SECTION 1. Product identification	
1.1. Product identifier	Product name : rNuQ recombinant mononucleosome Part Number*:* This MSDS covers the recombinant nucleosomes listed in annex I. MSDS Revision number: 1.0 MSDS Revision date: 18/03/2026 03:06 PM
1.2. Relevant identified uses of the substance or mixture and uses advised against:	Recombinant nucleosomes were assembled *in vitro* using a 147 bp or 167 bp of 601 positioning sequence DNA and four core histones purified from E. coli inclusion bodies. In case of biotinylated nucleosome, the biotin is present at the extremity of one of the DNA strands. **FOR RESEARCH USE ONLY – Not for use in diagnostic procedures.** **Not intended for use in humans or animals.** For details, see the technical datasheet.
1.3. Details of the suppliers of the Safety data sheet	Belgian Volition SRL Crealys Scientific Park 22 rue Phocas Lejeune 5032 Isnes Belgium
1.4. Emergency telephone number	Contact the regional poison Control Center.
SECTION 2. Hazards identification	
2.1 Classification of the substance or mixture	Classification according to regulation (EC) No 1272/2008: Not classified. This product is not hazardous and does not contain hazardous ingredients at concentrations used.
2.2 Labels Elements	Labeling according to regulation (EC) No 1272/2008: **Hazard pictograms:** None **Signal word:** None **Hazard statement(s):** None **Precautionary statement(s):** None **Supplemental Hazard Statements:**

	None
2.3 Other Hazards	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. Endocrine Disruptor Information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3. Composition/information on ingredients

3.1. Substances

This product is a mixture

3.2. Mixtures

Components

Recombinant nucleosome: Recombinant nucleosome stored in buffer containing Triethanolamine hydrochloride, Sodium chloride solution Ethylenediaminetetraacetic acid disodium salt solution and Sodium azide.

Biologicals

Histones: Four core histones purified from E. coli inclusion bodies.

DNA: 147 bp or 167 bp of 601 positioning sequence DNA, with biotin if applicable.

Hazardous substance

Component	CAS-No	Concentration	Classification
Sodium azide	26628-22-8	0.5mg/l = 0.05%	Acute Tox. 2 (H300) (EUH032) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)

For the full text of the H-Statements mentioned in this Section, see Section 16

Packaging material

Polypropylene Protein low bind tube snap top tube.
Cardboard storage box with grid dividers.

Other information

N/A

SECTION 4. First aid measures

4.1. Description of first aid measures

After inhalation: If breathed in, move person into fresh air. Consult doctor in case of complaints.
After skin contact: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

	After eye contact: Rinse thoroughly with plenty of water for at least 15 minutes. Remove contact lenses. Consult a physician. **After ingestion:** Rinse thoroughly mouth with water provided the person is conscious. Immediately call a POISON CENTER or doctor/physician. Do not induce vomiting. If vomiting occurs, keep head lower than hips to prevent aspiration.
4.2. Most important symptoms and effects, both acute and delayed	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.
4.3. Indication of any immediate medical attention and special treatment needed	No data available.
SECTION 5. Firefighting measures	
5.1. Extinguishing media	Suitable extinguishing media: Sand, special powder against metal fire, cement. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Unsuitable extinguishing media: Foam, water.
5.2. Special hazards arising from the substance or mixture	Combustible. Development of hazardous combustion gases or vapors possible in the event of fire. Sodium oxides.
5.3. Advice for fire-fighters	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.
SECTION 6. Accidental release measures	
6.1. Personal precautions, protective equipment and emergency procedures	Wear appropriate protective clothing (refer to point 8). Advice for non-emergency personnel: Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
6.2. Environmental Precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
6.3. Methods and material for containment and cleaning up	Sweep up and collect in appropriate container for waste disposal (refer to point 13) clean the floor and all other contaminated objects.
6.4. Reference to other sections	For disposal see section 13.
SECTION 7. Handling and storage	
7.1. Precautions for safe handling	Wear appropriate protective clothing (refer to point 8). Avoid breathing vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Follow good laboratory practices. For precautions see section 2.2.
7.2. Conditions for safe storage, including any incompatibilities	Store at 2-8°C. Keep container tightly closed. Do not heat or freeze components.

7.3. Specific end use(s)	No further relevant information available.
SECTION 8. Exposure controls and personal protection	
8.1. Control parameters	Occupational exposure limits: The product does not contain any relevant quantities of materials with critical values that have to be monitored in the workplace.
8.2. Exposure controls	N/A
8.2.1.Appropriate engineering controls	Handle in accordance with good industrial hygiene and safety practice. Good laboratory practices (GLP). Wash hands before breaks and at the end of workday.
8.2.2. Personal protective equipment	**Eye/face protection:** Safety goggles. **Skin protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. **Body Protection:** Laboratory coat. **Respiratory protection:** In case of insufficient ventilation, wear suitable respiratory equipment.
8.2.3. Environmental exposure controls	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided (see sections 6 and 7).
SECTION 9. Physical and chemical properties	
9.1. Information on basic physical and chemical properties	Appearance: Liquid Odor: odorless pH: No data available Melting point/freezing point: No data available Initial boiling point and boiling range: No data available Flash point: No data available Evaporation rate: No data available Flammability (solid, gas): No data available Upper/lower flammability or explosive limits: No data available Vapor pressure: No data available Vapor density: No data available Relative density: No data available Solubility: No data available Partition coefficient: n-octanol/water: No data available Auto-ignition temperature: No data available Decomposition temperature: No data available Viscosity: No data available Explosive properties: No data available Oxidizing properties : No data available
9.2. Other safety information	No
SECTION 10. Stability and reactivity	
10.1. Reactivity	The product is stable in accordance with the recommended storage conditions.
10.2. Chemical stability	Material is stable under recommended storage conditions.
10.3. Possibility of hazardous reactions	No data available.
10.4. Conditions to avoid	Temperature out of 2-8°C.
10.5. Incompatible materials	Avoid contact with aluminum and heavy metals.

10.6. Hazardous decomposition products	No dangerous decomposition products are known. In the event of fire: see section 5.
SECTION 11. Toxicological information	
Acute toxicity:	Quantitative date on the toxic effects of this product is not available. Components: Sodium azide (CAS 26628-22-8) LD50 Oral - Rat - 27 mg/kg Remarks: (RTECS) LC50 Inhalation - Rat - male and female - 4 h - 0,054 - 0,52 mg/l - dust/mist (US-EPA) LD50 Dermal - Rabbit - 20 mg/kg Remarks: (RTECS)
Irritation:	No irritating component.
Corrosivity:	No corrosive component.
Sensitization:	Sensitization is possible through skin contact.
Repeated dose toxicity:	No data available.
Carcinogenicity:	No data available.
Mutagenicity:	No mutagenicity.
Toxicity for reproduction:	No data available.
Information on other hazards:	Endocrine disrupting properties: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Other information: No data available.
SECTION 12. Ecological information	
12.1. Toxicity	Sodium azide (CAS 26628-22-8): Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): 2,75 mg/l Exposure time: 96 h Test Type: flow-through test Analytical monitoring: yes Method: OECD Test Guideline 203 Toxicity to algae/aquatic plants: ErC50 (Pseudokirchneriella subcapitata): 0,35 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 201 M-Factor (Acute aquatic toxicity): 1 Toxicity to microorganisms: EC10 (activated sludge): 79,3 mg/l Exposure time: 3 h Test Type: static test Method: OECD Test Guideline 209 GLP: yes M-Factor (Chronic aquatic toxicity): 1
12.2. Persistence and degradability	The methods for determining biodegradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential	No data available.
12.4. Mobility in soil	No data available.
12.5. Results of PBT and vPvB assessment	PBT/vPvB: Not applicable for inorganic substances
12.6. Other adverse effects	Endocrine disrupting properties: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Other information: No data available.
SECTION 13. Disposal considerations	
13.1. Waste treatment methods	Rinse carefully polluted bench. Contact a licensed professional waste disposal service to dispose of this material. Observe all federal / state and regulations. Emptied bottles and vials may retain product residue: handle as if they were full.
SECTION 14. Transport information	
14.1. UN number	ADR/RID : - IMDG : - IATA : -
14.2. UN proper shipping name	ADR/RID : - IMDG : - IATA : -
14.3. Transport hazard classe(es)	ADR/RID : - IMDG : - IATA : -
14.4. Packaging group	ADR/RID : - IMDG : - IATA : -
14.5. Environmental hazards	ADR/RID : - IMDG Marin pollutant : - IATA : -
14.6. Special precautions for user	See sections 6-8.
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
SECTION 15. Regulatory information	
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture	This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
15.2. Chemical safety assessment	For this product a chemical safety assessment was not carried out.
SECTION 16. Other information	
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Belgian Volition shall not be held liable for any damage resulting from handling or from contact with the above product.	

Annex I : List of recombinant nucleosomes covered by this MSDS

Part Number	Name
NUC0001	Mononucleosome Recombinant H3.1 (147bp)
NUC0002	Mononucleosome Recombinant H3.1 (167bp)
NUC0003	Mononucleosome Recombinant H3K18Ac
NUC0004	Mononucleosome Recombinant H3K14Ac
NUC0006	Mononucleosome Recombinant H3K23Ac
NUC0007	Mononucleosome Recombinant H4K12Ac
NUC0008	Mononucleosome Recombinant H4K16Ac
NUC0009	Mononucleosome Recombinant H4panAc
NUC0010	Mononucleosome Recombinant H3R8cit
NUC0011	Mononucleosome Recombinant H3R(2+8+17)cit
NUC0012	Mononucleosome Recombinant H3K36me3
NUC0013	Mononucleosome Recombinant H3K27me3
NUC0014	Mononucleosome Recombinant H3k9me3
NUC0015	Mononucleosome Recombinant H3.1 Clipped
NUC0017	Mononucleosome Recombinant H3.1R8cit
NUC0018	Mononucleosome Recombinant H3.3 147bp
NUC0020	Mononucleosome Recombinant H2Abdb
NUC0021	Mononucleosome Recombinant H3k4me2
NUC0022	Mononucleosome Recombinant H3k9Ac
NUC0023	Mononucleosome Recombinant H3K36me1
NUC0024	Mononucleosome Recombinant H3K9me2
NUC0025	Mononucleosome Recombinant H3K27Ac
NUC0026	Mononucleosome Recombinant H3K27mut
NUC0027	Mononucleosome Recombinant H3K4me1
NUC0028	Mononucleosome Recombinant H3K9me1
NUC0029	Mononucleosome Recombinant pH2AX
NUC0030	Mononucleosome Recombinant H3S10ph
NUC0032	Mononucleosome Recombinant H3R26cit
NUC0036	Mononucleosome Recombinant H3.1 DNA Biot
NUC0037	Mononucleosome Recombinant H3R8cit DNA Biot
NUC0038	Mononucleosome Recombinant H3R26cit DNA Biot
NUC0039	Mononucleosome Recombinant H3K56Ac
NUC0040	Mononucleosome Recombinant H3.3K56Ac
NUC0041	Mononucleosome Recombinant H3R17cit
NUC0042	Mononucleosome Recombinant H3R2cit
NUC0043	Mononucleosome Recombinant H3K27me3 DNA Biot
NUC0044	Mononucleosome Recombinant H3K27me2 DNA Biot
NUC0045	Mononucleosome Recombinant H3K27me1 DNA Biot
NUC0046	Mononucleosome Recombinant H3K27Ac DNA Biot
NUC0047	Mononucleosome Recombinant H3K36me3 DNA Biot
NUC0048	Mononucleosome Recombinant H3K36me2 DNA Biot
NUC0049	Mononucleosome Recombinant H3K36me1 DNA Biot
NUC0050	Mononucleosome Recombinant H3K36Ac DNA Biot

Part Number	Name
NUC0051	Mononucleosome Recombinant H3K9me3 DNA Biot
NUC0052	Mononucleosome Recombinant H3K27me2
NUC0053	Mononucleosome Recombinant H3K27me1
NUC0054	Mononucleosome Recombinant H3.1 DNA Biot
NUC0055	Mononucleosome Recombinant H3R8citK9Ac
NUC0056	Mononucleosome Recombinant H3R8citK9me3
NUC0057	Mononucleosome Recombinant H3R2cit DNA Biot
NUC0058	Mononucleosome Recombinant H3R17cit DNA Biot
NUC0059	Mononucleosome Recombinant H3.3 DNA Biot
NUC0060	Mononucleosome Recombinant H3.2
NUC0067	Mononucleosome Recombinant H3K4me
NUC0068	Mononucleosome Recombinant H3PanAc
NUC0085	Mononucleosome recombinant H3K18Lactyl
NUC0090	Mononucleosome Recombinant H3K36me2