



LIFEWOOD 60

1. IDENTIFICATION OF THE PRODUCT AND COMPANY

- **Product Name: LIFEWOOD 60**
 - **Internal identification code: 01**
 - **Application: insecticide and fungicide**
 - **Manufacture:**
 - Industria Química DIPIL Ltda.,**
 - Koppers Performance Chemicals - Millington Plant, Tennessee - USA.**
 - TEFQUIM S.A.- Hurlingham-Province of Buenos Aires- Argentina.**
- For Koppers Performance Chemicals Brasil Comércio de Preservantes Ltda.**
- **Emergency Telephone: Company: (+55 47) 3029-0129**

2. COMPOSITION/INFORMATION ON THE INGREDIENTS

This chemical is a preparation.

- Chemical Nature: It is manufactured from oxides and contains no electrolytes in its composition.

SYNONYMS	CONCENTRATION (% M/M)	N° CAS	MOLECULAR FORMULA
Chromic acid	28.50	18540-29-9	CrO ₃
Cupric acid	11.10	7440-50-8	CuO
Arsenic acid	20.40	7440-38-2	As ₂ O ₅

- Ingredient(s) or impurity(ies) that contribute to the hazard:

GENERIC NAME	CONCENTRATION
WATER	40.00 %

- Classification concerning the Environmental Risk, Toxicology, and hazard labeling:

Toxicological Class: Extremely Toxic CLASS I	Environmental risk High Risk CLASS I	TOXIC CORROSIVE
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3. HAZARDS IDENTIFICATION

- Most important hazards: The product is highly irritating and corrosive.
- Product Effects:
 - Adverse effects to human health: The product is highly irritant and corrosive. Skin, eyes, and mucous membranes are exposure routes, contact of the product with such routes may cause burns.
 - Environmental Effects: Extremely toxic to aquatic organisms, birds, and wild animals.
 - Physical/chemical hazards: Stable under normal conditions of use and storage.

4. FIRST AID MEASURES

- First Aid Measures: take the affected individual to an airy location outside the hazard zone. Refer to the nearest medical facility carrying this sheet.
 - Inhalation: remove the individual to an airy location. If the victim is unconscious and no longer breathes, practice artificial respiration or oxygenation, and take to the doctor immediately even if breathing with difficulties.
 - Skin contact: Immediately wash affected area with plenty of water. Remove contaminated clothing. If the symptoms/effects appear, call a physician.
 - Eye contact: Wash immediately with plenty of water, keeping the eyelids apart. Consult a doctor.
 - Ingestion: Give one or two glasses of milk or water added with a teaspoon of cornstarch or wheat flour, or two or three egg whites for each glass of water. Then stimulate vomiting by inserting a spoon or even the finger into the throat. Lay patient on his/her side to avoid aspiration. Seek medical attention immediately.

WARNING: Never give anything orally to an unconscious person.

- Which actions must be avoided: do not apply mouth to mouth if the patient has ingested the product. Use an intermediate or emergency room to perform the procedure. Do not administer anything orally or provoke vomiting on an unconscious person.
- Description of the main symptoms and effects: repeated dermal exposure may result in an ulcer, which may cause dermatitis. The ingestion of the product will cause gastroenteritis, stomach and esophagus pains, and oliguria or anuria. In the event of inhalation, serious irritation may occur, and the acute exposure may result in chemical pneumonitis.
- Protection of first-aiders: avoid skin and inhalation with the product during the care of the injured individual.
- Notes to physician: Symptomatic treatment.

LIFEWOOD 60**5. FIRE PREVENTION AND FIGHTING MEASURES**

- Suitable extinguishing means: In the event of fire, use foam, CO₂, chemical powder, and water mist extinguishers.
- Unsuitable extinguishing means: Water jet.
- Specific hazards: Arsenic salts, when in combustion, release gases toxic to man and to the environment.
- Special methods:
 - Evacuate the area and fight the fire from a safe distance;
 - Use water mist to cool the equipment near the fire;
 - Position your back to the wind, avoiding possible intoxication;
 - Use dikes to contain the water used in the firefight.
- Protection for fire-fighters: In ventilated rooms: wear protective mask against inorganic arsenic. In enclosed spaces: insulation apparatus (breathing apparatus independent from circulating air) and approach/protection clothing at elevated temperatures. In case of fire, the formation of hydrogen chloride, hydrogen cyanide, hydrogen fluoride, carbon monoxide, and nitric oxides should be considered.

6. CONTROL MEASURES FOR SPILLS OR LEAKS

- Personal precautions: Use PPE as described in item 8. Keep out of the reach of children. Contact your local authorities and the manufacturer.
 - Removal of ignition sources: interrupt electrical power and turn off spark-generating sources. Remove any material that may be a fire hazard (e.g. diesel oil).
 - Dust control: not applicable as it is a liquid.
- Environmental precautions: avoid contamination of the watercourses by sealing the entry of rainwater galleries (wolf's mouth). Avoid spilled product residues from reaching bodies of water by building dikes with soil, sand or other absorbent material.
- Methods for cleaning up: On pavement floor: contain and collect the spillage with non-combustible, absorbent materials (e.g. sawdust, sand, soil, vermiculite, diatomaceous earth); Directly on the soil: remove the contaminated soil layer until reaching the uncontaminated layer. Place the waste in a closed container for disposal according to local regulations. Place the cleaning material in a container that can be closed and then disposed of.
 - Neutralization: apply over the spilled product 45 kg of limestone or 170 kg of cement per 100 kg of spilled product.

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7. HANDLING AND STORAGE

- Handling:
 - Technical measures:
 - Prevention of worker exposure: use PPE as described in Item 8. Do not eat, drink or smoke while handling the product. Avoid leakage when opening the packaging. Do not use damaged or defective personal protective equipment. Do not handle or load damaged packages.
 - Prevention of fire and explosion: Eliminate hot and ignition sources. All electrical equipment must be shielded and explosion proof. The installations and equipment should be grounded to avoid static electricity. Do not smoke. The product is not explosive.
 - Precautions for safe handling: use PPE as described in Item 8. Handle far from heat sources and in well-ventilated environments. Handle the product with the appropriate local exhaust ventilation or in a well-ventilated area. If in an open environment, handle with your back to the wind. Apply only as recommended by the manufacturer. The application equipment shall be subject to initial, periodic, and extraordinary safety inspections as established in the Regulatory Norm - NR 13 - Boilers and Pressure Vessels (113.000-5) of the Ministry of Labor. In the event of poisoning symptoms, stop the work immediately and proceed as described in Item 4 of this sheet.
 - Storage:
 - Proper technical measures: maintain the product in its original container. Store outside the access of outsiders. Keep any leftovers from the products properly closed in their original containers. Store it properly labeled with the words "CAUTION POISON", exclusively for toxic products. In case of storage of large quantities, these should be in accordance with NBR-9843.
 - Storage conditions:
 - Suitable: Maintain the container tightly closed, in a cool, well-ventilated location, at room temperature, and away from light. Lock the location away from unauthorized persons and children.
 - To avoid: humid places, heat sources, and adverse conditions.
 - Incompatible products and materials: do not store together with food and beverages, including those intended for animals.
 - Recommended materials for safe packaging: the product is already packed in appropriate packaging (PVC).

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8. EXPOSURE CONTROL AND PERSONAL PROTECTION

- Engineering control measures: in enclosed spaces, use ventilators, air circulators, and exhaust fans; provide adequate ventilation to the workplace. The operator must always wear respiratory protective equipment, even when good ventilation is provided.
- Personal protective equipment:
 - Respiratory protection: use masks combined with chemical and mechanical filters (ORGAN P2 - EPICON or class P2 - 5n11 - 3M).
 - Hand protection: use nitrile, PVC or other impermeable material gloves.
 - Eye protection: Use chemical product safety goggles.
 - Skin and body protection: wear impermeable long-sleeved overalls, waterproof jacket, and PVC boots.
- Special Precautions: maintain the PPE properly clean and in proper conditions of use by conducting periodic inspections and possible maintenance or replacement of damaged equipment.
- Measures for cleaning/hygiene: ensure hygiene in the working area. Avoid contact with the product. Store work clothes separately. Immediately disinfect work clothing or contaminated clothing; have it washed separately or, if necessary, disposed of by taking the appropriate precautionary measures. Wash hands before breaks. Shower at the end of the work period.

9. PHYSICAL-CHEMICAL PROPERTIES

- Physical state: viscous liquid
- Color: reddish brown
- Odor: characteristic
- pH: solution at 1% (m/v)=2.20
- Specific temperatures or temperature range in which changes in the physical state occur: not available
- Flash point: N.A
- Superior/inferior explosiveness limits: N.A
- Density: 1.89-1.90 (20°C)
- Solubility: hydro-soluble

10. STABILITY AND REACTIVITY

- Specific conditions:
 - Instability: not available.
 - Hazardous reactions: no hazardous reactions occur is properly applied.
- Conditions to avoid: heat and ignitions sources.
- Decomposition hazard products: in case of fire or thermal decomposition of the arsenic salts, gasses toxic to humans and the environment are formed.

11. TOXICOLOGICAL INFORMATION

- Acute toxicity:
 - Oral CL50, mice: superior to 4000 mg/kg
- Local effects: extremely irritating.
- Chronic toxicity to fish (*Brachydanio rerio*):
 - Chronic value (CV): 7 days – inferior to 1 ppm
 - No visible effect concentration: inferior to 1 ppm
 - Visible effect concentration: inferior to 1 ppm

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12. ECOLOGICAL INFORMATION

- Environmental and behavioral effects and product impacts:
 - Environmental impact: the product is hazardous to aquatic life. High concentrations decrease the pH of the environment, which is damaging to the fauna and flora.
 - Persistence/Degradability: the product is not biodegradable since it contains no organic matter in its composition.

13. CONSIDERATIONS ON THE TREATMENT AND DISPOSAL

- Treatment and disposal methods:
 - Product leftovers: maintain the eventual leftover or expired product in its original packages, appropriately closed, and deal according to the current local legislation.
 - Used package: the empty packages must be submitted to triple wash and stored in safe location for posterior return. Do not burn or bury the packages. Comply with the specific State and Municipal legislation. Consult the State or Municipal Environmental Organ.

14. INFORMATION ON TRANSPORTATION

- National and international regulations:
 - Terrestrial:
 - UN number: 2922
 - Appropriate name for shipment: corrosive, toxic liquid, **N.E**
 - Risk Class: 6.1
 - Risk description: Highly toxic substance
 - Risk number: 886
 - Package group: II

15. REGULATIONS

Regulations: registered in IBAMA under n° 4593

16. OTHER INFORMATION

“The information present in this FISPQ represent the current data and accurately reflect our best knowledge for the appropriate handling of this product under normal conditions and according to the application specified in the package and literature. Any other use of this product that involve the combined use with another product or other processes is of the responsibility of the user”.

- Information on risk and security:
 - Do not smoke, drink or eat while handling the product, its solutions or freshly treated wood;
 - In case of intoxication, seek the Poison Center or Health Service, taking the package or label or (preferably) this sheet;
 - Do not reuse empty containers and maintain the product in its original packaging;
 - In case of direct contact with the product, wash the affected part with plenty of water;
 - In case of contact with eyes, rinse thoroughly with plenty of water;
 - If inhaled in excess, remove the individual to fresh air;
 - Do not dispose of in the fire or incinerator. Dangerous if applied near flames or heated surfaces;
 - There are appropriate sites indicated by Municipal Prefectures – Environment Secretariat, in which the empty containers are placed for deactivation and disposal;
 - Avoid contact of the product, its solutions, and the freshly treated wood with the skin, eyes and mucous membranes;
 - Its entry into the autoclave or solution storage tank should be restricted to the necessary cases. In this case, use PPE as described in Item 8.
 - Use the "Drum In" system to dilute the product.
 - Use only the recommended quantities and according to the instructions contained in this sheet and the user manuals provided by the company.