

Safety Data Sheet dated 25/3/2024, version 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification:

Trade name: Trade code: UFI: **SOFT LB2** G13-002 **N5F2-V0T3-W002-D88F**

1.2. Relevant identified uses of the substance or mixture and uses advised against Recommended use:

Alkaline liquid laundry detergent. For professional use only.

Products categories: PC35 - washing and cleaning products. This category includes water and solvent based products.

Use at industrial sites (IS). Widespread use by professional workers (PW).

Uses advised against:

Do not use for purposes other than those indicated.

1.3. Details of the supplier of the safety data sheet

Company: **G.B.M. ELETTROCHIMICA s.r.I.** Via Fiumicino San Mauro, 120/130 - 47039 – Savignano Sul Rubicone (FC) Italy tel +39 0541 930058 **e-mail:** <u>gbm@gbmprodottichimici.it</u> web site: <u>www.gbmprodottichimici.it</u>

1.4. Emergency telephone number +39 0541-930058

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
EC regulation criteria 1272/2008 (CLP)

Met. Corr. 1, H290 May be corrosive to metals.
Acute Tox. 4, H302 Harmful if swallowed.
Skin Corr. 1A, H314 Causes severe skin burns and eye damage.
Eye Dam. 1, H318 Causes serious eye damage.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements
Hazard pictograms:



Danger Hazard statements:

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

Precautionary statements:

P264 Wash hands thoroughly with water after handling.

P280 Wear protective gloves and eye/face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

16623/1 Page n. 1 of 12



P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 In case of malaise, contact a POISON CENTRE/doctor.

P390 Absorb spillage to prevent material damage.

Special Provisions:

None Contains

potassium hydroxide; caustic potash

Phosphonic polymer

Etidronic acid

Special provisions according to Annex XVII of REACH and subsequent amendments: None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$ Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

- 3.1. Substances
 - N.A.
- 3.2. Mixtures

Ingredients according to EC Detergents Regulation 648/2004:

<5%: phosphonates, polycarboxylates

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb	er	Classification
>= 20% - < 30%	potassium hydroxide; caustic potash	Index number: CAS: EC: REACH No.:	019-002-00-8 1310-58-3 215-181-3 01- 2119487136- 33-XXXX	 2.16/1 Met. Corr. 1 H290 3.2/1A Skin Corr. 1A H314 3.3/1 Eye Dam. 1 H318 3.1/4/Oral Acute Tox. 4 H302 Specific Concentration Limits: C >= 5%: Skin Corr. 1A H314 2% <= C < 5%: Skin Corr. 1B H314 0,5% <= C < 2%: Skin Irrit. 2 H315 0,5% <= C < 2%: Eye Irrit. 2 H319
>= 1% - < 5%	Phosphonic polymer			 2.16/1 Met. Corr. 1 H290 3.2/1C Skin Corr. 1C H314 3.3/1 Eye Dam. 1 H318
>= 1% - < 5%	Etidronic acid	CAS: EC:	2809-21-4 220-552-8	2.16/1 Met. Corr. 1 H290



		REACH No.:	2119510391- 53-XXXX	 3.1/4/Oral Acute Tox. 4 H302 3.3/1 Eye Dam. 1 H318
>= 0.25% - < 0.5%	hydrochloric acid %	Index number: CAS: EC: REACH No.:	017-002-01-X 7647-01-0 231-595-7 01- 2119484862- 27-XXXX	 3.2/1B Skin Corr. 1B H314 3.8/3 STOT SE 3 H335 Specific Concentration Limits: C >= 25%: Skin Corr. 1B H314 10% <= C < 25%: Skin Irrit. 2 H315 10% <= C < 25%: Eye Irrit. 2 H319 C >= 10%: STOT SE 3 H335

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.

Give nothing to eat or drink.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

None

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

Treat symptomatically.

SECTION 5: Firefighting measures

- 5.1. Extinguishing media
 - Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons: None in particular.

- 5.2. Special hazards arising from the substance or mixture
 - Do not inhale explosion and combustion gases. Burning produces heavy smoke.
- 5.3. Advice for firefighters

16623/1 Page n. 3 of 12



Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures Wear personal protection equipment. Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

- 6.3. Methods and material for containment and cleaning up Wash with plenty of water.
- 6.4. Reference to other sections See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities

Store the product only in its original closed containers, in a cool, dry and well-ventilated areas at temperatures below 0 °C and not higher than 40 °C.

Keep away from food, drink and feed.

- Incompatible materials:
- None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s) None in particular

SECTION 8: Exposure controls/personal protection

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8.1. Control parameters

potassium hydroxide; caustic potash - CAS: 1310-58-3
ACGIH - STEL: Ceiling 2 mg/m3 - Notes: N.A.
hydrochloric acid ... % - CAS: 7647-01-0
EC - STEL: 15 mg/m3, 10 ppm
EC - TWA: 8 mg/m3, 5 ppm
UE - TWA(8h): 8 mg/m3, 5 ppm - STEL: 15 mg/m3, 10 ppm
ACGIH - STEL: Ceiling 2 ppm - Notes: N.A.

DNEL Exposure Limit Values

Etidronic acid - CAS: 2809-21-4
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16623/1 Page n. 4 of 12



Consumer: 1.7 mg/kg b.w./day - Exposure: Human Oral - Frequency: Long Term, systemic effects Consumer: 1.7 mg/kg b.w./day - Exposure: Human Oral - Frequency: Short Term, systemic effects Consumer: 2.95 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects Consumer: 17 mg/kg b.w./day - Exposure: Human Dermal - Frequency: Long Term, systemic effects Worker Professional: 12 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects Worker Professional: 34 mg/kg b.w./day - Exposure: Human Dermal - Frequency: Long Term, systemic effects hydrochloric acid ... % - CAS: 7647-01-0 Worker Professional: 8 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects - Endpoint: Irritation (respiratory tract) Worker Professional: 15 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term (acute) - Endpoint: Irritation (respiratory tract) Consumer: 8 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects - Endpoint: Irritation (respiratory tract) Consumer: 15 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term (acute) -Endpoint: Irritation (respiratory tract) **PNEC Exposure Limit Values** Etidronic acid - CAS: 2809-21-4 Target: Fresh Water - Value: 0.068 mg/l Target: Marine water - Value: 0.007 mg/l Target: Freshwater sediments - Value: 136 mg/kg dry weight Target: Marine water sediments - Value: 13.6 mg/kg dry weight Target: Soil - Value: 10 mg/kg dry weight Target: Secondary poisoning - Value: 3.7 g/kg Target: Sewage treatment plant - Value: 40 mg/l 8.2. Exposure controls Eye protection: Eye glasses with side protection. Protection for skin: Chemical protection clothing. Protection for hands: Use protective gloves resistant to chemicals. The choice of hand PPE must be made on the basis of its better resistance to chemical agents, taking into account the results of tests obtained in accordance with EN 374 Because of the great diversity of types, you should follow the instructions of the manufacturers. Suitable materials for short contact (recommended: at least protection index 2, corresponding to > 30 minutes permeation time according to EN 374). Butyl rubber - 0.7 mm thick. Suitable materials for direct and prolonged contact (recommended: protection index 6, corresponding> 460 minutes of permeation time according to EN 374) nitro-caoutchouc (NBR) - 0.4 mm thick.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Physical state:	Liquid		
Colour:	straw yellow		
Odour:	CHARACTER ISTIC		
Melting point/freezing point:	Not Relevant		
Boiling point or initial boiling point and boiling range:	Not Relevant		
Flammability:	Non- flammable		
Lower and upper explosion limit:	Not Relevant		
Flash point:	Not Relevant	-	
Auto-ignition temperature:	Not Relevant		
Decomposition temperature:	Not Relevant		
pH:	13		
Kinematic viscosity:	N.A.		
Solubility in water:	SOLUBLE	-	
Solubility in oil:	Not Relevant		
Partition coefficient n- octanol/water (log value):	Not Relevant		
Vapour pressure:	Not Relevant		
Density and/or relative density:	1.25 ± 0.05 kg/l		
Relative vapour density:	Not Relevant		
Particle characteristics:			
Particle size:	N.A.		

9.2. Other information

Properties	Value	Method:	Notes
Explosive properties:	ABSENT	-	
Miscibility:	MISCIBLE	-	
Oxidizing properties:	ABSENT	-	

SECTION 10: Stability and reactivity

- 10.1. Reactivity
 - Stable under normal conditions
- 10.2. Chemical stability

The product is stable under normal conditions of use and storage.

- 10.3. Possibility of hazardous reactions It may generate flammable gases on contact with halogenated organic substances, and elementary metals.
- 10.4. Conditions to avoid
 - Avoid contact with acids.

10.5. Incompatible materials Do not mix with acids, oxidizing and / or reducing agents. Aluminum, light metals.

16623/1 Page n. 6 of 12



Avoid contact with strong oxidizing and reducing agents, strong acids and bases 10.6. Hazardous decomposition products

Under normal conditions of storage and use, are not known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 Toxicological information of the product: SOFT LB 2 a) acute toxicity The product is classified: Acute Tox. 4 H302 ATEmix - Oral 1440,73 mg/kg bw b) skin corrosion/irritation The product is classified: Skin Corr. 1A H314 c) serious eye damage/irritation The product is classified: Eye Dam. 1 H318 d) respiratory or skin sensitisation Not classified No data available for the product e) germ cell mutagenicity Not classified No data available for the product f) carcinogenicity Not classified No data available for the product a) reproductive toxicity Not classified No data available for the product h) STOT-single exposure Not classified No data available for the product i) STOT-repeated exposure Not classified No data available for the product i) aspiration hazard Not classified No data available for the product Toxicological information of the main substances found in the product: potassium hydroxide; caustic potash - CAS: 1310-58-3 a) acute toxicity: Test: LD50 - Route: Oral - Species: Rat = 333 mg/kg Etidronic acid - CAS: 2809-21-4 a) acute toxicity: Test: LD50 - Route: Skin - Species: Rabbit > 7940 mg/kg bw Test: LD50 - Route: Oral - Species: Rabbit = 1100 mg/kg bw hydrochloric acid ... % - CAS: 7647-01-0 a) acute toxicity: Test: LC50 - Route: Inhalation - Species: Rat = 45.6 mg/l - Duration: 5min b) skin corrosion/irritation: Test: Skin Corrosive - Route: Skin - Species: Rabbit Positive - Causes severe skin burns c) serious eye damage/irritation:



Test: Eye Corrosive - Route: Eyes - Species: Rabbit Positive - Causes serious eye damage

- h) STOT-single exposure:
- Test: Respiratory Tract Irritant Positive May irritate the respiratory tract i) STOT-repeated exposure:

Test: NOAEL(C) - Route: Inhalation - Species: Rat = 20 ppm

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity	
Adopt good working practices, so that the product is not released into the environment.	
SOFT LB2	
Not classified for environmental hazards	
Based on available data, the classification criteria are not met	
potassium hydroxide; caustic potash - CAS: 1310-58-3	
a) Aquatic acute toxicity:	
Endpoint: LC50 - Species: Fish = 80 mg/l - Duration h: 96	
Etidronic acid - CAS: 2809-21-4	
a) Aquatic acute toxicity:	
Endpoint: EC50 - Species: Daphnia = 527 mg/l - Duration h: 48	
Endpoint: EC50 - Species: Algae = 7.2 mg/l - Duration h: 96	
Endpoint: LC50 - Species: Fish = 368 mg/l - Duration h: 96	
hydrochloric acid % - CAS: 7647-01-0	
a) Aquatic acute toxicity:	
Endpoint: LC50 - Species: Fish = 3.25 pH - Duration h: 96	
Endpoint: EC50 - Species: Daphnia = 4.92 pH - Duration h: 48	
Endpoint: EC50 - Species: Algae = 4.7 pH - Duration h: 72	
12.2. Persistence and degradability	
None	
SOFT LB2	
Biodegradability: The formulation does not contain surfactants.	
The organic substances are eliminated in normal wastewater treatment plants.	
Etidronic acid - CAS: 2809-21-4	
Biodegradability: Non-readily biodegradable	
12.3. Bioaccumulative potential	
hydrochloric acid % - CAS: 7647-01-0	
Bioaccumulation: Not bioaccumulative	
12.4. Mobility in soil	
hydrochloric acid % - CAS: 7647-01-0	
Mobility in soil: The product is very volatile	
12.5. Results of PBT and vPvB assessment	
vPvB Substances: None - PBT Substances: None	
12.6. Endocrine disrupting properties	
No endocrine disruptor substances present in concentration $>= 0.1\%$	
12.7. Other adverse effects	
None	
SECTION 13: Disposal considerations	

13.1. Waste treatment methods



Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

non 14. nunsport mornation	
14.1. UN number or ID number	
ADR-UN number:	3266
RID-UN Number:	3266
ADN-UN Number:	3266
IATA-Un number:	3266
IMDG-Un number:	3266
14.2. UN proper shipping name	
ADR-Shipping Name:	Basic corrosive inorganic liquid, N.O.S. (mixture containing
	potassium hydroxide)
IATA-Shipping Name:	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
	(potassium hydroxide)
IMDG-Shipping Name:	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
	(potassium hydroxide)
14.3. Transport hazard class(es)	
ADR-Class:	8
ADR-Label:	8
ADR - Hazard identification nu	mber: 80
RID-Class:	8
ADN-Class:	8
IATA-Class:	8
IATA-Label:	8
IMDG-Class:	8
14.4. Packing group	
RID-Packing Group:	III
ADN-Packing Group:	III
ADR-Packing Group:	III
IATA-Packing group:	III
IMDG-Packing group:	III
14.5. Environmental hazards	
IMDG-EMS:	F,A-S,B
ADN-Environmentally hazardo	us in tank-vessels:
14.6. Special precautions for user	
ADR-Transport category (Tunn	
IMDG-Shipping Name:	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
	(potassium hydroxide)
14.7. Maritime transport in bulk accor	ding to IMO instruments
N.A.	
TION 45. Desculators information	

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 2020/878
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)

16623/1 Page n. 9 of 12



Regulation (EU) n. 944/2013 (ATP 5 CLP) Regulation (EU) n. 605/2014 (ATP 6 CLP) Regulation (EU) n. 2015/1221 (ATP 7 CLP) Regulation (EU) n. 2016/918 (ATP 8 CLP) Regulation (EU) n. 2016/1179 (ATP 9 CLP) Regulation (EU) n. 2017/776 (ATP 10 CLP) Regulation (EU) n. 2018/669 (ATP 11 CLP) Regulation (EU) n. 2018/1480 (ATP 13 CLP) Regulation (EU) n. 2019/521 (ATP 12 CLP) Regulation (EU) n. 2020/217 (ATP 14 CLP) Regulation (EU) n. 2020/1182 (ATP 15 CLP) Regulation (EU) n. 2021/643 (ATP 16 CLP) Regulation (EU) n. 2021/849 (ATP 17 CLP) Regulation (EU) n. 2022/692 (ATP 18 CLP) Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications: Restrictions related to the product: **Restriction 3** Restrictions related to the substances contained: **Restriction 75** Where applicable, refer to the following regulatory provisions : Directive 2012/18/EU (Seveso III) Regulation (EC) nr 648/2004 (detergents). Dir. 2004/42/EC (VOC directive) Provisions related to directive EU 2012/18 (Seveso III):

- Seveso III category according to Annex 1, part 1 None
- 15.2. Chemical safety assessment No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Hazard class and hazard category	Code	Description
Met. Corr. 1	2.16/1	Substance or mixture corrosive to metals, Category 1
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Corr. 1C	3.2/1C	Skin corrosion, Category 1C
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2



STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Met. Corr. 1, H290	On basis of test data
Acute Tox. 4, H302	Calculation method
Skin Corr. 1A, H314	Calculation method
Eye Dam. 1, H318	Calculation method

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of
ATC.	Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Áviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.

16623/1 Page n. 11 of 12



TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.