

Documented Development History of 3Dresyns Material and Process Platforms

Dated company milestones separated from comparative primacy, safety and regulatory claims

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Highlights

- Historical wording remains a current claim when republished and is held to current evidence rules.
- First, pioneer and most-extensive claims require a documented market review or are removed.
- Monomer-free options are separated from product-specific biological test information.
- SDS classification, biological evidence and finished-device MDR assessment are distinct.
- Bio-content, biodegradation, compost testing and lifecycle performance are not interchangeable.

Abstract

This paper records dated company development milestones using internal launch records, archived product documents and controlled external sources.

Comparative primacy and absolute safety or biological claims are removed unless substantiated by a documented market review and exact product evidence. Quotation marks do not neutralise historical claims.

The revised comparison architecture separates formulation, SDS classification, biological test evidence and the legal manufacturer's finished-device pathway.

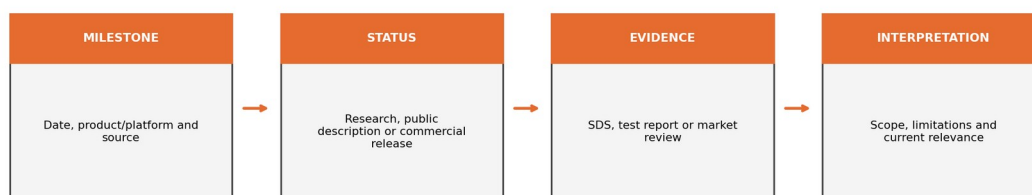
Keywords company history · innovation · milestone · evidence · claims control

Source use. Company milestones are controlled in [1]; chemical/biological/legal scope in [2–4]; environmental methods in [5–6].

1. Milestone evidence

Every milestone records date, product/platform, document or archive reference, public/commercial/research status and limitation.

- Avoid unsupported first/pioneer wording.
- Distinguish launch from market adoption.
- Preserve document provenance.



Release requires traceable evidence at every gate; a catalogue label cannot bypass the chain.

Figure 1. WP-49 evidence gates from controlled material description to final acceptance.

2. Claim-safe historical comparison

A conventional-resin panel is included only as a sourced example. Current product SDS and exact biological reports replace pictogram and ISO-compatibility shortcuts.

- No blanket percentage biological-suitability wording.
- No risk-pictogram-free architecture.
- No generic MDR alignment.

3. Sustainability chronology

ASTM bio-based carbon, OECD biodegradation, controlled compost testing and lifecycle assessment are recorded as distinct milestones and evidence types.

4. Minimum controlled evidence before release

Control field	Required record	Release interpretation
Milestone	Date, product/platform and source	Catalogue description only until evidence is linked
Status	Research, public description or commercial release	Control process variables and change triggers
Evidence	SDS, test report or market review	Report method, result, uncertainty and limits
Interpretation	Scope, limitations and current relevance	Apply final acceptance and responsibility boundary

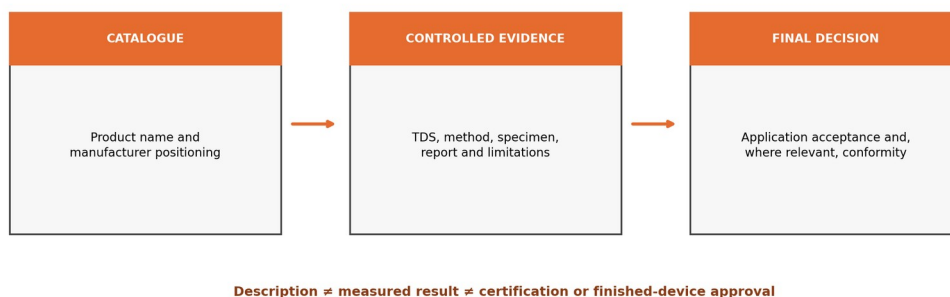


Figure 2. WP-49 separates catalogue positioning, measured evidence and final application decisions.

KEY INSIGHT

Precise product or application language is retained only when the exact formulation, method, processed specimen and controlled evidence can be traced.

5. Limitations

- Historical quotations remain claims.
- Absolute safety and blanket biological-suitability claims are removed.
- Primacy requires a market review.
- CLP, biology and MDR are separated.
- Environmental evidence types are not merged.

6. Conclusions

- Historical wording remains a current claim when republished and is held to current evidence rules.
- First, pioneer and most-extensive claims require a documented market review or are removed.
- Bio-content, biodegradation, compost testing and lifecycle performance are not interchangeable.
- This corrected candidate remains local and on HOLD until series-wide scientific, metadata and visual release checks are complete.

Revision note

Version 5.5 removes absolute safety/biocompatibility, unsupported primacy and pictogram/MDR shortcuts and rebuilds history around dated source, maturity, evidence and scope.

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Disclosure. Dr. Juan Segurola is founder and Scientific Director of 3Dresyns by Resyner Technologies S.L., the supplier of the materials discussed.

References

- [1] 3Dresyns. Controlled company archive, launch records, historical TDS/SDS and dated webpages.
- [2] Regulation (EC) No 1272/2008 on classification, labelling and packaging.
- [3] ISO 10993-1:2025. Biological evaluation of medical devices—Part 1.
- [4] Regulation (EU) 2017/745 on medical devices.
- [5] ASTM D6866 and OECD Test No. 301; use exact controlled editions at release.
- [6] ISO 14040:2006 and ISO 14044:2006. Life cycle assessment.