

SAFETY DATA SHEET v1.0



Doc number: HD70110-01

Date Compiled: 15/11/2021

Revised: 01/10/2021

Prior to use, ensure this document is the most recent revision

COMPANY PROPRIETARY INFORMATION

COMPANY INFORMATION

Company name: Byrna SA (Pty) Ltd Address:
Byrna SA (Pty) Ltd
50 Kambathi Street, N4 Gateway Industrial Park, Pretoria, 0184, South Africa
Tel: 086-182-0031

SECTION 1 – PRODUCT INFORMATION

Product Name: Byrna Max Powder (1% OC / 8% CS) **Formulation**
Number: MJMF1371
Identification: White powder with noxious organoleptic profile **Packaging:**
2kg powder packed in a white plastic container

SECTION 2 – COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Hazardous components:	CAS Number	Amount
Organic Capsaicin powder	404-86-4	1%
Ortho-chlorobenzylidene malonitrile (CS)	2698-41-1	8%
Silicon Dioxide	112945-52-5, 7631-86-9	<2%

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SECTION 3 – HAZARDS IDENTIFICATION

CAUTION: This material is an eye, dermal & mucous membrane irritant.

This material is intended for use as an incapacitating agent.

This material is a potentially hazardous mixture according to Regulation (EC) No. 1272/2008.

Handle in accordance with good industrial hygiene and safety practice using appropriate protective equipment. Store in airtight containers in a cool, dry place away from direct light & heat. Keep out of reach of untrained persons.



SECTION 4 – FIRST AID MEASURES

Oral Exposure

Have patient rinse mouth with water. Never give anything by mouth to an unconscious person. Consult a medical practitioner /doctor for advice.

Inhalation Exposure

Move patient away from exposure to fresh air to allow respiration distress to subside. If breathing difficulty persists, seek medical attention and oxygen support if necessary.

Skin Exposure

Remove any residual powder from the skin in a dry manner. Rinse the affected area with clean water, and wash with a mild soap. If allergic reaction takes place or a burning sensation persists, consult a medical practitioner/doctor.

Eye Exposure

Rinse out with the affected eye(s) using a large amount of clean water for 15 minutes with the eyelid held wide open. Consult a medical practitioner/doctor if eye irritation persists for an abnormal amount of time.

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SECTION 5 – FIRE FIGHTING MEASURES

Non-flammable material.

Suitable extinguishing media:

Carbon dioxide, dry powder, or foam as appropriate to environment.

Caution: Toxic fumes evolve during combustion.

Collect contaminated extinguishing water/residue separately, do not allow to reach sewage or effluent systems. Cool endangered containers with water spray.

Special protective equipment for firefighters:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

SECTION 6 – ACCIDENTAL RELEASE MEASURE

METHODS FOR SPILL CLEANUP

Wear appropriate PPE including suitable respirators with adequate filters, and disposable coveralls, eye protection & gloves.

Contain any spillage and collect powder material using suitable dust binding agents and transfer to a waste disposal container.

Dispose contents/container to hazardous or special waste collection point.

Dispose of according to regional/national regulations. Do not mix hazardous and non-hazardous waste.

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SECTION 7 – HANDLING AND STORAGE

Keep this product in a well ventilated cool, dry place away from direct sunlight and excess moisture.

Always store in tightly sealed containers.

Only trained personnel may handle opened containers of material, in a ventilated/exhausted facility.

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Remove all soiled and contaminated clothing before exiting handling area to avoid contamination of other areas.

SECTION 8 – EXPOSURE CONTROLS / PPE

Use of appropriate PPE is mandatory when handling sealed and exposed material:

Respirator devices with suitable filters: To be used when handling exposed material. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Use appropriate eye protection (tightly sealed goggles) and suitable impermeable gloves for handling material.

SECTION 9 – PHYSICAL/CHEMICAL PROPERTIES

Product type:	Highly irritant powder
Other:	Indicated for use as filler in incapacitating rounds
Physical State:	Powder
Colour:	White

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SECTION 10 – STABILITY AND REACTIVITY

Stability: This inert powder is stable under ordinary ambient conditions of use and sealed storage, when no decomposition is expected.

Specific reactivity data is not available.

Incompatibility: Strong oxidising agents.

Possible hazardous decomposition products: When heated to decomposition temperature of Calcium carbonate (825°C), calcium oxide fumes may be emitted and liberate carbon dioxide.

No risk of hazardous Polymerization.

Incompatibilities: Acids, fluorine, magnesium with hydrogen.

Conditions to avoid: Exposure to sources of heat, ignition and moisture.

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Keep packaging sealed.

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute LD₅₀: No Data Available

Sensitization: May cause allergic respiratory and skin reactions. Toxic if swallowed.

Ortho-chlorobenzylidene malnonitrile is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Literature toxicity data for individual raw materials

Material	LD ₅₀ *
CAPSAICIN	148.1 mg/kg
ORTHO-CHLOROBENZYLIDENE MALONONITRILE	178 mg/kg
SILICON DIOXIDE	5 000 mg/kg

*LD₅₀ literature values based on mouse animal toxicity studies (oral administration), as published in scientific literature and/or provided by the manufacturer.

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SECTION 12 – ECOLOGICAL INFORMATION

Environmental fate: No data available.

Mobility in soil: Practically insoluble in cold water.

This product should not be released into the environment.

This substance/mixture contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher

SECTION 13 – DISPOSAL CONSIDERATIONS

Remove as hazardous waste. Treat all soiled containers as the waste itself. Recommendation is for a certified waste handling company to dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all national, provincial, and local environmental regulations. Remove waste in accordance with local and/or national regulations.

SECTION 14 – TRANSPORT INFORMATION

This substance is considered to be non-hazardous for land, sea & rail freight transport.

It contains an aviation regulated solid, n.o.s. (Nonivamide) Marine pollutant: no

Transport hazard class(es)

Unregulated

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SECTION 15 – REGULATORY INFORMATION

Symbol of Danger:



Safety Statements:

Full text of H-Statements referred to under sections 2 and 3.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

SECTION 16 – OTHER INFORMATION

The information and statements provided in this publication is based on our current knowledge and experience. They do not however represent any assurance towards properties of the product within the sense of liability, guaranty regulations and thus are given without any obligation. Compliance with all applicable laws & regulations should be ensured and all third-party rights must be observed.

The information provided here is for guidance applicable to handling bulk products and to readily identify toxicity & safety data. While this SDS is based on technical data judged to be reliable, Byrna and the manufacturer assumes no responsibility for the completeness or accuracy of the information contained herein.

Safety information is under continuous review.