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TECHNICAL DATA SHEET (TDS)

Product: Ruby M Nano | Material code: FG-RubyM-Nano-001

Revision date: 03 September 2026 | Version: 1.0

1. Product description

Ruby M Nano is a cosmetic ingredient blend comprising an aqueous base, botanical extract, humectant system, botanical oil blend, emulsifier, stabiliser, and preservation / antioxidant system. The blend is intended for incorporation into final cosmetic and personal care formulations. No nanoparticles are intentionally present in the product. The term “Nano” refers only to the manufacturing/emulsification process and not to a nanomaterial classification.

2. Intended use

Cosmetic ingredients blend for incorporation into cosmetic/personal care formulations. For external use in cosmetic formulations. Not intended for ingestion.

3. Composition (w/w)

Component	INCI name	CAS No.	% w/w
Deionised water	Aqua	7732-18-5	25 – 35
Acmel-Active Mixture	Acmella Oleracea Extract (and) 1,3-Propanediol (and) Aqua	90131-24-1 & 504-63-2 & 7732-18-5	15 – 25
Vegetable glycerin	Glycerin	56-81-5	10 – 20
Disodium EDTA	Disodium EDTA	139-33-3	≤ 0.5
Xanthan gum	Xanthan Gum	11138-66-2	≤ 0.5
Saliguard BDHA (preservative)	Benzyl Alcohol (and) Dehydroacetic Acid	Mixture	≤ 2.0
Rosemary extract (10% HG Liquid Extract)	Aqua (and) Glycerin (and) Rosmarinus Officinalis Leaf Extract (and) Potassium Sorbate (and) Disodium EDTA (and) Sodium Benzoate	84604-14-8	≤ 2.0
Polysorbate 20	Polysorbate 20	9005-64-5	3 – 7
Soy lecithin	Lecithin	8002-43-5	≤ 2.0
Rosehip seed oil	Rosa Rubiginosa Seed Oil	84603-93-0	10 – 20
Baobab seed oil	Adansonia Digitata Seed Oil	91745-12-9	
Vitamin E acetate	Tocopheryl Acetate	7695-91-2	≤ 2.0
MCT oil	Caprylic/Capric Triglyceride	73398-61-5	5 – 15

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** Proprietary blend. Exact composition is confidential. Full formulation data available to authorised parties under Non-Disclosure Agreement (NDA). * The raw material 10% rosemary extract reflects the full sub-composition of glycerin/water carrier with preservatives — not a pure rosemary extract or essential oil.*

4. Typical technical properties

Parameter	Method	Typical value
Appearance	Visual QC-SOP-001	Liquid milky opaque
Colour	Visual QC-SOP-001	White brownish
Odour	Organoleptic QC-SOP-001	Slightly nutty/cereal grain
Solubility	Visual dispersion test in water QC-SOP-001	Dispersible/emulsifiable in water; forms emulsion (not a true solution)
Relative density @ 25°C (g/mL)	Pycnometer QC-SOP-002	0.985 – 1.055
pH (20±2°C)	pH meter QC-SOP-004	4.6 – 5.0
*Viscosity (25°C) kg/m.s	Brookfield-type rotational viscometer, ISO 2555, 25 °C	0.40–0.56
Refractive index @ 20°C (nD)	Refractometer QC-SOP-003	1.45 – 1.47
*Microbiological testing	ISO 17516:2014	TAMC CFU/1 g; TYMC CFU/1 g; specified pathogens absent
Flash point (mixture)	Pensky-Martens closed cup, ISO 2719 (if applicable)	Flash point could not be detected as the sample forms an emulsion at 60°C, with a fire point present.
Chemical composition mg/mL: 2 (Decanoyloxy)propane 1,3 diyl dioctanoate 2 (Octanoyloxy)propane 1,3 diyl bis(decanoate) Glycerol tricaprylate Vitamin E (tocopherol) Capric acid triglyceride Benzyl alcohol Linoleic acid Glycidol oleate γ Sitosterol 1,3 Dioctanoin Eicosane 1,2 Dioctanoin γ Tocopherol Glycidyl palmitate	GC MS	 18.24–27.36 13.12–19.68 10.97–16.46 4.20–6.30 3.27–4.91 3.08–4.62 0.95–1.42 0.39–0.58 0.14–0.21 0.13–0.20 0.10–0.14 0.07–0.10 0.06–0.09 0.02–0.03
Phase separation	Phase Separation test method SOP-QC-006	No visible separation after 24 h @ 20–25 °C; re-dispersible
*Preservative efficacy testing	ISO 11930:2019	Pass

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5. Quality / release information

Each batch of Ruby M Nano is supplied with a Certificate of Analysis (CoA) indicating batch identification, traceability, and release results.

Release criteria (routine on each batch)	Method	Acceptance
Appearance	Visual QC-SOP-001	Liquid milky opaque
Colour	Visual QC-SOP-001	White brownish
Odour	Organoleptic QC-SOP-001	Slightly nutty/cereal grain
Relative density @ 25°C (g/mL)	Pycnometer QC-SOP-002	0.985 – 1.055
pH @ 20 +-2°C	pH meter QC-SOP-004	4.6 – 5.0
*Viscosity (25°C) kg/m.s	ASTM D1343-95(2019) (adapted)	0.40–0.56
Refractive index @ 20°C (nD)	Refractometer QC-SOP-003	1.41 – 1.47
*Microbiological	ISO 17516:2014	TAMC CFU/1 g; TYMC CFU/1 g; specified pathogens absent

Note: Ruby M Nano contains an aqueous phase and includes a preservative system

6. Handling and storage

Store in tightly closed, light-resistant containers at or below 25 °C in a cool, dry, well-ventilated area away from direct sunlight, heat sources, and strong oxidising agents. Spills may create a slip hazard. Avoid introduction of water or contaminants. Spills may create a slip hazard.

7. Shelf life

Provisional shelf life: 12 months when stored at or below 25 °C in the sealed original packaging. The full shelf life will be confirmed upon completion of real-time stability studies

8. Packaging

Packaging: As supplied by Velden Botanicals S.A. (e.g., HDPE or suitably lined containers). Available options and pack sizes on request.

9. Safety and regulatory reference

For safety information, hazard communication and transport classification, refer to the corresponding Safety Data Sheet (SDS) for this material code.

10. Efficacy test results

On request.

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11. Processing method

No nanoparticles are intentionally present in the product. The term “Nano” refers only to the manufacturing/emulsification process and not to a nanomaterial classification.

12. TDS disclaimer

This Technical Data Sheet is provided for product identification and technical guidance only. Typical values are not specifications unless explicitly stated. Product performance and suitability depend on the customer’s formulation, processing conditions and intended use. Users remain responsible for compliance with applicable laws and regulations.

13. Change Control Policy

Velden operates a documented Change Control system designed to uphold product quality, safety, performance, and compliance with regulatory requirements. To ensure transparency and continuity, Velden will provide at least 60 days’ written notice before implementing any change that could reasonably affect the product’s identity, specifications, quality attributes, safety, regulatory status, or intended performance.

Changes subject to notification include, but are not limited to, modifications involving raw material source or supplier, country of origin, formulation or active standardization range, manufacturing site, equipment, or process, critical process parameters, specifications or test methods, packaging components in direct contact with the product, labelling or INCI declarations, and storage or transportation conditions.

All proposed changes undergo formal risk assessment and, where applicable, are supported by validation data. Updated quality and regulatory documentation will be provided as necessary. In cases where urgent changes are required to address safety, legal, or supply continuity risks, Velden will notify customers as soon as practicable and provide supporting justification and mitigation actions.

This document is a computer-generated printout and has not been signed by hand.

Prepared by:
Onyx Pharma (Pty) Ltd
Regulatory / Technical Consultant
Date: 3 September 2026

