

SAFETY DATA SHEET



RHINO

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: **AP110**

Version No: **3.1**

Issue Date: **12/10/2020**

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
Product code	AP110
Pack sizes	5L & 15L
Proper shipping name	SODIUM HYDROXIDE SOLUTION

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
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	02 4966 5516

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	Serious Eye Damage Category 1, Skin Corrosion/Irritation Category 1B
	<i>Classification drawn from HCIS and ECHA C&L Inventory</i>

Label elements

GHS Label pictograms	
----------------------	--

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

Hazard statement(s)

H314	Causes severe skin burns and eye damage
------	-----------------------------------------

Precautionary statement(s) Prevention

P260	Do not breathe mist / vapours / spray.
P280	Wear protective gloves / protective clothing / eye protection.

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: Immediately call a POISON CENTER or doctor. 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.

Precautionary statement(s) Storage

P405	Store locked up.
------	------------------

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	sodium hydroxide
9016-45-9	<10	nonyl phenol ethoxylate
111-76-2	<10	ethylene glycol monobutyl ether

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>Lay patient down. Keep warm and rested.</p> <p>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</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

	The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas. Though the material is non-combustible, evaporation of water from the mixture, caused by the heat of nearby fire, may produce floating layers of combustible substances. In such an event consider: foam or dry chemical powder or carbon dioxide.
--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Special hazards arising from the substrate or mixture

Fire incompatibility	None known
----------------------	------------

Advice for firefighters

Fire Fighting	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.
Fire/Explosion Hazard	Not combustible under normal conditions. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. Combustion products include carbon monoxide (CO), carbon dioxide (CO2) and other pyrolysis products typical of burning organic material May emit corrosive fumes.
HAZCHEM	2R

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	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.
Major Spills	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.
PPE	Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	DO NOT allow clothing wet with material to stay in contact with skin. Wear protective clothing when risk of exposure occurs. 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.
Other information	DO NOT store near acids, or oxidising agents No smoking, naked lights, heat or ignition sources.

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. Avoid contact with copper, aluminium and their alloys.

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/m ³	Not Available
Australia Exposure Standards	ethylene glycol monobutyl ether	2-Butoxyethanol	20 ppm / 96.9 mg/m ³	242 mg/m ³ / 50 ppm	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
sodium hydroxide	Sodium hydroxide	Not Available	Not Available	Not Available
nonylphenol, ethoxylated	Ethoxylated nonylphenol; (Nonyl phenyl polyethylene glycol ether)	43 mg/m ³	470 mg/m ³	5400 mg/m ³
ethylene glycol monobutyl ether	2-Butoxyethanol	60ppm	120ppm	700ppm

Ingredient	Original IDLH	Revised IDLH
sodium hydroxide	10 mg/m ³	Not Available
nonylphenol, ethoxylated	Not Available	Not Available
ethylene glycol monobutyl ether	700ppm	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	Red liquid		
Physical state	Liquid	Relative density (Water = 1)	1.06
Odour	Not Available	Partition coefficient n-octanol / water	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	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	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	Surface Tension (dyn/cm or mN/m)	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.
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 esophagus 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. 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.
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.

Toxicological effects of ingredients

Acute toxicity	Sodium hydroxide	Oral LD50 rat 140-340 mg/Kg Dermal rabbit LD50 1350 mg/kg
	Nonyl phenol ethoxylate	Oral LD50 Rat >=500 mg/kg
	ethylene glycol monobutyl ether	Oral LD50 (Guinea pig) 1414 mg/kg Dermal LD50 (Guinea pig) >2000 mg/kg
Skin corrosion/irritation	Sodium hydroxide	Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns.
	Nonyl phenol ethoxylate	Causes mild skin irritation (Rabbit)
	ethylene glycol monobutyl ether	Causes skin irritation
Eye damage/irritation	Sodium hydroxide	A severe eye irritant. Corrosive to eyes; contact can cause corneal burns. Contamination of eyes can result in permanent injury
	Nonyl phenol ethoxylate	Causes severe eye irritation (Rabbit)
	ethylene glycol monobutyl ether	Causes serious eye irritation
Respiratory/skin sensitization	Sodium hydroxide	No data available
	Nonyl phenol ethoxylate	Not considered to have skin sensitization properties
	ethylene glycol monobutyl ether	No data available
Germ cell mutagenicity	Sodium hydroxide	No data available
	Nonyl phenol ethoxylate	Not considered to be genotoxic
	ethylene glycol monobutyl ether	Not classified
Carcinogenicity	Sodium hydroxide	No data available
	Nonyl phenol ethoxylate	Not considered to be carcinogenic
	ethylene glycol monobutyl ether	Not classified
Reproductive toxicity	Sodium hydroxide	No data available
	Nonyl phenol ethoxylate	While nonyl phenol ethoxylates are toxic to reproduction the effects seem to be specific to direct spermicidal use, which is not relevant to the industrial use of the chemical - NICNAS
	ethylene glycol monobutyl ether	Not classified
STOT (single exposure)	Sodium hydroxide	No data available
	Nonyl phenol ethoxylate	Inhalation of mist /vapours may cause respiratory tract irritation
	ethylene glycol monobutyl ether	High concentrations may cause central nervous system depression
STOT (repeated exposure)	Sodium hydroxide	No data available
	Nonyl phenol ethoxylate	Not considered to damage health following repeated exposure
	ethylene glycol monobutyl ether	Data not relevant to humans
Aspiration toxicity	Sodium hydroxide	No data available
	Nonyl phenol ethoxylate	No data available
	ethylene glycol monobutyl ether	Not classified

SECTION 12 ECOLOGICAL INFORMATION**Toxicity**

Toxic to aquatic organisms.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites

	Endpoint	Test Duration(hr)	Species	Value
Sodium Hydroxide	LC50	96	Fish	<180mg/L
	EC50	48	Crustacea	<40.4mg/L
Nonylphenol, ethoxylated	EC50	48	Crustacea	1.43mg/L
	EC50	72	Algae or other aquatic plants	2.5mg/L
Ethylene glycol monobutyl ether	LC50	96	Fish	1-250mg/L
	EC50	48	Crustacea	>1-mg/L
	EC50	96	Algae or other aquatic plants	>1-mg/L
	NOEC	24	Crustacea	>1-mg/L

Data extracted from Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity

Persistence and degradability

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

Bio accumulative potential

Ingredient	Bioaccumulation
sodium hydroxide	LOW (LogKOW = -3.8796)
nonyl phenol ethoxylated	HIGH (LogKOW = 5.3019)
ethylene glycol monobutyl ether	LOW (BCF = 2.51)

Mobility in soil

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

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 IS FOUND ON THE FOLLOWING REGULATORY LIST**

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australian Inventory of Industrial Chemicals (AIIC)

NONYLPHENOL, ETHOXYLATED IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6

ETHYLENE GLYCOL MONOBUTYL ETHER IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australian Inventory of Industrial Chemicals (AIIC)
International Agency for Research on Cancer (IARC) – Agents classified by AIRC monographs

SECTION 16 OTHER INFORMATION**Revision Schedule**

Revision Date	12/10/2020
Initial Date	09/09/2016

SDS Version Summary

Version	Issue Date	Sections Updated
3.1	12/10/2020	Sections 2,3,5,8,9,11,12,15.16 have been updated or corrected

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, AICIS and HCIS Australia

DISCLAIMER: While the information in this Safety Data Sheet (SDS) is believed to be true and accurate based on the current level of knowledge available to us, the author makes no representations as to its accuracy or sufficiency. Conditions of use are beyond the control of APPLIED PRODUCTS AUSTRALIA PTY LTD and therefore the users are responsible to verify this data under their own particular conditions of use, applications and regulations to determine whether the product is suitable for their particular purpose and they assume all risks of their use, handling, disposal, reliance upon, publication or use of the information contained herein. This information applies only to the product designated above and does not necessarily apply to its use in combination with other materials, products, chemical compounds, structures, or processes

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 Applied Products Australia Pty Ltd.

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

End of SDS