

# ASTROBIO™ K2

## Bio solvent blend replacement of methyl ethyl ketone Technical Data Sheet

**Product name:** ASTROBIO™ K2  
**Manufacturer:** Liberty Chemicals s.r.l. (Italy)  
**Contact:** [info@astrobiosolvent.com](mailto:info@astrobiosolvent.com)

### Area of Use:

**Sustainable and safer, plant derived bio-solvent replacement of MEK** in many industrial applications. It's used in formulation of coatings, laquers, paints, varnishes, adhesives and inks products based on acrylics, polyesters, melamines and vinylics resins. It has a great solvency power for nitrocellulose and wood rosins as well. It's very effective as cleaner in industrial settings to remove different kinds of residues and soils. Suitable for cold degreasing (e.g. after polymerization in synthesis reactors). **ASTROBIO™ K2** is also available in cosmetic grade for formulating eco-friendly nail varnishes and polishers.

### Technical Benefits:

- 20% -30% more efficient in reducing viscosity than MEK.
- Reduced evaporation losses: stays on the job longer than MEK.
- **Dries completely and leaves no residue.**
- Easy and inexpensive to distill or recycle.
- **Strong solvency power for different resins, polymers grade and soils.**
- **Custom blend available for maximum performances.**
- Excellent flow characteristics in formulation.
- High loading capacity.

### Available Packaging:

Drums	IBC	Bulk
174Kg	870Kg	≥ 10MT
net weight	net weight	net weight



### Key Features:

#### Bio-based solvent according to EN 16575

Flashpoint	6° C	EN 3679
RER (BuOAc=1)	1,51	Calculated
Vap. pressure (20°C)	7,04 kPa	Calculated
Boiling range	71° -151° C	-

### Solvency power:

HSP's	$\delta_d$	$\delta_p$	$\delta_h$	$\delta_t$	Calculated
	15,88	6,87	12,70	21,94	

### Environmental Benefits:

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

### Health Benefits:

- Aromatics, ketones, paraffins and alogens FREE.
- Guaranteed FREE of hazardous or toxic substances.
- **Non irritant to eye contact.**
- Safer than MEK due to its hazard statements.

### LIBERTY CHEMICALS s.r.l.

### Guaranteed Specifications

Properties	Standard	ASTROBIO™ K2	Units
Appearance	Visual	Clear colourless liquid	-
Colour	ASTRO001 <sup>1</sup>	20	Pt-Co (APHA), Max
Specific gravity (20°C)	ASTRO002 <sup>1</sup>	0,84 – 0,90	g/mL
Moisture	ASTRO003 <sup>1</sup>	0,2	% in weight, max

### Technical Performances and properties

Properties	Standard	ASTROBIO™ K2				Units
Chemical composition	-	Blend of organic acids esters and alcohols <sup>2</sup>				-
Solvency power: HSP's	Calculated	δd	δp	δh	δt	Mpa <sup>1/2</sup>
		15,88	6,87	12,70	21,94	
Boiling range	-	71 - 151				°C
Flashpoint	EN 3679	6				°C
Evaporation rate	Calculated	1,51				RER (BuOAc=1)
Vapor pressure (20° C)	Calculated	7,04				kPa
Dynamic Viscosity (25° C)	ASTRO004 <sup>1</sup>	≈ 0,82				mPa.s

### Environmental characteristics and Biodegradability

Properties	Standard/Reference	ASTROBIO™ K2	Units
Ready Biodegradability <sup>3</sup>	OECD 301 series	> 85	% w/w in 10 days window
Ultimate biodegradability <sup>4</sup>	-	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.