



SAFETY DATA SHEET



SECTION I – PRODUCT AND COMPANY IDENTIFICATION

Product name: **MUL ARCW**
Product Identifier: MUL ARCW
Relevant identified uses: Emulsifier.

BOLLAND Y CÍA. S.A.

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Elaborated under license from MI SWACO.

Emergency phone (24 hours): **BOLLAND PQB 0 800 222 1030 (from Argentina)**
+5411 4320 7500 (other countries)

SECTION II – HAZARDS IDENTIFICATION

Classification according to Globally Harmonized System.

Hazard pictogram(s):



Flammable liquids (Category 2)
Acute toxicity, dermal (Category 4)
Skin irritation (Category 2) – eye irritation (Category 2)
Skin sensitization (Category 1)
Aspiration hazard (Category 2)
Short-term (acute) aquatic hazard (Category 1)
Long-term (chronic) aquatic hazard (Category 2)

Signal word: **WARNING**

Hazard statements:
H225 - Highly flammable liquid and vapour.
H312 - Harmful in contact with skin.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements:
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 - Avoid breathing mist, vapours and spray.
P273 - Avoid release to the environment.
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313 - IF SKIN IRRITATION OCCURS: Get medical advice/attention.
P337 + P313 - IF EYE IRRITATION PERSISTS: Get medical advice/attention.
P370 + P378 - IN CASE OF FIRE: Use water spray, foam, dry chemical or carbon dioxide to extinguish.
P405 - Store locked up.

Additional information

None.

SECTION III - COMPOSITION / INFORMATION ON INGREDIENTS

CONFIDENTIAL COMMERCIAL INFORMATION
IF EMERGENCY, CALL BOLLAND PQB 0 800 222 1030 (desde Argentina)
+5411 4320 7500 (otros países)

SECTION IV – FIRST AID MEASURES

GENERAL ADVICE:	Avoid exposure to the product, taking appropriate protective measures. Get medical advice.
EYE CONTACT:	Immediately flush with water for at least 20 minutes, holding eyelids apart to ensure that all eye and lid tissues rinsed. Washing eyes within several seconds is essential to achieve maximum effectiveness. If you have contact lenses, remove them after the first 5 minutes, then continue rinsing eye. Get medical advice.
SKIN CONTACT:	Wash immediately after contact with soap and water for at least 20 minutes. Remove contaminated clothing and wash before reuse.
INHALATION:	For those providing assistance, avoid exposure. Use proper protection if necessary. Move victim and get fresh air. Keep calm. If not breathing, give artificial respiration. If having difficulty breathing, give oxygen. Get medical advice.
INGESTION:	DO NOT INDUCE VOMITING. Rinse mouth and give water to drink. Never give anything by mouth to an unconscious person. Get medical advice. If vomiting occurs spontaneously, place victim on side to reduce the risk of aspiration.
SYMPTOMS:	Inhalation: May cause respiratory irritation, nausea and headache. Contact with skin: Frequent or prolonged contact may cause skin irritation and dermatitis. Eye contact: Irritating to eyes. Ingestion: May cause gastrointestinal disorders.
MEDICAL ADVICE:	Provide symptomatic treatment. For more information, contact a Poison Control Center.

SECTION V – FIREFIGHTING MEASURES

EXTINGUISHING MEDIA:	Use dry chemical, foam, sand or CO ₂ . Use the product according to surrounding materials. DO NOT use a solid water stream as it may scatter and spread fire.
FLASH POINT:	≥ 5°C (41°F) - c.c.
FLAMMABLE LIMITS:	N/D
SPECIAL HAZARDS:	<p>The container subjected to heat may explode unexpectedly and project dangerous fragments.</p> <p>Vapours are heavier than air, and may spread along floors. In case of fire may release irritating fumes and gases and / or toxic gases, such as carbon monoxide, carbon dioxide, nitrogen oxides and other substances derived from incomplete combustion.</p>
SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:	<p>Use self-contained breathing apparatus. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it may not be effective in spill situations.</p> <p>For large spills wear protective clothing against chemicals, which is specifically recommended by the manufacturer. It may provide little or no thermal protection.</p>
ADVICE FOR FIREFIGHTERS:	<p>Spray with water to cool containers. Cool containers with flooding quantities of water until well after the fire is out. Fight fire from maximum distance or use unmanned hose holders or monitor.</p> <p>Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply.</p> <p>Withdraw immediately in case of rising sound security mechanisms vents, or if the tank begins to discolor. ALWAYS stay away from tanks engulfed in fire.</p> <p>Hot product may cause violent when in contact with water, hot material can be projected and cause serious burns eruptions.</p>

SECTION VI – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:	<p>Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. A foam may be used to reduce vapour. Do not allow reuse of spilled product.</p> <p>Consider the information and recommendations in sections 5 and 7. Use protective equipment recommended in Section 8.</p>
ENVIRONMENTAL PRECAUTIONS:	Contain spilled liquid with a dam. Prevent entry into waterways, sewers, basements or confined areas.
CONTAINMENT AND CLEANING UP:	Collect the product through sand, vermiculite, or inert absorbent and completely clean or wash the contaminated area.

SECTION VII – HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:	<p>Do not eat, drink or smoke during handling.</p> <p>Avoid contact with eyes, skin and clothing. Wash arms, hands, and nails after handling. The use of gloves is recommended.</p> <p>Facilitate access to safety showers and eyewash emergency.</p> <p>Use equipment and clothing that prevents the accumulation of electrostatic charges. Monitor and avoid explosive atmosphere formation.</p>
CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:	<p>Store in a clean, dry, well-ventilated area. Do not smoke, weld or do any work that can produce flames or sparks in storage area. Keep away from strong oxidants.</p> <p>Keep away from strong oxidizing agents, acids and bases.</p> <p>Material appropriate packaging: supplied by the manufacturer.</p> <p>NFPA Code: 1 3 0 1</p>

SECTION VIII – EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS:	<p>TLV-TWA (ACGIH): S/D</p> <p>TLV-STEL (ACGIH): S/D</p> <p>PEL (OSHA 29 CFR 1910.1000): S/D</p> <p>IDLH (NIOSH): S/D</p>
EXPOSURE CONTROLS:	<p>Keep workplace ventilated. The normal routine ventilation is usually adequate. Local hoods should be used for operations that produce or release large amounts of product. In low or confined areas should be provided mechanical ventilation.</p> <p>Provide showers and eyewash stations.</p>
PERSONAL PROTECTION EQUIPMENT, INHALATION:	<p>Where necessary, use an organic vapours (A) respirator. Special attention to oxygen levels in the air should be paid.</p> <p>If large releases occur, wear self-contained breathing apparatus (SCBA).</p>
SKIN PROTECTION:	<p>When handling this product should wear impermeable protective PVC, nitrile or butyl gloves (complying with standards EN 374), clothes and safety footwear resistant to chemicals.</p>
EYE AND FACE PROTECTION:	<p>Should wear safety glasses, chemical splash-proof (complying with EN 166).</p>

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Liquid.
ODOUR:	N/D
ODOUR THRESHOLD:	N/D
PH:	7,6 ± 1,0 (5% hydroalcoholic solution)
MELTING POINT:	-15°C (5°F)
BOILING POINT:	N/D
FLASH POINT:	≥ 5°C (41°F) - c.c.
EVAPORATION RATE:	N/D

AUTO-IGNITION TEMPERATURE:	N/D
EXPLOSIVE LIMITS:	N/D
VAPOUR PRESSURE (20°C):	N/D
VAPOUR DENSITY (AIR=1):	N/D
RELATIVE DENSITY (20°C):	0,86 ± 0,03 g/cm ³
SOLUBILITY (in water, 20°C):	N/D
HENRY CONSTANT (20°C):	N/D
PARTITION COEFFICIENT (logKo/w):	N/D
VISCOSITY (cSt, 20°C):	N/D
OTHER PROPERTIES:	None.

SECTION X – STABILITY AND REACTIVITY

REACTIVITY:	It is not expected that reactions or decomposition product occur under normal storage conditions.
CHEMICAL STABILITY:	The material is stable under normal conditions.
CONDITIONS TO AVOID:	Heat, open flames and sources of ignition.
HAZARDOUS DECOMPOSITION PRODUCTS:	When heated, it may release toxic and irritating vapors. In case of fire, see section 5.
INCOMPATIBLE MATERIALS:	strong oxidizing agents, acids and bases.

SECTION XI – TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE:	inhalation, skin and eye contact, and ingestion.
ACUTE EFFECTS:	Inhalation: May cause respiratory irritation, nausea and headache. Contact with skin: Frequent or prolonged contact may cause skin irritation and dermatitis. Eye contact: Irritating to eyes. Ingestion: May cause gastrointestinal disorders.
CARCINOGENICITY AND MUTAGENICITY:	There is no information on any component of this product present at levels greater than or equal to 0.1% as probable, possible or confirmed human carcinogen by the IARC (International Agency for Research on Carcinogens).
ANIMAL TOXICITY VALUES:	ATE - LD50 oral (rat, OECD 401): > 2000 mg/kg ATE - LD50 der (rat, OECD 402): > 1733 mg/kg ATE - LC50 inh. (rat, 4hs., OECD 403): > 9,9 mg/l Skin irr. (rabbit, OECD 404): irritant Eye irr. (rabbit, OECD 405): irritant Skin sens (Guinea pig, OECD 406): sensitising Resp. sens (Guinea pig, OECD 403): non sensitizing

SECTION XII – ECOLOGICAL INFORMATION

ECOTOXICITY:	ATE - LC50 (fishes, OECD 203, 96hs.): 0,9 mg/l ATE - EC50 (Daphnia magna, OECD 202, 96hs.): 0,5 mg/l ATE - EC50 (algae, OECD 201, 96hs.): 0,9 mg/l ATE - EC50 (activated sludge, OECD 209, 3hs.): > 100 mg/l ATE - NOEL (fishes, OECD 204, 90d.): 0,19 mg/l ATE - NOEC (Daphnia magna, QSAR, 21d.): 0,45 mg/l
PERSISTENCE AND DEGRADABILITY:	BIODEGRADABILITY (OECD 301): Some product components are not biodegradable or degrade with difficulty. PNEC (water): S/D PNEC (sea water): S/D PNEC-STP: S/D
BIOACCUMULATIVE POTENTIAL:	Log Ko/w (OCDE 107 o 117): N/D BIOCONCENTRATION FACTOR - BCF (OCDE 305): N/D
MOBILITY IN SOIL:	HENRY CONSTANT (20°C): N/D LogKoc: N/D DISTRIBUTION (%): N/D
OTHER ADVERSE EFFECTS:	Does not contain organic halogens nor metals.

SECTION XIII – DISPOSAL CONSIDERATIONS

Both the excess product and empty containers should be disposed of in accordance with current legislation on Environmental Protection and in particular Hazardous Waste Laws. You must classify the waste and dispose of it by an authorized company. Both the excess product and empty containers should be disposed of in accordance with current legislation regarding the Protection of Environment and particularly of hazardous waste. It should classify the waste and dispose of it by an authorized company. Empty containers may contain residue and thus be dangerous. Do not attempt to refill or clean containers without possessing the appropriate instructions.

SECTION XIV – TRANSPORT INFORMATION**TRANSPORT BY LAND**

Proper Shipping Name:	FLAMMABLE LIQUID, N.O.S. (Contains kerosene)
UN/ID Number:	1993
Hazard class:	3
Packing group:	II
Hazard identification number:	30
Excepted and limited quantity:	1L / E2

**AIR TRANSPORT (ICAO/IATA)**

Proper Shipping Name:	FLAMMABLE LIQUID, N.O.S. (Contains kerosene)
UN/ID Number:	1993
Hazard class:	3
Packing group:	II
PAX and Cargo Packing instructions:	Y341, 1L / 353, 5L



Cargo Packing instructions:	364, 60L
ERC:	3H
SEA TRANSPORT (IMO)	
Proper Shipping Name:	FLAMMABLE LIQUID, N.O.S. (Contains kerosene)
UN/ID N°:	1993
Hazard class:	3
Packing group:	II
EMS:	F-E; S-E
Marine pollutant:	YES



SECTION XV – REGULATORY INFORMATION

Regulations and safety legislation specific for the substance or mixture:

Not dangerous for the ozone layer (1005/2009/CE).

Volatile organic compounds (VOC's) (1999/13/EC): N/D

Safety Data Sheet according to Resolution 801/2015 of the Superintendency of Occupational Risks MTESS and IRAM 41400: 2013, Argentina.

Resolution 295/2003 Ministry of Labour, Employment and Social Security, Argentina.

National Law No. 24,051 and its regulations, Argentina.

Resolution 195/97 Department of Public Works and Transportation, Republic Argentina.

Regulation (EC) 1272/2008 on classification, labeling and packaging of chemicals and their mixtures, as amended.

Regulation (EC) 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), as amended.

Dir. 91/689 / EEC on hazardous waste and Dir. 91/156 / EEC waste management.

European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR 2015).

Regulations concerning the International Carriage of Dangerous Goods by Rail (RID 2015).

International Maritime Dangerous Goods Code (IMDG 34 ed.) IMO Resolution MSC 90/28 / Add.2.

IBC Code / MARPOL, IMO Resolution MEPC 64/23 / Add.1.

Regulations of the International Air Transport Association (IATA 56 ed., 2015) on the transport of dangerous goods by air.

Globally Harmonized System of Classification and Labelling of Chemicals, fifth edition, 2015 (GHS 2015).

International Agency for Research on Cancer (IARC) classification of carcinogens. Revision: 03/23/2015.

SECTION XVI – OTHER INFORMATION

ATE: acute toxicity estimation.

LD: lethal dose.

N/A: no information available.

LC: lethal concentration.

The classification was performed based on chemical analogues and product information.

SECTION 2: classification by analogy with other products, and based on product data.

SECTION 9: product data.

SECTION 11 and 12: analogy with other products.

Acute toxicity: calculation method for estimating acute toxicity.

HEALTH	1
FLAMMABILITY	3
REACTIVITY	0
DIANA ORGANS	1



Obligatory safety goggles.



Obligatory gloves.



Obligatory overall.

The information and recommendations given here are to our knowledge correct, and is the responsibility of each user to determine whether they are accurate, appropriate and complete for its particular use. The conditions and / or methods of handling, storage, use and disposal of the product are beyond our control and perhaps of our knowledge. For these and other reasons our company is not liable for loss, damage or caused or related to the handling, storage, use or disposal of this product costs. Our company is not responsible for any damage or incident, direct or indirect, of any nature that may result from the use of this information. Any information not contained in this SDS must be understood as undetermined or unknown.

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