

SAFETY DATA SHEET



RHINO BRITE

Section 1. Identification

Product name : RHINO BRITE
Other means of identification : Not available.
Product type : Liquid.
Relevant identified uses of the substance or mixture and uses advised against
Supplier's details : DuBois Chemicals, Inc.
3630 E. Kemper Road
Cincinnati, Ohio 45241
Phone: 1-800-438-2647
Emergency telephone number (24hr) : 1-866-923-4919 (US and Canada)
01-651-523-0314 (Int'l and Mexico)
e-mail address of person responsible for this SDS : cs@duboischemicals.com

Section 2. Hazards identification

This material is hazardous according to criteria of EPA New Zealand.

EPA Group Standard: HSR002526 - Cleaning Products (Corrosive) Group Standard

HSNO Classification : 8.1 - CORROSIVE TO METALS - Category A
6.1 - ACUTE TOXICITY: ORAL - Category E
8.2 - CORROSIVE TO DERMAL TISSUE - Category A
8.3 - CORROSIVE TO OCULAR TISSUE - Category A
6.7 - CARCINOGENICITY - Category A
6.9 - SPECIFIC TARGET ORGAN TOXICITY (SINGLE OR REPEATED EXPOSURE): INHALATION - Category B
9.1 - AQUATIC ECOTOXICITY - Category B

This material is classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 and has been classified according to the Hazardous Substances (Classifications) Regulations 2001.

This material is classified as a dangerous good according to criteria in New Zealand Standard 5433:2007 Transport of Dangerous Goods on Land.

GHS label elements

Signal word : Danger
Hazard statements : May be corrosive to metals.
May be harmful if swallowed.
Causes severe skin burns and eye damage.
May cause cancer.
May cause damage to organs if inhaled.
Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.
Wear protective gloves: > 8 hours (breakthrough time): Chemical-resistant gloves.
Wear eye or face protection: Recommended: splash goggles. Wear protective clothing. Keep only in original container. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Response : Absorb spillage to prevent material damage. Collect spillage. Immediately call a POISON CENTER or doctor/physician. IF SWALLOWED: Rinse mouth. Do NOT

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induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. IF

Section 2. Hazards identification

- exposed or concerned: Get medical attention/advice.
- Storage** : Store locked up. Store in corrosive resistant container with a resistant inliner.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Symbol** :



Other hazards which do not result in classification : None known.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.
- CAS number/other identifiers**
- CAS number** : Not applicable.
- EC number** : Mixture.
- Product code** : BLE00116

Ingredient name	%	CAS number
Benzenesulfonic acid, C10-16-alkyl derivs.	5 - 10	68584-22-5
sulphuric acid	5 - 10	7664-93-9
Phosphoric acid	5 - 10	7664-38-2
2-butoxyethanol	1 - 5	111-76-2
glycollic acid	1 - 5	79-14-1
sodium xylenesulphonate	1 - 5	1300-72-7

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Inhalation** : Get medical attention immediately. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Ingestion** : Get medical attention immediately. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Section 4. First aid measures

- Skin contact** : Get medical attention immediately. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Eye contact** : Get medical attention immediately. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Inhalation** : May cause damage to organs following a single exposure if inhaled. May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
- Ingestion** : May be harmful if swallowed. May cause burns to mouth, throat and stomach.
- Skin contact** : Causes severe burns.
- Eye contact** : Causes serious eye damage.

Over-exposure signs/symptoms

- Inhalation** : No specific data.
- Ingestion** : Adverse symptoms may include the following:
stomach pains
- Skin** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Eyes** : Adverse symptoms may include the following:
pain
watering
redness

Indication of immediate medical attention and special treatment needed, if necessary

- Specific treatments** : Not available.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
sulfur oxides
phosphorus oxides
metal oxide/oxides

Section 5. Fire-fighting measures

- Hazchem code** : Not available.
- Special precautions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

- Personal precautions, protective equipment and emergency procedures** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. Absorb spillage to prevent material damage.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. Absorb spillage to prevent material damage.

Section 7. Handling and storage

- Precautions for safe handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Avoid exposure - obtain special instructions before use. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Separate from alkalis. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
sulphuric acid	NZ OSH (New Zealand, 2/2013). WES-TWA: 1 mg/m ³ 8 hours.
Phosphoric acid	NZ OSH (New Zealand, 2/2013). WES-TWA: 1 mg/m ³ 8 hours.
2-butoxyethanol	NZ OSH (New Zealand, 2/2013). Absorbed through skin. WES-TWA: 25 ppm 8 hours. WES-TWA: 121 mg/m ³ 8 hours.

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection : If a risk assessment indicates this is necessary, use a properly fitted, air-purifying or airfed respirator complying with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): Chemical-resistant gloves

Eye protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead. Recommended: splash goggles

Skin protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid. [Aqueous solution]
Color	: Clear Blue [Light]
Odor	: Acrid. acidic smell [Strong]
Odor threshold	: Not available.
pH	: 0.5

Section 9. Physical and chemical properties

Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Closed cup: Not applicable. [Product does not sustain combustion.]
Burning rate	: Not applicable.
Burning time	: Not applicable.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 1.115
Solubility	: Easily soluble in the following materials: cold water and hot water.
Solubility in water	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
SADT	: Not available.
Viscosity	: Not available.
<u>Aerosol product</u>	
Type of aerosol	: Not applicable.
Heat of combustion	: Not available.
Ignition distance	: Not applicable.
Enclosed space ignition - Time equivalent	: Not applicable.
Enclosed space ignition - Deflagration density	: Not applicable.
Flame height	: Not applicable.
Flame duration	: Not applicable.

Section 10. Stability and reactivity

Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air. Reactive or incompatible with the following materials: alkalis metals
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on the likely routes of exposure

- Inhalation** : May cause damage to organs following a single exposure if inhaled. May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
- Ingestion** : May be harmful if swallowed. May cause burns to mouth, throat and stomach.
- Skin contact** : Causes severe burns.
- Eye contact** : Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics

- Inhalation** : No specific data.
- Ingestion** : Adverse symptoms may include the following:
stomach pains
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness

Delayed and immediate effects and also chronic effects from short and long term exposure

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Benzenesulfonic acid, C10-16-alkyl derivs.	LD50 Dermal	Rabbit	2000 mg/kg	-
sulphuric acid	LD50 Oral	Rat	650 mg/kg	-
	LD50 Oral	Rat	2140 mg/kg	-
Phosphoric acid	LD50 Oral	Rat	1.25 g/kg	-
2-butoxyethanol	LD50 Oral	Rat	917 mg/kg	-
glycollic acid	LC50 Inhalation Dusts and mists	Rat	3600 mg/m ³	4 hours
sodium xylenesulphonate	LD50 Oral	Rat	1938 mg/kg	-
	LD50 Oral	Rat	5 g/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
sulphuric acid	Eyes - Severe irritant	Rabbit	-	250 Micrograms	-
	Eyes - Severe irritant	Rabbit	-	0.5 minutes 5 milligrams	-

Sensitization

Not available.

Potential chronic health effects

- General** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Eye contact** : No known significant effects or critical hazards.
- Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

Section 11. Toxicological information

Chronic toxicity

Not available.

Carcinogenicity

Not available.

Mutagenicity

Not available.

Teratogenicity

Not available.

Reproductive toxicity

Not available.

Specific target organ toxicity

Name	Category	Route of exposure	Target organs
sulphuric acid	Category A	Inhalation	Not determined

Aspiration hazard

Not available.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	2800.2 mg/kg
Dermal	21780.8 mg/kg
Inhalation (vapors)	276.5 mg/l
Inhalation (dusts and mists)	16.6 mg/l

Section 12. Ecological information

Ecotoxicity : This material is toxic to aquatic life with long lasting effects.

Aquatic and terrestrial toxicity

Product/ingredient name	Result	Species	Exposure
Benzenesulfonic acid, C10-16-alkyl derivs. sulphuric acid	Acute EC50 5.65 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 42500 µg/l Marine water	Crustaceans - Pandalus montagui - Adult	48 hours
Phosphoric acid	Acute LC50 42 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours
	Acute EC50 105 ppm Fresh water	Daphnia - Daphnia magna	48 hours
2-butoxyethanol	Acute LC50 60 ppm Fresh water	Fish - Lepomis macrochirus	96 hours
	Acute EC50 >1000 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 800000 µg/l Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 1250000 µg/l Marine water	Fish - Menidia beryllina	96 hours

Persistence/degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
2-butoxyethanol	0.81	-	low
glycollic acid	-1.11	-	low
sodium xylenesulphonate	-3.12	-	low

Mobility in soil

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Section 12. Ecological information







Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
New Zealand Class	3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (SULPHURIC ACID AND PHOSPHORIC ACID)	8	II		Hazchem Code: 2X Emergency Response Guide No: 37
ADG Class	3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (SULPHURIC ACID AND PHOSPHORIC ACID)	8	II		-
UN Class	3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (SULPHURIC ACID AND PHOSPHORIC ACID)	8	II		-
ADR/RID Class	3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (SULPHURIC ACID AND PHOSPHORIC ACID)	8	II		Tunnel code (E)
IATA Class	3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (SULPHURIC ACID AND PHOSPHORIC ACID)	8	II		-
IMDG Class	3264	CORROSIVE LIQUID, N.O.S.	8	II		-

PG* : Packing group

Section 15. Regulatory information

New Zealand Inventory of Chemicals (NZIoC)	: All components are listed or exempted.
HSNO Approval Number	: Not available.
HSNO Group Standard	: HSR002526 - Cleaning Products (Corrosive) Group Standard
HSNO Classification	: 8.1 - CORROSIVE TO METALS - Category A 6.1 - ACUTE TOXICITY: ORAL - Category E 8.2 - CORROSIVE TO DERMAL TISSUE - Category A 8.3 - CORROSIVE TO OCULAR TISSUE - Category A 6.7 - CARCINOGENICITY - Category A 6.9 - SPECIFIC TARGET ORGAN TOXICITY (SINGLE OR REPEATED EXPOSURE): INHALATION - Category B 9.1 - AQUATIC ECOTOXICITY - Category B
Australia inventory (AICS)	: All components are listed or exempted.
Safety, health and environmental regulations specific for the product	: No known specific national and/or regional regulations applicable to this product (including its ingredients).

Section 16. Other information

History

Date of printing	: 16/11/2020
Date of issue/Date of revision	: 16/11/2020
Date of previous issue	: No previous validation.
Version	: 1
Key to abbreviations	: ADG = Australian Dangerous Goods ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail UN = United Nations
References	: Not available.

📄 Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.