU value than sludges produced by other treatments. It is easily incinerated in waste heat recovery systems, which lowers burning and fuel costs.

Total Systems Management



The cost-effective results and benefits you can obtain from [Sky & Sanders](#) go far beyond the best for your paint booth operation and maintenance. You can call on a wide array of resources to improve the performances in your plant - products, technical support staff, chemical delivery systems, computer-based monitoring, control and preventative maintenance technologies - that ensures optimum operation.



Equipment and Chemical Feed Systems.

To ensure the best performance from our programs, [Sky & Sanders](#) offers a full range of equipment and feed systems including:

- Standard or pre-assembled chemical feeders.
- Custom designed systems
- Advance automation and control systems.

Flexible Distribution Systems

Along with the equipment systems, [Sky & Sanders](#) are committed to offer you many choices in product purchasing and container programs:

- Individual drums
- Single bins
- Stack bins
- Bulk



If you want to arrange for a no-risk evaluation, please contact your local [Sky & Sanders](#) agent, Or write to :-

[Sky & Sanders Holdings Sdn Bhd](#)
No.107, Jalan Pendamar 27/90
Seksyen 27, 40400 Shah Alam,
Selangor, Malaysia

Tel No:
+603 5191 8217

Email to :
info@skysanders.com

SS 611C

Paint Detackifier



DESCRIPTION

SS 611C is a metal-free liquid polymer used to detackify paint particles in recirculating water systems. It is a unique material that will coagulate all water-borne and solvent-borne paint.

SS 611C is designed for use in all types of water circulation systems. It performs well under many different operating conditions such as different variations of water quality, system design configurations, and types of paints and thinners sprayed.

ADVANTAGES

- Reduces system cleaning and maintenance.
- Proven effective on a broad range of new high-solids paints.
- Compatible with all types of paint-sludge dewatering.
- Does not contribute hazardous material to the waste.
- Effective over a wide pH range.
- Several feed options.

TYPICAL PROPERTIES

Appearance	Clear thin bluish liquid
pH	1.1 to 2.5
Density	1.02 ± 0.05
Freeze Point, °F	32 (not freeze-thaw stable, protect from freezing)
Brookfield Viscosity @ 250C, cps	< 50

FEED REQUIREMENTS

SS 611C should be fed neat. The product should be fed at a point in the system where good mixing occurs, to allow product dispersion and contact with paint particles.

PACKAGING

SS 611C is available in 215 kg drum

DOT Hazardous Class	Not Restricted
DOT Proper Shipping Name	Not Restricted
UN Number	Not Applicable

STORAGE & HANDLING

SS 611C must be protected from freezing. It is not freeze/thaw stable.
Storage tanks should be clean and dry before initial fill.

Sky & Sanders Holdings Sdn. Bhd. (183057-P)

No.107, Jalan Pendamar 27/90, Seksyen 27, 40400 Shah Alam, Selangor Darul Ehsan, Malaysia.
Tel: +603- 51918217 Fax: +603-51918317 URL : www.skysanders.com

SS 711

Paint Flocculant



DESCRIPTION

SS 711 is a high molecular weight, moderately cationic, liquid polyelectrolyte. This product forms a large shear-resistance floc and is effective over a wide pH range. It will aid in liquid/solid separation processes such as clarification, floatation, skimming and filtration.

ADVANTAGES

- Forms a large, easily dewatered floc.
- Can be used as it is, with no dilution or make-down necessary

TYPICAL PROPERTIES

Appearance	clear liquid
Solubility	complete
Density	1.00 ± 0.05
Viscosity @ 25 °F	100 - 500 cps
Flash Point	noncombustible
Freezing Point	27 °F
pH (as supplied)	6.5 ± 0.5

APPLICATION

SS 711 should be fed continuously at the point where flocculation of the sludge is required and good agitation exists. This point may vary from system to system depending on the overall design.

As sludge volume and concentration can vary greatly, final dosage should be determined during the actual operation. Your **Sky & Sanders** representative is available to help determine the optimum package.

PACKAGING

SS 711 is available in 215 kg drum

STORAGE

Store **SS 711** in heated buildings or heat-traced tanks. Although this product is freeze/thaw stable, stratification may occur upon freezing. **SS 711** will become homogeneous again upon agitation.

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SS pH Plus

pH Booster



DESCRIPTION

SS pH Plus is a pure grade of disodium carbonate solution. The product can be used in Spray Booth water treatment for regulation of water's pH and neutralization of effluent before water is discharged.

TYPICAL PRODUCT SPECIFICATION

Assay	25 ± 1%
pH	11 – 12
Specific Gravity	1.2 to 1.3

DOSAGE AND CONTROL

Dosage of SS pH Plus depends on system water quality.

PRODUCT PACKING INFORMATION

SS pH Plus is supplied in 250kg drum.

PRODUCT HANDLING INFORMATION

SS pH Plus may irritate skin and eyes upon contact. Wear chemical splash goggles, rubber gloves and coverall when handling the product. Please refer to Safety Data Sheet for more specific details on health and safety information of product.

PRODUCT STORAGE INFORMATION

Store in a dry place away from acids, metals (aluminium, zinc, tin and alloys), organic compounds and other materials that are easily ignited. Recommended in plant storage limit is one year in unopened containers.

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ECO 650K

Paint Detackifier



DESCRIPTION

ECO 650K is an innovative liquid polymer used to detackify paint particles in circulating water systems. It is a unique material that will coagulate all water-borne and solvent-borne paint.

ECO 650K is designed for use in all types of water circulation systems. It performs well under many different operating conditions such as different variations of water quality, system design configurations, and types of paints and thinners sprayed.

ECO 650K is composed of a reacted blend of naturally occurring plant-based material, an inorganic salt and organic polymeric materials. The active constituents are considered proprietary information for this product.

ADVANTAGES

- Does not contain formaldehyde.
- Reduces system cleaning and maintenance.
- Proven effective on a broad range of new high-solids paints.
- Compatible with all types of paint-sludge dewatering.
- Does not contribute hazardous material to the waste.
- Effective over a wide pH range.
- Several feed options

TYPICAL PROPERTIES

Appearance	Red Brown to Red Purple liquid
pH	11.0 to 12.0
Density	1.1 – 1.2 @ 77°F
Boiling Point	> 212°F
Freeze Point	32°F
Brookfield Viscosity @ 25°C, cps	200-800 cps Freeze-thaw Recovery
Freeze-thaw Recovery	Complete

FEED REQUIREMENTS

The dosage of **ECO 650K** will vary depending on the type of paint being used in the paint booth and the unique characteristics associated with your recirculation paint booth system. For complete dosage, feeding points and feeding equipment, consult your S&S representative

PACKAGING

ECO 650K is available in 235 kg drum

DOT Hazardous Class	Not Restricted
DOT Proper Shipping Name	Not Restricted
UN Number	Not Applicable

STORAGE & HANDLING

For **ECO 650K**, the recommended in-plant storage limit is one year in unopened containers. For handling and health effects please refer to the SDS for proper personal protective equipment(PPE).

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ECO 303A

Paint Detackifier



DESCRIPTION

ECO 303A is an innovative liquid polymer use together with ECO 650K to detackify paint particles in circulating water systems. It is a unique material that will coagulate all water- borne and solvent-borne paint.

ECO 303A is designed for use in all types of water circulation systems. It performs well under many different operating conditions such as different variations of water quality, system design configurations, and types of paints and thinners sprayed.

ECO 303A is composed of a reacted blend of naturally occurring plant-based material, an inorganic salt and organic polymeric materials. The active constituents are considered proprietary information for this product.

ADVANTAGES

- Does not contain formaldehyde.
- Reduces system cleaning and maintenance.
- Proven effective on a broad range of new high-solids paints.
- Compatible with all types of paint-sludge dewatering.
- Does not contribute hazardous material to the waste.
- Effective over a wide pH range.
- Several feed options.

TYPICAL PROPERTIES

Appearance	Clear liquid
pH	2.0 to 3.0
Density	1.2 – 1.3 @ 77°F
Freeze Point, °F	32
Brookfield Viscosity @ 25°C, cps	400-900 cps Freeze-thaw Recovery
Freeze-thaw Recovery	Complete

FEED REQUIREMENTS

The dosage of **ECO 303A** is 1:1.5 of ECO 650K and will vary depending on type of paint being used in the paint booth and the unique characteristics associated with your recirculation paint booth system. For complete dosage, feeding points and feeding equipment, consult your S&S representative.

PACKAGING

ECO 303A is available in 260 kg drum

DOT Hazardous Class	Not Restricted
DOT Proper Shipping Name	Not Restricted
UN Number	Not Applicable

STORAGE & HANDLING

For **ECO 303A**, the recommended in-plant storage limit is one year in unopened containers. For handling and health effects please refer to the SDS for proper personal protective equipment (PPE).

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ECO 712

Paint Flocculant



DESCRIPTION

ECO 712 is a high molecular weight, moderately cationic, liquid polyelectrolyte. This product forms a large shear-resistance floc and is effective over a wide pH range. It will aid in liquid/solid separation processes such as clarification, floatation, skimming and filtration

ADVANTAGES

- Forms a large, easily dewatered floc.
- Can be used as it is, with no dilution or make-down necessary

TYPICAL PROPERTIES

Appearance	Milky White liquid
Solubility	complete
Flash Point	noncombustible
Freezing Point	27 °F
pH (as supplied)	5.0-6.0

APPLICATION

ECO 712 should be fed continuously at the point where flocculation of the sludge is required and good agitation exists. Dosing point may vary from system to system depending on the overall design.

As sludge volume and its concentration can vary greatly, final dosage should be determined during actual operation. Your Sky & Sanders representative is available to help in determine the optimum dosage.

PACKAGING

ECO 712 is available in 25kgs pail or 205 kgs HDPE drum.

STORAGE

Store **ECO 712** in cool and ventilated area.

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SS 611 C	– Paint Detackifier
SS 711	– Paint Flocculant
SS pH plus	– pH booster
SS Systems	– Custom made systems
ECO 650K	– Paint Detackifier
ECO 303A	– Paint Detackfier
ECO 712	– Paint Flocculant