

ASTROBIO™ G1

Bio-Solvents Blend, ideal industrial and professional degreaser Technical Data Sheet

Product name: ASTROBIO™ G1
Manufacturer: Liberty Chemicals s.r.l. (Italy)
Contact: info@astrobiosolvent.com

Area of Use:

ASTROBIO™ G1 is a high performance, plant based bio-solvent suitable for cleaning and degreasing operations in many industrial and professional settings. It's a slow evaporating solvent, partially VOC, used to manufacture professional and household detergents, inks/graffiti/adhesives removers and paints strippers. It's used for heavy duty cleaning and maintenance procedure of industrial machinery (e.g paving machines) and in chemical/mining processing plants (oil, gas, minerals, coal) cause it readily dissolves greases, lubricants, tar, bitumen, asphalt, heavy hydrocarbons and combustion residues. **ASTROBIO™ G1 it's also a very strong asphalt and concrete release agent** (stronger than ASTROBIO™ G4 and G3) and it's water rinsable.

Technical Benefits:

- **Outstanding results in cleaning/degreasing formulations.**
- Better cleaning power and reduced solvent usage than many other fossil based solvents.
- **Non-flammable – it can be used on cold or on hot surfaces - high flashpoint.**
- Easy and inexpensive to distill or recycle.
- Water rinsable.
- **Strong solvency power for different resins, polymers grade and soils.**
- High loading capacity

Available Packaging:

Drums	IBC	Bulk
190Kg	950Kg	≥ 10MT
net weight	net weight	net weight



Key Features:

Bio-based solvent according to EN 16575

Flashpoint	90° C	EN 3679
RER (BuOAc=1)	0,02	Calculated
Vap. pressure (20°C)	0,35 kPa	Calculated
Boiling Range	151° - 379°C	-

Solvency power:

HSP's	δd	δp	δh	δt	Calculated
	16,54	4,75	7,88	19,20	

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.
- **Non flammable, light labelling.**
- Faint and pleasant smell.

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Guaranteed Specifications

Properties	Standard	ASTROBIO™ G1	Units
Appearance	Visual	Clear yellowish liquid	-
Colour	ASTRO001 ¹	200	Pt-Co (APHA), Max
Specific gravity (20°C)	ASTRO002 ¹	0,92 – 0,98	g/mL
Moisture	ASTRO003 ¹	0,5	% in weight, max

Technical Performances and properties

Properties	Standard	ASTROBIO™ G1				Units
Chemical composition	-	Blend of organic acids esters ²				-
Solvency power: HSP's	Calculated	δd	δp	δh	δt	Mpa ^{1/2}
		16,54	4,75	7,88	19,20	
Boiling range	-	151 - 379				°C
Flashpoint	EN 3679	90				°C
Evaporation rate	Calculated	0,02				RER (BuOAc=1)
Vapor pressure (20° C)	Calculated	0,35				kPa
Dynamic Viscosity (25° C)	ASTRO004 ¹	≈ 3,50				mPa.s

Environmental characteristics and Biodegradability

Properties	Standard/Reference	ASTROBIO™ G1	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)	50	% w/w
	Directive 2004/42/CE	50	% 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 or inherently biodegradable according to one or more of the following OECD guidelines: OECD 301 A, B, C, D, E, F or OECD 302 A, B, C, D.
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.