

## 1 Identification of the substance/preparation and of the company/undertaking

### · Product details

· Trade name: **B71 BOYSEN METAL ETCHING SOLUTION**

### · Application of the substance / the preparation

Boysen Metal Etching Solution is an acid type metal cleaner and rust converter. It transforms rust and removes light deposits of mill oil. B71 destroys corrosion stimulators and properly conditions metal surfaces for painting.

Principal Uses : As preparation agent for painting on new galvanized and rusty metal surfaces

### · Manufacturer/Supplier:

Pacific Paint (Boysen) Phils., Inc.  
292 D. Tuazon St., Quezon City  
1115 Philippines

· Further information obtainable from: Product safety department

### · Information in case of emergency:

Telephone Nos. : +63 2 364 3505; +63 2 365 0561

Facsimile Nos. : +63 2 367 8878; +63 2 364 0472

Email Address : [inquiry@boysen.com.ph](mailto:inquiry@boysen.com.ph)

Website Address : [www.boysen.com.ph](http://www.boysen.com.ph)

## 2 Hazards identification

### · Hazard description:



C Corrosive

### · Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 10 Flammable.

R 34 Causes burns.

### · Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

### · GHS label elements



Danger

3.2/1B - Causes severe skin burns and eye damage.



Warning

2.6/3 - Flammable liquid and vapour.

### · Prevention:

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

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

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· **Response:**

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

Immediately call a POISON CENTER or doctor/physician.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.

· **Storage:**

Store in a well-ventilated place. Keep cool.

Store locked up.

· **Disposal:**

Dispose of contents/container in accordance with local/regional/national/international regulations.

## 3 Composition/information on ingredients

· **Chemical characterization**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

|                                     |   |         |
|-------------------------------------|---|---------|
| CAS: 7664-38-2<br>EINECS: 231-633-2 | phosphoric acid<br>☠ C; R 34<br>Danger: ☠ 3.2/1B  | 50-100% |
| CAS: 71-36-3<br>EINECS: 200-751-6   | butan-1-ol<br>☠ Xn, ☠ Xi; R 10-22-37/38-41-67<br>Danger: ☠ 3.1.O/3, 3.2/2, 3.8/3; ☠ 3.3/1<br>Warning: ☠ 2.6/3           | 2.5-10% |
| CAS: 111-76-2<br>EINECS: 203-905-0  | 2-butoxyethanol<br>☠ Xn, ☠ Xi; R 20/21/22-36/38<br>Danger: ☠ 3.1.O/3, 3.1.D/3, 3.1.I/4, 3.2/2, 3.3/2A<br>Warning: 2.6/4 | 2.5-10% |

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

## 4 First aid measures

· **General information:** Immediately remove any clothing soiled by the product.

· **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.

## 5 Fire-fighting measures

· **Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· **Protective equipment:** No special measures required.

## 6 Accidental release measures

· **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.

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· **Measures for environmental protection:**

Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.

· **Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralizing agent.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.  
Do not flush with water or aqueous cleansing agents

## 7 Handling and storage

· **Handling:**

· **Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.

· **Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.

· **Storage:**

· **Requirements to be met by storerooms and receptacles:** No special requirements.  
· **Information about storage in one common storage facility:** Not required.  
· **Further information about storage conditions:** Keep container tightly sealed.

## 8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **Ingredients with limit values that require monitoring at the workplace:**

**7664-38-2 phosphoric acid**

|            |   |
|------------|---|
| PEL (USA)  | 1 mg/m <sup>3</sup>   |
| REL (USA)  | Short-term value: 3 mg/m <sup>3</sup><br>Long-term value: 1 mg/m <sup>3</sup> |
| TLV (USA)  | Short-term value: 3 mg/m <sup>3</sup><br>Long-term value: 1 mg/m <sup>3</sup> |
| IOELV (EU) | Short-term value: 2 mg/m <sup>3</sup><br>Long-term value: 1 mg/m <sup>3</sup> |

**71-36-3 butan-1-ol**

|           |  |
|-----------|--|
| PEL (USA) | 300 mg/m <sup>3</sup> , 100 ppm                              |
| REL (USA) | Short-term value: C 150 mg/m <sup>3</sup> , C 50 ppm<br>Skin |
| TLV (USA) | 61 mg/m <sup>3</sup> , 20 ppm                                |

**111-76-2 2-butoxyethanol**

|             |  |
|-------------|--|
| ACGIH (USA) | Short-term value: 20 ppm   |
| PEL (USA)   | 240 mg/m <sup>3</sup> , 50 ppm<br>Skin   |
| REL (USA)   | 24 mg/m <sup>3</sup> , 5 ppm<br>Skin   |
| TLV (USA)   | Short-term value: 240 mg/m <sup>3</sup> , 20 ppm<br>Long-term value: 97 mg/m <sup>3</sup> , 20 ppm         |
| IOELV (EU)  | Short-term value: 246 mg/m <sup>3</sup> , 50 ppm<br>Long-term value: 98 mg/m <sup>3</sup> , 20 ppm<br>Skin |

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· **Additional information:** The lists valid during the making were used as basis.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

## 9 Physical and chemical properties

### · General Information

|                |                                    |
|----------------|------------------------------------|
| <b>Form:</b>   | Fluid                              |
| <b>Colour:</b> | According to product specification |
| <b>Odour:</b>  | Characteristic                     |

### · Change in condition

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** 116°C

· **Flash point:** 35°C

· **Ignition temperature:** 340°C

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Vapour pressure at 20°C:** 0 hPa

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|  |                                   |
|--|-----------------------------------|
| · <b>Density:</b>                                | 1.4 -1.5 Kg/L                     |
| · <b>Solubility in / Miscibility with water:</b> | Not miscible or difficult to mix. |
| · <b>Solvent content:</b>                        |                                   |
| <b>Organic solvents:</b>                         | 9.0 %                             |
| <b>VOC (EC)</b>                                  | 90 g/L                            |
| · <b>Solids content:</b>                         | 10.0 %                            |

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Corrosive  
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

## 12 Ecological information

- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.  
Must not reach sewage water or drainage ditch undiluted or unneutralized.

## 13 Disposal considerations

- **Product:**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

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## 14 Transport information

### · Land transport ADR/RID (cross-border)



- **ADR/RID class:** 3 (FC) Flammable liquids.
- **Danger code (Kemler):** 38
- **UN-Number:** 2924
- **Packaging group:** III
- **Hazard label:** 3+8
- **Description of goods:** 2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S. (BUTANOLS, PHOSPHORIC ACID, SOLUTION)

### · Maritime transport IMDG:



- **IMDG Class:** 3
- **UN Number:** 2924
- **Label:** 3+8
- **Packaging group:** III
- **EMS Number:** F-E,S-C
- **Marine pollutant:** No
- **Proper shipping name:** FLAMMABLE LIQUID, CORROSIVE, N.O.S. (BUTANOLS, PHOSPHORIC ACID, SOLUTION)

### · Air transport ICAO-TI and IATA-DGR:



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 2924
- **Label:** 3+8
- **Packaging group:** III
- **Proper shipping name:** FLAMMABLE LIQUID, CORROSIVE, N.O.S. (BUTANOLS, PHOSPHORIC ACID, SOLUTION)

- **UN "Model Regulation":** UN2924, FLAMMABLE LIQUID, CORROSIVE, N.O.S., 3 (8), III

## 15 Regulatory information

### · Philippines Inventory of Chemicals and Chemical Substances

All ingredients are listed.

### · Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

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· **Code letter and hazard designation of product:**



C Corrosive

· **Hazard-determining components of labelling:**

phosphoric acid

· **Risk phrases:**

10 Flammable.

34 Causes burns.

· **Safety phrases:**

1/2 Keep locked up and out of the reach of children.

7/9 Keep container tightly closed and in a well-ventilated place.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant R-phrases**

10 Flammable.

20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

22 Harmful if swallowed.

34 Causes burns.

36/38 Irritating to eyes and skin.

37/38 Irritating to respiratory system and skin.

41 Risk of serious damage to eyes.

67 Vapours may cause drowsiness and dizziness.

· **Department issuing MSDS:**

Safety, Health and Environment Department

Gretchen A. Fontejon - g\_fontejon@boysen.com.ph

Joanne C. Ysrael - joanneysrael@boysen.com.ph

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

VOC: Volatile Organic Compounds (USA, EU)

· **\* Data compared to the previous version altered. 25.11.2010**

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