

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

Approval Date : July, 18, 2006
Last Revision : September, 22, 2021
Print Date : 22/09/21

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Million HP Developer

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

1.1 Product identifier

Product Name : Million HP Developer
Catalogue Number(s): 057954 - package 20 liters

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

Recommended main uses for the substance or mixture: Developing solution of thermal offset plates.
Uses advised against: Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Manufacturer: IBF INDÚSTRIA BRASILEIRA DE FILMES
Address : Rua Lauro Muller, 116 10º andar CEP 22290 900 Rio de Janeiro Brasil
Tel.: 55 21 2103-1000

SDS prepared by : IBF INDÚSTRIA BRASILEIRA DE FILMES
Rua Lauro Muller, 116 10º andar CEP 22290 900 Rio de Janeiro Brasil
Tel.: 55 21 2103-1000

1.4 Emergency telephone number:

CHEMTREC PHONE: 1 800 424 9300
PRO QUIMICA ABIQUIM PHONE: 0800 110 8270

SECTION 2: Hazards Identification

2.1 Classification of the substance mixture:

Classification according to Regulation (EC) No 1272/2008 (CLP).

Hazard information is based on information from the ingredients.

Hazard class/Hazard Category	Hazard statements	Route of exposure
Corrosion and skin irritation - Category 1B	H314	---
Serious eye damage/eye irritation - Category 1	H318	---

2.2 Label elements:

Labelling according to 1272/2008/EC [CLP/GHS]:

Contains: sodium metasilicate

Symbol(s):



Word of warning:

Danger

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Sentence of danger:

H314 - Causes severe skin burns and eye damage.

H318 - Causes serious eye damage.

Precautionary statements: Prevention.

P260 - Do not inhale dust, fumes, gas, mist / vapors / spray.

P264 - Wash thoroughly after handling.

P270 - Do not eat, drink or smoke while using this product.

P280 - Wear protective gloves / protective clothing / eye protection / face protection.

Precautionary statements: emergency response.

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

P303+P361+P353- IN CASE OF CONTACT WITH SKIN (or hair): Immediately remove all contaminated clothing. Rinse skin with water / take a shower.

P305 + P351 + P338 - IN CASE OF EYE CONTACT: Rinse thoroughly with water for several minutes. In the case of use of contact lenses, remove them if it is easy. Continue rinsing.

Precautionary statements: storage.

P405 - Store in a lockable room.

Precautionary statements: disposal.

P501 - Dispose of contents / container in local licensed by the environmental agency.

2.3 Other hazards:

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixture related information:

Product Name : Million HP Developer

This product is a mixture: Wash solution thermal sensitive lithographic (offset) printing plates.

Chemical nature: water-based solution.

3.2 Hazard ingredients:

Weight percent	Component	CAS No. EC No.	Classification according to 1272/2008/EC	Classification according to 67/548/EEC
10 - 20	Sodium metasilicate	6834-92-0 229-912-9	Skin Corr.1B H314 STOT SE 3 H335	*
1 - 5	Sodium Silicate	1344-09-8	Serious eye damage/eye irritation - 1 H318 STOT SE 3	*

* Substance classification as listed in Annex VI to Regulation (EC) No 1272/2008

** Substance not listed in Annex VI to Regulation (EC) No 1272/2008.

Note: Exact percentage (concentration) of composition has been withheld as a trade secret is required.

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3.3 Impurities contributing to the hazard:

Not identified.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician immediately.

Skin contact: Wash with soap and plenty of water. Consult a physician. Remove all contaminated clothing.

Eye contact: Rinse thoroughly with water, keeping the lid open for at least 15 minutes.

Ingestion: Rinse mouth. Do not induce vomiting, seek medical attention. Never give anything by mouth to an unconscious person.

After first aid urgently forward to the doctor.

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

Alkaline product. Causes burns.

Irritating to respiratory system.

Can cause permanent eye damage.

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

Direct treatment according to the symptoms and the clinical condition of the patient. Seek medical attention immediately.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing Media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Specific hazards of the substance or mixture:

In case of combustion may generate carbon monoxide, and carbon dioxide.

5.3 Protective measures of the fire fighting team:

Wear self-contained breathing apparatus for fire fighting if necessary.

The water jets may be used to cool the sealed containers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures.

6.1.1 Advice for non-emergency: Keep people away. Isolate the area. Avoid contact with the material and stay upwind.

6.1.2 Advice for emergency responders: Use personal protective equipment. Avoid breathing vapor / mist / gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Pay attention to the accumulation of vapors that can form explosive concentrations. Vapors can accumulate in low areas.

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6.2 Environmental precautions.

Prevent leakage or spillage if safe. Do not allow product enter drains.
Contain spilled material with earth dikes or sand.

6.3 Methods and materials for containment and cleaning.

Transfer the spilled materials (solid and liquid) into suitable containers and deliver to an authorized manager for waste disposal. Collect the debris with absorbent materials.

6.4 Reference to other sections.

See Section 8 for recommendations on the use of personal protective equipment.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling.

Use in well ventilated area. Prevent inhalation of the product, contact with eyes, skin and clothing through proper protection. If accidental contact, the site should be washed immediately.

Emergency showers and eyewash should be available in appropriate locations.

Wash hands and face thoroughly after handling. Wash contaminated clothing before reuse. When using do not eat, drink or smoke.

Use goggles and gloves.

7.2 Conditions of safe storage, including any incompatibilities.

Store in cool, dry and well ventilated area and away from heat sources or open flames. Ensure that the storage location has temperature, pressure and humidity appropriate. Keep containers tightly closed when not in use.

Incompatibility: Avoid contact with strong acids.

7.3. Specific end use(s): No information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters:

The control limits are for substances.

Exposure Limits	ACGIH TLV	OSHA PEL
Sodium Metasilicate	no data	no data
Sodium Silicate	no data	no data

8.2. Exposure controls

Appropriate engineering controls: Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels to an acceptable level.

Recommended Decontamination Facilities: Eyewash, emergency shower and washing facilities.

Individual protection measures, such as personal protective equipment

Eye protection: Wear safety glasses with side shields (or goggles) and a face shield.

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Hand protection: Using the information provided in Section 2, seek the advice of the glove supplier as to the most suitable glove material. Avoid skin contact when mixing or handling the substance/preparation or a mixture by wearing impervious gloves and protective clothing appropriate to the risk of exposure.

Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact:

Material	Thickness	Breakthrough time
Nitrile rubber	> 0.38 mm	> 480
Neoprene	> 0.65 mm	> 240
butyl-rubber	> 0.36 mm	> 480

Avoid natural rubber gloves.

The protective gloves to be used must comply with the specifications of the EC directive 89/686/EEC and the resultant standard EN 374. This recommendation applies only to the product stated in the Safety Data Sheet and supplied by us as well as to the purpose specified by us.

Respiratory protection: If engineering controls do not maintain airborne concentrations to an acceptable level, an approved respirator must be worn. If respirators are used, a program should be instituted to assure compliance with applicable federal, state, commonwealth, provincial, or local laws and regulations.

General health and safety measures: Safety shower, eye wash, washing facilities as appropriate to condition of use.

Environmental exposure controls: No information available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance: Clear, colorless.

Odour: slight

Odour Threshold: No data available - testing not performed

pH (as is) (± 0,10) : 13,50

Melting / Freezing Point: Not available.

Initial boiling point and boiling range temperature: Not available.

Flash Point: Not applicable.

Evaporation Rate: Not available.

Flammability (solid, gas): Not applicable.

Upper explosion limit: No data available - testing not performed

Lower explosion limit: No data available - testing not performed

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Vapor Pressure: Not available.

Vapor Density: Not available.

Specific density ($\pm 0,005$) : 1,095 g/cm³ at 20 ° C

Solubility in Water: Easily soluble in water.

Partition coefficient: n-octanol/water: No data available - testing not performed

Auto-ignition temperature: No data available - testing not performed

Decomposition temperature: No data available - testing not performed

Viscosity: No data available - testing not performed

Explosive properties: No data available - testing not performed

Oxidizing properties: No data available - testing not performed

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction in normal use.

10.2 Stability

Chemically stable product at ambient conditions. The decomposition by heating can generate carbon monoxide plus carbon dioxide. Does not polymerize.

10.3 Possibility dangerous reactions

No dangerous reactions.

10.4 Conditions to be avoided

Strong heating and ignition source.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Hydrogen.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Acute toxicity:

Sodium metasilicate

LD50, oral, rats - from 1152 to 1349 mg / kg

LC50, inhalation rat - 2.06 g / m³.

LD50, dermal, rat -> 5000 mg / kg.

11.2 Corrosion / skin irritation:

Sodium metasilicate

Corrosive to the skin.

11.3 Serious eye damage / irritation:

Sodium metasilicate

Corrosive to eyes

11.4 Respiratory sensitization or skin:

No data available.

11.5 Germ cell mutagenicity:

No data available.

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11.6 Carcinogenesis:

Carcinogenic rating (components present at 0.1% or more):

- International Agency for Research on Cancer (IARC): none
- American Conference of Governmental Industrial Hygienists: none
- National Toxicology Program (NTP): none
- Security Management and Occupational Health - OSHA: None

11.7 Reproductive toxicity:

No data available.

11.8 organ toxicity - specific target - single exposure

Sodium metasilicate

Irritating to respiratory system.

11.9 organ toxicity - specific target - repeated exposure:

Potassium hydroxide

No data available.

11.10 Aspiration hazard:

No data available.

SECTION 12: ECOLOGICAL INFORMATION

The following properties are ESTIMATED from the components of the preparations.

12.1 Ecotoxicity:

Sodium metasilicate

LC50, 96 h, Brachydanio rerio - 210 mg / l.

EC50, 48 h, aquatic invertebrates, Daphnia magna - 1700 mg / l (analogy).

12.2 Persistence and degradability:

Sodium metasilicate

Inorganic. Soluble silicates upon dilution, depolymerize rapidly in molecular species indistinguishable from natural dissolved silica.

12.3 Bioaccumulative potential:

Partition coefficient (Kow): no data available.

Bioconcentration factor (BCF): no data available.

12.4 Mobility in soil:

No data available.

12.5 Other adverse effects:

No data available.

Additional ecological information:

This product has not been tested for environmental effects.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Methods recommended for disposal:

This information is provided to assist users in the correct disposal of working solutions prepared and used to IBF specifications.

Working solution: Waste material is currently classified as hazardous under Commission Regulation (EU) No 1357/2014. The European Waste Catalogue Code is 09 01 02 Water based offset plate

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developer solutions. Dispose according to the local regulations or guidelines that apply to the category of waste. Ensure the use of properly authorized waste management companies.

Product containers: If thoroughly cleaned, preferably by rinsing at least three times with small quantities of water, waste product packaging may be consigned for recovery or disposal as non-hazardous waste. Whenever possible, minimize waste by using the rinsing water to make up the working solution. The European Waste Catalogue Code is 15 01 02 plastic packaging.

Waste product packaging contaminated by residues of hazardous contents should be consigned for disposal as hazardous waste. In this case, the European Waste Catalogue Code is 15 01 10 packaging containing residues of or contaminated by dangerous substances.

SECTION 14. TRANSPORTATION INFORMATION

ADR

14.1 UN Number:	3266.
14.2 UN Proper Shipping Name:	CORROSIVE LIQUID, BASIC, INORGANIC, n.o.s
14.3 Transport Hazard Class(es)	8
14.4 Packing Group:	III
14.5 Environmental Hazards:	Not regulated.
14.6 Special precautions for user:	Not regulated.

RID

14.1 UN Number:	3266.
14.2 UN Proper Shipping Name:	CORROSIVE LIQUID, BASIC, INORGANIC, n.o.s
14.3 Transport Hazard Class(es)	8
14.4 Packing Group:	III.
14.5 Environmental Hazards:	Not regulated.
14.6 Special precautions for user:	Not regulated.

IMDG

14.1 UN Number:	3266.
14.2 UN Proper Shipping Name:	CORROSIVE LIQUID, BASIC, INORGANIC, n.o.s
14.3 Transport Hazard Class(es)	8
14.4 Packing Group:	III
14.5 Environmental Hazards:	Not regulated.
14.6 Special	Not regulated.

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precautions for user:

IATA

14.1 UN Number: 3266
14.2 UN Proper Shipping Name: CORROSIVE LIQUID,
BASIC, INORGANIC,
n.o.s

14.3 Transport Hazard Class(es): 8.

14.4 Packing Group: III

14.5 Environmental Hazards: Not regulated.

14.6 Special Precautions for user: Not regulated.

precautions for user:

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: not applicable.

SECTION 15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

1907/2006/EC Article 59(1) - Candidate List of Substances Subject to Authorisation

This mixture contains no ingredient which is subject to an authorisation according to Regulation (EC) No. 1907/2006 (REACH).

1907/2006/EC - Annex XIV - Substances Subject to Authorization

This mixture does not contain substances which are subject to an authorization according to Regulation (EC) No. 1907/2006 (REACH).

1907/2006/EC - Potential Substances of Very High Concern

This product does not contain substances of very high concern

1907/2006/EC - Annex XVII - Restrictions on Certain Dangerous Substances

This mixture does not contain ingredients which are subject to restrictions according to Regulation (EC) No. 1907/2006 (REACH)

Detergents Regulation (648/2004) - Derogations and Banned or Restricted Detergent Surfactants

This mixture does not contain substances listed in Detergents Regulation (648/2004) - Derogations and Banned or Restricted Detergent Surfactants

Regulation of transport in Brazil: Resolution 5947:2021 – ANTT.

Brazilian Association of Technical Standards (ABNT) - NBR 14725 - Part 1-4.

15.2. Chemical safety assessment

Chemical safety assessment has not been performed.

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SECTION 16. OTHER INFORMATION

16.1. Indication of changes

Corrected/updated:

Multiple changes due to format update

Minor changes may be present due to component or regulatory data updates

Review Safety Data Sheet before using product.

Approval data: July, 18, 2006.

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Review: 8

16.2. Key or legend to abbreviations and acronyms used in the safety data sheet

ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road;

CAS = Chemical Abstracts Service;

CLP = Classification, Labelling, and Packaging;

EC = European Commission;

EC50 = Effective Concentration 50%;;

EH40 = EH40/2005 Workplace Exposure Limits;

EINECS = European Inventory of Existing Commercial chemical Substances;

ELINCS = European List of Notified Chemical Substances;;

GHS = Globally Harmonized System of Classification and Labelling of Chemicals;

HSA = Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents);

IARC = International Agency for Research on Cancer;

IATA = International Air Transport Association;

IC50 = Inhibitory Concentration 50%;

IMDG = International Maritime Dangerous Goods;

LC50 = Lethal Concentration 50%;

LD50 = Lethal Dose 50%;

mg/Kg = milligrams per Kilogram;

mg/L = milligrams per Liter;

mg/m³ = milligrams per Cubic Meter;

PBT = Persistent, Bioaccumulative and Toxic substances;

ppm = parts per million;

REACH= Registration, Evaluation and Authorization of Chemicals;

RID = European Agreement concerning the International Carriage of Dangerous Goods by Rail;

vPvB = very Persistent, very Bioaccumulative substances

16.3. Methods used for classification of mixture according to Regulation (EC) No 1272/2008

The determination of classifications is derived via expert judgment and/or weight of evidence.

16.4. Relevant R- and H-phrases

H314 Corrosion and skin irritation

H318 Serious eye damage/eye irritation

16.5. Training advice

Review Safety Data Sheet before using product.

16.6. Further information

This Safety Data Sheet has been compiled and is solely intended for this product. The information is based upon the present state of our knowledge.

The information contained in this SDS is furnished without warranty of any kind.

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Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and the protection of the environment.