

Susan's Sensational Solution

Boeing BAC5408 Approved for use via PSD 6-75

Technical Data Sheet

Introducing SSS!

Susan's Sensational Solution is an effective blend of non-flammable hydrofluoroethers (HFEs), trans-1,2-dichloroethylene (t-DCE), and alcohol, formulated for the purpose of defluxing and vapor degreasing.

Susan's Sensational Solution is a reliable alternative to n-propyl bromide (nPB), TCE, and other toxic vapor degreasing solvents.

Susan's Sensational Solution possesses beneficial physical properties as a solvent, such as high density, low viscosity and low surface tension for excellent performance. For cleaning in the shortest optimal amount of time, the solvent needs to flow very close to the metal surface, to be able to "catch and release" contaminants.

Material Friendly

Susan's Sensational Solution is compatible with all metal surfaces, ceramic and other materials that are non-conducting. It is generally compatible with most elastomeric materials, other than fluoroelastomers which can swell. It is highly recommended to test all materials prior to use.

Benefits of SSS

Susan's Sensational Solution was formulated to balance optimal performance, worker's health and safety, and environmentally preferred attributes.

- Non-ozone depleting chemical
- Drop-in replacement for PERC
- Low toxicity providing a high allowable exposure limit
- Low global warming potential
- No ceiling on instantaneous exposure
- Chemically stable

Table 1: Material Compatibility

	Compatible	Additional Testing Required
Metals	Aluminum, Copper, S/S Titanium, Brass, Tungsten	N/A
Elastome	Neoprene, Butyl Rubber	Viton, Kalrez
Plastics	HDPE, PTFE, Nylon, PVC Epoxy, Phenolic	Acrylic, ABS

Table 2: Physical Properties

Property	SSS	TCE	nPB
Boiling Point °C [°F]	43 [109]	87 [189]	71 [160]
Density at 25°C (77°F) kg/liter [lb/gal]	1.26 [10.6]	1.46 [12.15]	1.35 [11.26]
Surface Tension at 25°C (77°F) dyne/cm	21	32.3	25.9
Viscosity at 25°C (77°F), cPs	0.46	0.54	0.49
Vapor Pressure at 25°C (77°F) kPa	41	9.9	20.3
Heat of Vaporization @bp cal/g	64.3	56	58.8
Global Warming Potential	<30	n/a	n/a
Ozone Depleting Chemical	No	No	No
Volatile Organic Compounds (VOC) g/l	756	1,470	1,350
Allowable Exposure Limit (AEL) ppm	352	10	<10
Worker Exposure Ceiling (ppm)	No	30	10
KB Value	92	120	125

Table 3: Flammability

	Test Method	Susan's Sensational Solution
Flash Point (CC)	ASTM D93	None
Flash Point (OC)	ASTM D1310	None
Flammability in Air	ASTM E681	
Lower Explosivity		6.1 vol%
Upper Explosivity		11.1 vol%

Worker Safety

Results from acute toxicity studies have proven that Susan's Sensational Solution has a low toxicity and a calculated Acceptable Exposure Limit of 335 ppm. The ingredients in Susan's Sensational Solution do not possess any chronic or acute toxicity associated with them, making it a worker friendly solvent.

Please refer to the SDS for more information related to exposure limits and toxicity-related data.

LssChemicals Susan's Sensational Solution is not classified as a flammable liquid per the definitions by NFPA and DOT, as it does not exhibit closed cup or open cup flash point. However, because it is volatile, there is still an associated risk of vapors becoming flammable in the air. Flash point data and vapor flammability limits are shown below.

Storage Info

Susan's Sensational Solution is stable both thermally & chemically. Some notable features of the solvent include:

- Non-reactive
- Low water solubility
- Will not oxidize or degrade when exposed to air
- No effects by sunlight or UV radiation

Standard industrial storage practices include keeping the solvent away from food sources and volatile temperature conditions. Freezing temperatures can cause compression of the drums, while hot temperatures will cause ballooning of the drum. If undergoing these conditions, the product will still be usable and effective.