

NuGenTec nPB Based Precision Solvents

Technical Properties	NuSolv™ 6368	NuSolv™ 6368ES	TCE	PERC
Azeotrope	True	True	N/A	N/A
Flash Point ASTM D-93	None	None	None	None
Boiling Point	55 °C (131 °F)	64 °C (148 °F)	87 °C (189 °F)	121 °C (250 °F)
Specific Gravity (g/ml)	1.160	1.250	1.460	1.620
VOC Content (g/L)	1310	1250	1460	0
Chemistry	Brominated	Brominated	Chlorinated	Chlorinated
Vapor Pressure (mm Hg @ 25 ° C)	139	111	60	18
Specific Heat (BTU/lb-°F)	0.27	0.27	0.23	0.21
Kauri Butanol Value	129	>130	125	90
Hansen Parameters (Disperse / Polar / H2 Bond)	16.4 / 7.9 / 4.8	16.3 / 7.7 / 7.2	8.8 / 1.5 / 2.6	19.0 / 6.5 / 2.9
Surface Tension (dynes/cm @ 25 °C)	24.5	24.9	28.7	31.8
Cleaning Strength	High	High	High	High
Global Warming Potential (GWP)	0.2	0.3	0.1	0.2
Exposure Limit Information (ppm)	USEPA: 18 ppm ACGIH: <10 ppm OSHA PEL: 200 ppm	USEPA: 18 ppm ACGIH: <10 ppm OSHA PEL: 400 ppm	ACGIH: 50 ppm OSHA PEL: 100 ppm	ACGIH: 25 ppm OSHA PEL: 100 ppm
Regulatory Information	VOC US EPA SNAP Approved	VOC US EPA SNAP Approved	NESHAP Applies HAP VOC Content	NESHAP Applies HAP VOC Content
Hazardous Air Pollutant (HAP)	No	No	Yes	Yes
DOT Shipping Classification	Non-regulated	Non-regulated	Hazard Class 6.1	Hazard Class 6.1
IARC Cancer Classification	Not listed	Not listed	2A	2A



High-Performance Cleaning Solvent

High-performance cleaning solvent ideal for use in electronics and circuit assembly defluxing, removal of solder fluxes, pastes, ionic residues, particulates, greases, resins, inks, silicone oils, buffing compounds, drawing oils and lapping compounds, as well as all metals and a broad range of elastomers and plastics. Conforms to Table 1 of ASTM D6368-06.

Description:

NuGeneration Technologies' NuSolv™ 6368 is a stabilized n-Propyl Bromide formula used to remove solder fluxes, pastes, ionic residues, particulates, greases, resins, inks, silicone oils, buffing compounds, drawing oils and lapping compounds from a variety of surfaces including electronic and circuit assemblies, ferrous and non-ferrous alloys including Copper, Copper alloys (brass, bronze, etc.), Nickel, steel, stainless steel, Titanium, Zinc, and Aluminum., as well as a wide range of elastomers and plastics. NuSolv™ 6368 is hydrolytically stable in the presence of water contamination, which is a common problem in vapor degreasing. NuSolv™ 6368 conforms to Table 1 of ASTM D6368-06.

Characteristics:

NuSolv™ 6368 was formulated to be used at both ambient temperatures for cold-cleaning/wipe applications as well as at elevated temperatures for vapor phase cleaning. **NuSolv™ 6368** has very high solvency, with a Kb value of 130, making it a superior drop-in replacement for trichloroethylene (TCE), perchloroethylene (PCE), methylene chloride (MeCl), and expensive alternatives such as hydrofluorocarbons (HFC's) and hydrofluoroethers (HFE's). **NuSolv™ 6368** is a non-flammable solvent, and is SNAP approved due to its negligible impact on the ozone layer.

Directions for Use:

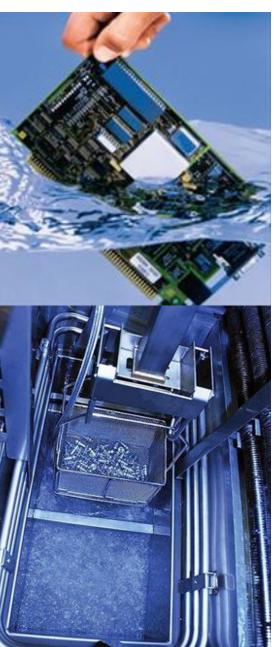
NuSolv™ 6368 is used at 100% concentration, and is effective at ambient temperatures in cold cleaning and wipe applications. However, it can also be used up to 71 °C (160 °F) for 5 seconds to 5 minutes for vapor phase cleaning. The parameters can vary due to the type and extent of soils to be removed.

Product Benefits

- High-performance, environmentally-friendly solvent blend.
- Effective at ambient temperatures for cold-cleaning applications, or at elevated temperatures for vapor-phase cleaning.
 - Compatible with all metals and most elastomers and plastics.

NuSolv[™] 6368 Physical Properties





Physical Properties	
Use concentration (cold-cleaning/immersion) Use concentration (vapor phase)	100% by volume 100% by volume
Bulk Density	10.9 lbs/gal
Operating Temps	Ambient to 71 °C
Boiling Point	71 °C
pH, @100%	N/A
VOC	1310 g/L
Flash Point	None
Cleaning Strength	High
Ozone Impact (ODP)	Zero
Global Warming Potential (GWP)	0.3
Kb Value	129
Vapor Pressure (mm Hg)	139
Regulatory Information	VOC US EPA SNAP Approved
Exposure Limit Information (ppm)	18 ppm USEPA <10 ppm ACGIH

Availability: 1-gallon, 5-gallon, 55-gallon, 275-gallon totes and bulk tankers.

Shipment: Non-regulated material, liquid

Storage: Keep out of direct sunlight. Keep from freezing.

Store between 40 °F - 120 °F.

Disposal: Dispose of in accordance with local, state, and federal regulations. For assistance with disposal contact NuGeneration Technologies at 888-99-NuGen or email: salesteam@nugentec.com.

Regulatory: This product is classified and labeled according to the Globally Harmonized System (GHS).

EMERGENCY OVERVIEW:

May cause cancer. May damage fertility of the unborn child. Causes damage to organs. May cause damage to organs through prolonged or repeated exposure. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness.

SAFETY:

Please make sure you have read and understand the product label and SDS before using this product. Avoid breathing vapors, spray or mists. Use only with adequate ventilation. Wash thoroughly after handling. Observe label precautions.

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Phone: (888) 99-NuGen Phone: (888) 996-8436 Fax: (707) 891-3012 www.NuGenTec.com info@NuGenTec.com



High-Performance Electronics Cleaning Solvent

High-performance electronics cleaning solvent ideal for use in electronics and circuit assembly defluxing, removal of solder fluxes, pastes, ionic residues, particulates, greases, resins, inks, silicone oils, buffing compounds, drawing oils and lapping compounds.

Description:

NuGeneration Technologies' NuSolv™ D6368ES is a stabilized, true azeotropic formula based on n-Propyl Bromide and Isopropyl Alcohol used to remove solder fluxes, pastes, ionic residues, particulates, greases, resins, inks, silicone oils, buffing compounds, drawing oils and lapping compounds from a variety of surfaces including electronic and circuit assemblies, ferrous and non-ferrous alloys including Copper, Copper alloys (brass, bronze, etc.), Nickel, steel, stainless steel, Titanium, Zinc, and Aluminum.



Characteristics:

NuSolv™ D6368ES was formulated to be used at both ambient temperatures for cold-cleaning/wipe applications as well as at elevated temperatures for vapor phase cleaning. NuSolv™ D6368ES contains a mixture of solvents, allowing for effective removal of a wide variety of soils. NuSolv™ D6368ES has very high solvency, with a Kb value of >130,, making it a superior drop-in replacement for trichloroethylene (TCE), perchloroethylene (PCE), methylene chloride (MeCl), and expensive alternatives such as hydrofluorocarbons (HFC's) and hydrofluoroethers (HFE"s), as well as an alternative to standard nPB. NuSolv™ D6368ES is a non-flammable solvent, and is SNAP approved due to its negligible impact on the ozone layer. NuSolv™ 6368ES is hydrolytically stable in the presence of water contamination, which is a common problem in vapor degreasing. NuSolv™ 6368ES conforms to Table 1 of ASTM D6368-06.

Directions for Use:

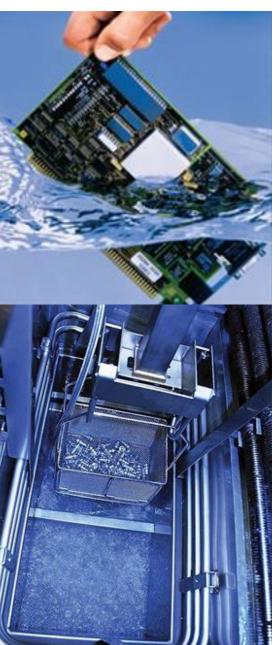
NuSolv™ PNPB is used at 100% concentration, and is effective at ambient temperatures in cold cleaning and wipe applications. However, it can also be used up to 54 °C (148 °F) for 5 seconds to 5 minutes for vapor phase cleaning. The parameters can vary due to the type and extent of soils to be removed.

Product Benefits

- High-performance,, environmentally friendly solvent blend.
- Effective at ambient temperatures for cold-cleaning applications, or at elevated temperatures for vapor phase cleaning.
- Ideal for removing flux residue, ionics, particulates, pastes, oils and greases.

NuSolv[™] PNPB Physical Properties





Physical Properties	
Use concentration (cold-cleaning/immersion) Use concentration (vapor phase)	100% by volume 100% by volume
Bulk Density	10.4 lbs/gal
Operating Temps	Ambient to 64 °C
Boiling Point	64 °C
pH, @100%	N/A
VOC	1250 g/L
Flash Point	None
Cleaning Strength	High
Ozone Impact (ODP)	Zero
Global Warming Potential (GWP)	0.3
Kb Value	>130
Vapor Pressure (mm Hg)	111
Regulatory Information	VOC US EPA SNAP Approved
Exposure Limit Information (ppm)	18 ppm USEPA <10 ppm ACGIH

Availability: 1-gallon, 5-gallon, 55-gallon, 275-gallon totes and bulk tankers.

Shipment: Non-regulated material, liquid

Storage: Keep out of direct sunlight. Keep from freezing.

Store between 40 °F - 120 °F.

Disposal: Dispose of in accordance with local, state, and federal regulations. For assistance with disposal contact NuGeneration Technologies at 888-99-NuGen or email: salesteam@nugentec.com.

Regulatory: This product is classified and labeled according to the Globally Harmonized System (GHS).

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EMERGENCY OVERVIEW:

May cause cancer. May damage fertility of the unborn child. May cause damage to organs through prolonged or repeated exposure. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness.

SAFETY:

Please make sure you have read and understand the product label and SDS before using this product. Avoid breathing vapors, spray or mists. Use only with adequate ventilation. Wash thoroughly after handling. Observe label precautions.