



SAFETY DATA SHEET

BRILL BOMAR

Revision n. 1

Dated 02/04/2008

Printed on 02/04/2008

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1) MATERIAL/PREPARATION AND COMPANY

- 1.1 Product name** : BRILL BOMAR
- 1.2 Use of the substance** : Pickling agent for welding. Use this product together with the electro-chemical systems CLINOX.
Only for professional users.
- 1.3 Company identification** : Nitty Gritty S.r.l.
Via dei Marmorari, 36 - 41057 Spilamberto (MO) – ITALY
Telephone +39 (0)59 785210 - Fax +39 (0)59 7861612
- 1.4 E-mail address SDS responsible** : info@nitty-gritty.it
- 1.5 Emergency telephone** : Nitty Gritty S.r.l. Telephone +39 (0)59 785210
- 1.6 Poison centers** : Italy → Niguarda Hospital (Milan) - ☎ +39 02 66101029
England → Guy's & Thomas' Hospital (London) - ☎ +44 20 7771 5310
France → F. Widal Hospital (Paris) - ☎ +33 1 40 05 48 48
Germany → Giftnotruf - Institut für Toxikologie (Berlin) - ☎ +49 30 19240
Spain → Instituto Nacional de Toxicologia (Madrid) - ☎ +34 91 562 04 20
Belgium → Antigifcentrum (Bruxelles) - ☎ +32 70 245 245
Netherlands → National Poison Control Centre (Bilthoven) - ☎ +31 30 274 88 88

2) HAZARDS IDENTIFICATION

- 2.1 Substances/preparation classification:** This product is dangerous under 67/548/EEC and 1999/45/EC directives and subsequent amendments. Therefore, this product requires a safety data sheet according to the Regulation (EC) 1907/2006 and subsequent amendments. Further information on health and/or environmental hazards can be found in sections 11 and 12 of this sheet.
Danger Symbol: C
Phrases R: 34
- 2.2 Danger identification:** causes burns.

3) COMPOSITION / INFORMATION ON INGREDIENTS

Name	Concentration (C)	Classification	
PHOSPHORIC ACID	>50%	C	R34
Cas Nr. 7664-38-2			Nota B
CE Nr. 231-633-2			
Index Nr. 015-011-00-6			

The complete text of -R- phrases is specified in section 16.

4) FIRST AID MEASURES

- 4.1 Eyes:** wash immediately with plenty of water for at least 15 minutes and seek medical advice.
- 4.2 Skin:** immediately wash with plenty of water. Remove all contaminated clothing. Obtain immediate medical attention. Wash contaminated clothing separately before using them again.
- 4.3 Ingestion:** obtain immediate medical attention. Induce vomiting only if indicated by the doctor. Give nothing by mouth to an unconscious person.
- 4.4 Inhalation:** remove to open air. If breathing is irregular or stopped, administer artificial respiration. Obtain immediate medical attention.

5) FIRE-FIGHTING MEASURES

- 5.1 General information:** use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.
- 5.2 Suitable extinguishing media:** the extinction equipment should be of the conventional kind: carbon dioxide, foam, powder and nebulised water.
- 5.3 Extinguishing media which shall not be used for safety reasons:** None in particular.
- 5.4 Hazards caused by exposure in the event of fire:** Do not breathe combustion products (carbon oxide, toxic pyrolysis products, etc).
- 5.5 Special protective equipment for fire-fighters:** Hardhat with visor, fireproof clothing (fireproof jacket and trousers with straps around arms, legs and waist), work gloves (fireproof, cut proof and dielectric), a depressurised mask with facemask covering the whole of the operator's face or a self-respirator (self-protector) in the event of large quantities of foam.



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6) ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions:** wear appropriate protective equipment. Send away individuals who are not suitably equipped. Use breathing equipment if fumes or powders are released into the air. Block the leakage if there is no hazard. Do not handle damaged containers or the leaked product before donning appropriate protective gear. For information on risks for the environmental and health, respiratory tract protection, ventilation and personal protection equipment, refer to the other sections of this sheet.
- 6.2 Environmental precautions:** the product must not penetrate the sewers, surface water, ground water and neighbouring areas. Dilute the product well with water after collection.
- 6.3 Methods for cleaning up:** suck the liquid into a suitable container (made of material not incompatible with the product) and soak up any leaked product with absorbent inert material (sand, vermiculite, diatomaceous earth, Kieselguhr, tripoli powder, universal cement, etc). Neutralise remaining material. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

7) HANDLING AND STORAGE

Make sure that equipment is available for cooling the vessels, to prevent the danger of overpressure and overheating in the event of fire in the vicinity. Refer to the other sections of this data sheet for information relating to health and environmental risks.

8) EXPOSURE CONTROL/INDIVIDUAL PROTECTION

8.1 Limit of individual exposition:

Name	Type	Country	TWA / 8h		STEL / 15min	
			mg/m ³	ppm	mg/m ³	ppm
PHOSPHORIC ACID	TLV – ACGIH		1		3	
	TLV	CH	1		2	
	OEL	EU	1			

- 8.2 Exposure controls:** as the use of adequate technical equipment must always take priority over personal protection equipment, make sure that the workplace is well aired through effective local aspiration or bad air vent. If such operations do not make it possible to keep the concentration of the product below the permitted workplace exposure thresholds a suitable respiratory tract protection must be used. See product label for hazard details during use. Ask your chemical substance suppliers for advice when choosing personal protection equipment. Personal protection equipment must comply with the rules in force indicated below.
- 8.2.1 Respiratory protection:** if workplace maximum concentration thresholds are exceeded, wear a partial facemask with an ABEK2P3 fume and powder mask, if there is no localised aspiration system (see Standard EN 141). If no technical measures are defined, to limit worker exposure, airway protection equipment, such as masks with cartridges for organic fumes and for powders/dusts, must be used. Facemasks only provide limited protection. For high concentrations in the workplace or in the case of an emergency, when exposure levels are unknown, wear an open circuit compressed air self-respirator (see standard EN 137) or an external air intake respirator with mask, partial mask or snorkel (see standard EN 138).
- 8.2.2 Hand protection:** protect hands using Laminated LCT Film work gloves. We recommend applying protective hand cream. The following should be considered when choosing work glove material: degradation, breakage times and permeation. Work glove resistance to preparations should be checked before use, as it can be unpredictable. Gloves' limit depends on the duration of exposure.
- 8.2.3 Eye protection:** wear sealed protective goggles with side shields (see standard EN 166).
- 8.2.4 Skin protection:** wear water-repellent overalls with long sleeves and professional water-repellent safety footwear. For maintenance and product transfer operations: tyvek overalls and water-repellent PVC boots. Wash with soap and water after removing protective clothing. Wash clothing before reuse. An emergency eye washing and shower system must be provided.

9) PHYSICAL AND CHEMICAL FEATURES

- **Color:** red
- **Odor:** characteristic
- **Physical State:** liquid
- **Vapor density:** N.A.
- **Evaporation speed:** N.A.
- **Comburent properties:** N.A.
- **Partition coefficient: n-octanol/water** N.A.
- **pH:** 1
- **Boiling point:** > 100°C



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- **Flash point:** > 60°C
- **Explosive properties:** Not explosive
- **Vapor pressure:** N.A.
- **Specific gravity:** 1,630 kg/l 20°C
- **Solubility:** Soluble (20°C)

10) STABILITY AND REACTIVITY

The product is stable in normal conditions of use and storage. Due to thermal decomposition or in the event of a fire vapours may be produced potentially dangerous to health.

PHOSPHORIC ACID: decomposes when heated forming toxic fumes of phosphorus oxide; it reacts with several metals with the formation of hydrogen which is explosive. Above 200 °C it also attacks glass.

11) TOXICOLOGICAL INFORMATION

This product is corrosive and causes abrasions of skin surface, accompanied by rubefaction, warmth and sting. In the most serious cases, small vesicles appear, which cause strong sting and pain. Upon contact with eyes, it may cause serious harm, such as cornea opacity, iris lesions, irreversible eye coloration. Possible vapours are caustic for the respiratory system and may cause pulmonary edema, whose symptoms sometimes arise only after some hours. Exposure symptoms may include: sting, cough, asthma, laryngitis, respiratory disorders, headache, nausea and sickness. If swallowed, it may cause mouth, throat and oesophagus burns; sickness, diarrhoea, edema, larynx swelling and, consequently, asphyxia. Perforation of the gastro-intestinal tract is also possible.

PHOSPHORIC ACID: oral LD50 (mg/kg) 1530 (RAT)
dermal LD50 (mg/kg) 2740 (RABBIT)
inhalation LC50 (rat) > 0,85 mg/l/1h

12) ECOLOGICAL INFORMATION

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.

13) DISPOSAL CONSIDERATION

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations. Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. Waste transportation may be subject to ADR restrictions. Contaminated packaging must be recovered or disposed of in compliance with national waste management.

14) TRANSPORT INFORMATION

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of the Code of International Carriage of Dangerous Goods by Road (ADR) and in all the applicable national regulations. These goods must be packed in their original packaging or in packaging made of materials resistant to their content and not reacting dangerously with it.

People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.

Road and rail transport:

ADR/RID class: 8
UN: 1805
Packing Group: III
Label: 8
Nr. Kemler: 80
Proper Shipping Name: PHOSPHORIC ACID SOLUTION

Carriage by sea (shipping):

IMO class: 8
UN: 1805
Packing Group: III
Label: 8
EMS: F-A, S-B
Proper Shipping Name: PHOSPHORIC ACID SOLUTION



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Transport by air:

IATA: 8
UN: 1805
Packing Group: III
Label: 8

Cargo:

Packaging instructions: 821
Maximum quantity: 60 L

Pass:

Packaging instructions: 819
Maximum quantity: 5 L
Special instructions: A3

15) REGULATORY INFORMATION

Commercial name: Brill Bomar
Symbol: "C" = corrosive



Risk phrases (R): 34 causes burns.
Risk sentences (S): 26 in case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
28 after contact with skin, wash immediately with plenty of water.
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).

Contains: PHOSPHORIC ACID

Danger labelling under directives 67/548/EEC and 1999/45/EC and following amendments and adjustments.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC regulation is respected.

16) OTHER INFORMATION

Text of -R- phrases quoted in section 3 of the sheet:

R34 causes burns.

GENERAL BIBLIOGRAPHY:

1. Directive 1999/45/EC and following amendments;
2. Directive 67/548/EEC and following amendments and adjustments (technical adjustment XXIX);
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament;
4. The Merck Index. - 10th Edition;
5. Handling Chemical Safety;
6. Niosh - Registry of Toxic Effects of Chemical Substances;
7. INRS - Fiche Toxicologique (toxicological sheet);
8. Patty - Industrial Hygiene and Toxicology;
9. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition.

NOTE FOR USERS:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product. This document must not be regarded as a guarantee on any specific product property. The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.