

SAFETY DATA SHEET



RHINO

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: AP110

Version No: 2.8

Issue date: 07/11/2016

Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	RHINO
Synonyms	Not Available
Proper shipping name	SODIUM HYDROXIDE SOLUTION
Other means of identification	Not Available

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

Relevant identified uses	Alkaline degreaser
--------------------------	--------------------

Details of the manufacturer/importer

Registered company name	APPLIED PRODUCTS AUSTRALIA PTY LTD
Address	11 Gamma Close, Beresfield 2322 NSW Australia
Telephone	(02) 4966 5516
Fax	(02) 4966 5510
Website	www.actichem.com.au
Email	info@actichem.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 11 26
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

Poisons Schedule	5
GHS Classification ^[1]	Serious Eye Damage Category 1, Skin Corrosion/Irritation Category 1B, Metal Corrosion Category 1, STOT - SE (Resp. Irr.) Category 3
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

Label elements

GHS label elements	
--------------------	--

SIGNAL WORD	DANGER
-------------	---------------

Hazard statement(s)

H318	Causes serious eye damage
H314	Causes severe skin burns and eye damage
H290	May be corrosive to metals
H335	May cause respiratory irritation

Precautionary statement(s) Prevention

P260	Do not breathe mist / vapours / spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves / protective clothing / eye protection.
P234	Keep only in original container.

Precautionary statement(s) Response

P301+P310+P330+P331	IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.
P303+P310+P361+P353+P352	IF ON SKIN (or hair): Immediately call a POISON CENTER or doctor. Take off immediately all contaminated clothing. Rinse skin with soap and water / shower.
P305+P310+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P310+P340	IF INHALED: Immediately call a POISON CENTER or doctor. Remove person to fresh air and keep at rest in a position comfortable for breathing.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.

Precautionary statement(s) Storage

P403+P405+P233	Store locked up, in a well-ventilated place. Keep container tightly closed.
----------------	---

Precautionary statement(s) Disposal

P501	Dispose of contents / container in accordance with local government regulations.
------	--

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**Substances**

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
1310-73-2	<10	<u>sodium hydroxide</u>
111-76-2	<10	<u>ethylene glycol monobutyl ether</u>
9016-45-9	<10	<u>nonylphenol, ethoxylated</u>
18662-53-8	<10	<u>nitrilotriacetic acid, trisodium salt</u>

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 FIRST AID MEASURES**Description of first aid measures**

Eye Contact	<p>If this product comes in contact with the eyes:</p> <p>Obtain medical advice / attention without delay.</p> <p>Immediately hold eyelids apart and flush the eye continuously with running water.</p> <p>Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</p> <p>Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.</p> <p>If required, transport to hospital or doctor without delay.</p> <p>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</p>
Skin Contact	<p>If skin or hair contact occurs:</p> <p>Obtain medical advice / attention without delay.</p> <p>Immediately flush body and clothes with large amounts of water, using safety shower if available.</p> <p>Quickly remove all contaminated clothing, including footwear.</p> <p>Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.</p> <p>If required, transport to hospital, or doctor.</p>
Inhalation	<p>Remove from contaminated area.</p> <p>Apply artificial respiration if not breathing.</p> <p>Seek medical advice.</p>
Ingestion	<p>For advice, contact a Poisons Information Centre or a doctor at once.</p> <p>Urgent hospital treatment is likely to be needed.</p> <p>If swallowed do NOT induce vomiting.</p> <p>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</p> <p>Observe the patient carefully.</p> <p>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</p> <p>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</p> <p>Transport to hospital or doctor without delay.</p>

Indication of any immediate medical attention and special treatment needed

Alkalis continue to cause damage after exposure.

INGESTION:

Milk and water are the preferred diluents

No more than 2 glasses of water should be given to an adult.

Neutralising agents should never be given since exothermic heat reaction may compound injury.

Catharsis and emesis are absolutely contra-indicated.

Activated charcoal does not absorb alkali.

Gastric lavage should not be used.

Supportive care involves the following:

Withhold oral feedings initially.

If endoscopy confirms transmucosal injury start steroids only within the first 48 hours.

Carefully evaluate the amount of tissue necrosis before assessing the need for surgical intervention.

Patients should be instructed to seek medical attention whenever they develop difficulty in swallowing (dysphagia).

SKIN AND EYE:

Injury should be irrigated for 20-30 minutes. Eye injuries require saline. [Ellenhorn & Barceloux: Medical Toxicology]

SECTION 5 FIREFIGHTING MEASURES**Extinguishing media**

Extinguishing media	<p>Foam. Dry chemical powder. BCF (where regulations permit). Carbon dioxide. Water spray or fog - Large fires only.</p>
----------------------------	--

Special hazards arising from the substrate or mixture

Fire incompatibility	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
-----------------------------	--

Advice for firefighters

Fire Fighting	<p>Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use firefighting procedures suitable for surrounding area. Do not approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use.</p>
Fire/Explosion Hazard	<p>Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. May emit acrid smoke. Mists containing combustible materials may be explosive. Combustion products include: carbon monoxide (CO), carbon dioxide (CO₂) and other pyrolysis products typical of burning organic material May emit corrosive fumes.</p>
HAZCHEM	2R

SECTION 6 ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Minor Spills	<p>Check regularly for spills and leaks. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal.</p>
Major Spills	<p>Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Collect recoverable product into labelled containers for recycling. Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labelled drums and dispose of according to local government regulations. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle.</p>
	Personal protection equipment advice is contained in Section 8 of this SDS

SECTION 7 HANDLING AND STORAGE**Precautions for safe handling**

Safe handling	<p>DO NOT allow clothing wet with material to stay in contact with skin. Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.</p>
Other information	<p>DO NOT store near acids, or oxidising agents No smoking, naked lights, heat or ignition sources.</p>

Conditions for safe storage, including any incompatibilities

Suitable container	Store only in original container.
Storage incompatibility	Avoid strong acids, acid chlorides, acid anhydrides and chloroformates.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**Control parameters****OCCUPATIONAL EXPOSURE LIMITS (OEL)****INGREDIENT DATA**


Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	sodium hydroxide	Sodium hydroxide	Not Available	Not Available	2 mg/m3	Not Available
Australia Exposure Standards	ethylene glycol monobutyl ether	2-Butoxyethanol	96.9 mg/m3 /20 ppm	242 mg/m3 / 50 ppm	Not Available	Sk

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
sodium hydroxide	Sodium hydroxide	Not Available	Not Available	Not Available
ethylene glycol monobutyl ether	2-Butoxyethanol	20 ppm	20 ppm	700 ppm
nonylphenol, ethoxylated	Glycols, polyethylene, mono(p-nonylphenol) ether	9.9 mg/m3	110 mg/m3	300 mg/m3
nitrotriacetic acid, trisodium salt	nitrotriacetic acid, trisodium salt	9.2 mg/m3	100 mg/m3	110 mg/m3

Ingredient	Original IDLH	Revised IDLH
sodium hydroxide	250 mg/m3	10 mg/m3
ethylene glycol monobutyl ether	700 ppm	700 [Unch] ppm
nonylphenol, ethoxylated	Not Available	Not Available
nitrotriacetic acid, trisodium salt	Not Available	Not Available

Exposure controls

Appropriate engineering controls	Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate. If ventilation is poor, then the use of a local exhaust ventilation system is recommended.
Personal protection	
Eye and face protection	Wear safety glasses with side shields or chemical goggles.
Skin protection	See Hand protection below
Hands/feet protection	Elbow length gloves. Butyl, PE/EVAL/PE or Nitrile are recommended for this application. When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots.
Body protection	Overalls
Other protection	PVC Apron. PVC protective suit may be required if exposure severe. Eyewash unit. Ensure there is ready access to a safety shower.
Thermal hazards	Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Appearance	Water white liquid		
Physical state	Liquid	Relative density (Water = 1)	1.06
Odour	Not Available	Viscosity (cSt)	Not Available
Odour threshold	Not Available	Auto-ignition temperature(°C)	Not Available
pH (as supplied)	14	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Partition coefficient n-octanol / water	Not Available
Initial boiling point and boiling range (°C)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Molecular weight (g/mol)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION**Information on toxicological effects**

Inhaled	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhaling corrosive bases may irritate the respiratory tract. Symptoms include cough, choking, pain and damage to the mucous membrane. The material has NOT been classified by EC Directives or other classification systems as 'harmful by inhalation'. This is because of the lack of corroborating animal or human evidence. Ethylene glycol monobutyl ether can destroy the blood cells with long term exposure. It also causes eye, nose and throat discomfort. Higher doses can cause blood in the urine.
Ingestion	Ingestion of alkaline corrosives may produce burns around the mouth, ulcerations and swellings of the mucous membranes, profuse saliva production, with an inability to speak or swallow. Both the oesophagus and stomach may experience burning pain; vomiting and diarrhoea may follow. The material has NOT been classified by EC Directives or other classification systems as 'harmful by ingestion'. This is because of the lack of corroborating animal or human evidence. Severe acute exposure to ethylene glycol monobutyl ether, by ingestion, may cause kidney damage, haemoglobinuria, (blood in urine) and is potentially fatal. The material can produce severe chemical burns within the oral cavity and gastrointestinal tract following ingestion.
Skin Contact	The material can produce severe chemical burns following direct contact with the skin. Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions. Ethylene glycol monobutyl ether penetrates the skin easily and will cause more harm on skin contact than through inhalation.
Eye	If applied to the eyes, this material causes severe eye damage. Direct eye contact with corrosive bases can cause pain and burns. There may be swelling, epithelium destruction, clouding of the cornea and inflammation of the iris. Mild cases often resolve; severe cases can be prolonged with complications such as persistent swelling, scarring, permanent cloudiness, bulging of the eye, cataracts, eyelids glued to the eyeball and blindness. One of the surfactants contained in this product can cause numbing of the cornea, which masks discomfort normally caused by other agents and leads to corneal injury.
Chronic	Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Repeated eye contact may cause permanent eye damage.

SECTION 12 ECOLOGICAL INFORMATION**Toxicity**

No data available.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
sodium hydroxide	LOW	LOW
ethylene glycol monobutyl ether	LOW (Half-life = 56 days)	LOW (Half-life = 1.37 days)
nonylphenol, ethoxylated	LOW	LOW

Bio accumulative potential

Ingredient	Bioaccumulation
sodium hydroxide	LOW (LogKOW = -3.8796)
ethylene glycol monobutyl ether	LOW (BCF = 2.51)
nonylphenol, ethoxylated	LOW (BCF = 16)

Mobility in soil

Ingredient	Mobility
sodium hydroxide	LOW (KOC = 14.3)
ethylene glycol monobutyl ether	HIGH (KOC = 1)
nonylphenol, ethoxylated	LOW (KOC = 940)

SECTION 13 DISPOSAL CONSIDERATIONS**Waste treatment methods**

Product / packaging disposal	Recycle containers whenever possible. Dispose of product residues and containers in accordance with local government regulations.
-------------------------------------	--

SECTION 14 TRANSPORT INFORMATION**Labels Required**

	
Marine Pollutant	NO
HAZCHEM	2R

Land transport (ADG)

UN number	1824				
Packing group	II				
UN proper shipping name	SODIUM HYDROXIDE SOLUTION				
Environmental hazard	No relevant data				
Transport hazard class(es)	<table border="1"><tr><td>Class</td><td>8</td></tr><tr><td>Sub risk</td><td>Not Applicable</td></tr></table>	Class	8	Sub risk	Not Applicable
Class	8				
Sub risk	Not Applicable				
Special precautions for user	<table border="1"><tr><td>Special provisions</td><td>Not Applicable</td></tr><tr><td>Limited quantity</td><td>1 L</td></tr></table>	Special provisions	Not Applicable	Limited quantity	1 L
Special provisions	Not Applicable				
Limited quantity	1 L				

SECTION 15 REGULATORY INFORMATION**Safety, health and environmental regulations / legislation specific for the substance or mixture****SODIUM HYDROXIDE (1310-73-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Exposure Standards
Australia Inventory of Chemical Substances (AICS)
Australia Hazardous Substances Information System - Consolidated Lists

ETHYLENE GLYCOL MONOBUTYL ETHER (111-76-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards
Australia Inventory of Chemical Substances (AICS)
Australia Hazardous Substances Information System - Consolidated Lists
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

NONYLPHENOL, ETHOXYLATED (9016-45-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Inventory of Chemical Substances (AICS)

NITRILOTRIACETIC ACID, TRISODIUM SALT (18662-53-8) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Inventory of Chemical Substances (AICS)
Australia Hazardous Substances Information System - Consolidated Lists
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

SECTION 16 OTHER INFORMATION**Other information**

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references. A list of reference resources used to assist the committee may be found at: www.chemwatch.net
The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered. This document is copyright.

Definitions and abbreviations

PC-TWA;	Permissible Concentration-Time Weighted Average
PC-STEL;	Permissible Concentration-Short Term Exposure Limit
IARC;	International Agency for Research on Cancer
ACGIH;	American Conference of Government Industrial Hygienists
STEL;	Short Term Exposure Limit
TEEL;	Temporary Emergency Exposure Limit
IDLH;	Immediate Danger to Life or Health Concentrations
OSF;	Odour Safety Factor
NOAEL;	No Observed Effects Level
TLV;	Threshold Limit Value
LOD;	Limit Of Detection
OTV;	Odour Threshold Value
BCF;	Bio Concentration Factors
BEI;	Biological Exposure Index

Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH. TEL (+61 3) 9572 4700.

End of SDS