

ASTROBIO™ BA

Bio-Solvents Blend, replacement for butyl acetate Technical Data Sheet

Product name: ASTROBIO™ BA

Manufacturer: Liberty Chemicals s.r.l. (Italy)

Contact: info@astrobiosolvent.com

Area of Use:

Sustainable Replacement for butyl acetate in many industrial applications. It can be used to formulate coatings, laquers, paints, varnishes and inks based on alkydic, acrylics, epoxies, vinylics, melamines, and polyamides resins. It has a great solvency power for nitrocellulose and wood rosins as well. It's very effective as cleaner in industrial settings: i.e. for rollers, industrial and professional application tools for paints and coatings. **ASTROBIO™ BA** is used to formulate ecological paint strippers to remove PU based coatings and as a sustainable replacement for butyl acetate in leather finishing and manufacturing. It's available in cosmetic grade for the formulation of nail varnishes and polishers.

Technical Benefits:

- 20% -30% more efficient in reducing viscosity than butyl acetate.
- Dries completely and leaves no residue.
- Easy and inexpensive to distill or recycle.
- Outstanding solvent properties for laquers formulation and cleaning procedures.
- **Custom blend available for maximum performances.**
- Excellent flow characteristics when in formulation.
- Moderate vapor pressure and high loading capacity.

Available Packaging:

Drums	IBC	Bulk
208Kg	1040Kg	≥ 10MT
net weight	net weight	net weight



Key Features:

Bio-based solvent according to EN 16575

Flashpoint	24° C	EN 3679
RER (BuOAc=1)	0,35	Calculated
Vap. pressure (20°C)	2,74 kPa	Calculated
Boiling Range	90°- 154°C	-

Solvency power:

HSP's	δd	δp	δh	δt	Calculated
	16,23	7,29	10,85	20,89	

Environmental Benefits:

- Readily biodegradable raw materials.
- Slow Climate change: carbon neutral balance.
- Sustainable chemistry: renewable raw materials.
- No ozone depleting chemicals.
- No environmental hazardous ingredients.
- No hazardous air pollutants.

Health Benefits:

- Chlorine, Halogens, Ketons, Aromatic and Paraffins free.
- Sweet and highly appreciated smell.

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Guaranteed Specifications

Properties	Standard	ASTROBIO™ BA	Units
Appearance	Visual	Clear colourless liquid	
Colour	ASTRO001 ¹	20	Pt-Co (APHA), Max
Specific gravity (20°C)	ASTRO002 ¹	1,01 – 1,07	g/mL
Moisture	ASTRO003 ¹	0,2	% in weight, max

Technical Performances and properties

Properties	Standard	ASTROBIO™ BA				Units
Chemical composition	-	Blend of organic acids esters ²				-
Solvency power: HSP's	Calculated	δd	δp	δh	δt	Mpa ^{1/2}
		16,23	7,29	10,85	20,89	
Boiling range	-	90 - 154				°C
Flashpoint	EN 3679	24				°C
Evaporation rate	Calculated	0,35				RER (BuOAc=1)
Vapor pressure (20° C)	Calculated	2,74				kPa
Dynamic Viscosity (25° C)	ASTRO004 ¹	≈ 1,45				mPa.s

Environmental characteristics and Biodegradability

Properties	Standard/Reference	ASTROBIO™ BA	Units
Ready Biodegradability ³	OECD 301 series	> 85	% w/w in 10 days window
Ultimate biodegradability ⁴	-	100	% w/w at 67 days
Water hazard	WGK Germany	1	Class
VOC content	Directive 2010/75/UE and Swiss Regulation (814.018)	100	% w/w
	Directive 2004/42/CE	100	% w/w

This product has to be subjected from any industrial or professional user to careful tests, in order to evaluate his effectiveness for expected applications. Our company waives any responsibility in case of any improper usage of this product.

Manufactured in Italy (European Union).
ASTROBIO™ is a trade mark of Liberty Chemicals s.r.l.
 (Italy)

Issued by: ASTROBIO™ division | Liberty Chemicals s.r.l. (Italy).

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Footnotes:

1. Analysis conducted according to an internal standard protocol.
2. All ingredient are REACH registered.
3. Product has not been tested itself to access ready biodegradability, but all raw materials used during manufacture are classified as readily biodegradable according to one or several of the following OECD guidelines: OECD 301 A, B, C, D, E, F.
4. Product has not been tested itself to access ultimate biodegradability, but all raw materials used during manufacture are completely (100%) biodegradable in 67 days or less.