



## SAFETY DATA SHEET

PRODUCT NAME: ARMOHIB 28

### IDENTIFICATION

**Product Name:** Armohib 28  
**Other Names:** Alkoxylated Fatty Alkylamine Polymer  
**Product Code:** ZAINHI  
**Uses:** Acid Inhibitor, Surfactant

**Supplier:** HamChem Hamilton Chemicals Ltd, 75 Ruffell Rd, Hamilton  
Phone: 079744971  
Email: [info@hamchem.co.nz](mailto:info@hamchem.co.nz), Web: [www.hamchem.nz](http://www.hamchem.nz)

- In emergency dial 111, and then ask for Fire, Ambulance or Police as necessary.
- In case of poisoning phone National Poisons Centre – 0800 764 766

### HAZARD IDENTIFICATION



**Signal Word:** DANGER

**Hazard Statements:**

H226 – Flammable Liquid and Vapour  
H302 – Harmful if swallowed  
H312 – Harmful in contact with skin  
H314 – Causes severe skins burns and eye damage  
H317 – May cause an allergic skin reaction  
H318 – Causes serious eye damage  
H332 – Harmful if inhaled  
H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H340 – May cause genetic defects  
H350 – May cause cancer  
H371 – May cause damage to organs  
H373 – May cause damage to organs through repeated or prolonged exposure  
H412 – Harmful to aquatic life with long lasting effects  
H423 – Harmful to the soil environment  
H432 – Toxic to terrestrial vertebrates

**Prevention Statements:**

P102 – Keep out of reach of children  
P103 – Read label before use  
P201 – Obtain special instructions before use

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HamChem Ltd, 75 Ruffell Road, Hamilton, New Zealand. Phone: 07-974-4971 Email: [info@hamchem.nz](mailto:info@hamchem.nz) Web: [www.hamchem.nz](http://www.hamchem.nz)

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P202 – Do not handle until all safety precautions have been read and understood  
P210 – Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P233 – Keep container tightly closed  
P240 – Ground/bond container and receiving equipment  
P241 – Use explosion proof electrical/ventilation/lighting equipment  
P260 – Do not breathe fumes/gas/mist/vapour/spray  
P264 – Wash all parts of the body thoroughly after handling  
P270 – Do not eat, drink or smoke while using this product  
P271 – Use only outdoors or in a well-ventilated area  
P272 – Contaminated work clothing should not be allowed out of the workplace  
P273 – Avoid release to the environment  
P280 – Wear protective gloves, clothing, eye protection and face protection  
P285 – In case of adequate ventilation wear respiratory protection

**Response Statements:**

P101 – If medical advice is needed, have product container or label at hand.  
P301+P330+P331 – IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTRE or Dr/Physician if you feel unwell  
P303+P361+P353 – IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower and soap if available  
P333+P313 – If skin irritation or rash occurs: Get medical advice/attention  
P304+P341 – IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.  
P342+P311 – If experiencing respiratory problems: Call a POISON CENTRE or Dr/Physician.  
P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing. Immediately call a POISON CENTRE or Dr/Physician.  
P308+P313 – If exposed or concerned: Get medical advice/attention.  
P363 – Wash contaminated clothing before re-use  
P370+P378 – In case of fire: Use foam, dry chemical powder, carbon dioxide, water spray or water fog for extinguishing.  
P391 – Collect spillage.

**Storage Statements:**

P403+P235 – Store in a well-ventilated place. Keep cool.  
P405 – Store locked up

**Disposal Statement:**

P501 – Dispose of in accordance with local/regional/national/international requirements.

<b>COMPOSITION &amp; INFORMATION ON INGREDIENTS</b>
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Chemical Entity	CAS No.	Proportion (%)
Tallowalkylzmine ethoxylate propoxylate	68213-26-3	35-45%
Formaldehyde, reaction products with oleylamine	91782-77-3	30-40%
Prop-2-yn-1-ol	107-19-7	2-10%
Butan-1-ol	71-36-3	5-10%
Acetic Acid	64-19-7	5-10%
Formaldehyde	50-00-0	<1%
Water	7732-18-5	1-3%

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FIRST AID MEASURES
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**If swallowed:** Do NOT induce vomiting. Immediately rinse mouth and lips thoroughly with water. If vomiting occurs, place victims face downwards, head lower than hips to prevent vomit entering lungs. Seek immediate medical attention.

**If on skin:** If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water (and soap if available). If irritation develops, seek medical attention.

**If inhaled:** Remove affected person from exposure. Allow to assume most comfortable position for breathing and keep warm. Keep at rest until fully recovered. If breathing has stopped apply artificial respiration at once. Seek immediate medical attention.

**If in eyes:** Hold eyelids apart and flush the eye continuously with running water. Remove contact lenses if present and easy to do so. Continue flushing for several minutes until all contaminants are washing off completely. Seek immediate medical attention.

**Note to Physician:** Treat symptomatically.

**First Aid Facilities:** Safety showers, eye wash and normal washroom facilities.

FIRE FIGHTING MEASURES
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**Extinguishing media:** Foam, dry chemical powder, carbon dioxide, water spray or water fog.

**Specific hazards:** This product is flammable. Keep storage tanks, pipelines, fire-exposed surfaces etc. cool with water spray. Shut off any leak if safe to do so and remove sources of re-ignition. Vapour/air mixtures may ignite explosively. Flashback along the vapour trail may occur. Runoff to sewer may create fire or explosion hazard. Collect firefighting water for disposal.

**Protective equipment for firefighters:** Fire-fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode.

**Additional advice:** Under fire conditions this product may emit toxic and/or irritating fumes.

ACCIDENTAL RELEASE MEASURES
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Wear appropriate personal protective equipment and clothing to minimize exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unnecessary personnel. If possible contain the spill. Place inert absorbent material onto spillage. Use clean non-sparking tools to collect the material and place into a suitable labelled container. Do not dilute material but contain. Dispose of waste according to Local, Regional, National & International. If the spillage enters the waterways contact the Environmental Protection Authority, or your local waste management authority.

HANDLING & STORAGE
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**Procedure for handling:** Open containers cautiously as contents may be under pressure. Use only in a well-ventilated area. Do NOT store or use in confined spaces. Do not enter these areas without respiratory protection or until the atmosphere has been checked. Keep tank covered and containers sealed when not in use. Build up of mists or vapours in the atmosphere must be prevented. Avoid inhalation of vapours and mists. Do not use near welding or other ignition sources and avoid sparks. Do NOT pressurize, cut, heat or weld containers as they may contain

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hazardous residues. Do not smoke. When dealing with large quantities, repeated or prolonged exposure without protection should be prevented in order to lessen the possibility of disorders. It is essential that all who come into contact with this material maintain high standards of personal hygiene i.e. washing hands prior to eating, drinking, smoking or using toilet facilities.

**Storage requirements:** Store in a cool, dry, well-ventilated area away from sources of ignition, oxidizing agents, foodstuffs, clothing and out of direct sunlight.

<b>EXPOSURE CONTROLS &amp; PERSONAL PROTECTION</b>
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**Exposure standards:**

Workplace Exposure Standards as set by Work Safe New Zealand:

Substance	TWA (ppm)	TWA (mg/m <sup>3</sup> )	STEL (ppm)	STEL (mg/m <sup>3</sup> )
Prop-2-yn-1-ol	1.0	2.3	-	-
Butan-1-ol	Ceiling 50 ppm (150 mg/m <sup>3</sup> )			
Formaldehyde	0.5ppm (8 hr shift) 0.33ppm (12 hr shift) Ceiling 1 ppm			
Acetic Acid	10	25	15	37

**Engineering controls:** Provide sufficient ventilation to keep airborne levels below the exposure limits. Where vapours or mists are generated, particularly in enclosed areas, and natural ventilation is inadequate, a flameproof exhaust ventilation system is required.

**Respiratory Protection:** If engineering controls are not effective in controlling airborne exposure then respiratory protective equipment should be used suitable for protecting against airborne contaminants. Types of breathing protection required will vary according to individual circumstances. Expert advice may be required to make this decision. Reference should be made to Australian/NZ Standards 1715 – Selection, use and maintenance of Respiratory Protective Devices; and AS/NZS 1716 – Respiratory Protective Devices.

**Hand Protection:** Wear gloves of impervious material. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161.1 – Occupational Protective Gloves – Selection, use and maintenance.

**Eye Protection:** Safety glasses with side shields, goggles or full-face shield as appropriate. Final choice of appropriate eye/face protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken. Eye Protection should conform with AS/NZS 1337 – Eye Protection for Industrial Applications.

**Body Protection:** Suitable work wear should be worn to protection personal clothing, e.g. cotton overalls buttoned at neck and wrist. When large quantities are handled the use of plastic aprons and rubber boots is recommended. Industrial clothing should conform to the specifications detailed in AS/NZS 4501 – Industrial Clothing.

**Biological Limit Values:** No biological limit values available.

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#### PHYSICAL & CHEMICAL PROPERTIES

Appearance	Dark liquid
Odour	Amine like odour
pH value	Not available
Vapour Pressure	Not available
Boiling Point	115°C
Melting Point	-58°C
Solubility in Water	Soluble
Specific Gravity (H2O = 1)	0.90
Flash Point	32°C (Pensky-Martens Closed Cup)
Upper Flammability Limits	Not available
Lower Flammability Limits	Not available
Auto-Ignition Temperature	342.9°C
Vapour Density (Air = 1)	Not available

#### STABILITY & REACTIVITY

**Stability:** Stable under normal conditions of handling and storage.

**Hazardous decomposition products:** Thermal decomposition may result in the release of toxic and/or irritating fumes.

**Hazardous polymerization:** Will not occur.

**Materials to avoid:** Strong oxidizing agents.

**Conditions to avoid:** Heat, direct sunlight, open flames or other sources of ignition.

#### TOXICOLOGICAL INFORMATION

**Toxicity Information:** LD50 (oral, rat): 950 mg/kg; LD50 (oral, rabbit): 705 mg/kg

**Carcinogenicity:** It is important to recognize that this product is classified as a Category 3 Carcinogen according to National Occupational Health & Safety Commission (NOHSC Australia). That is, there is some evidence from appropriate animal studies that human exposure can result in the development of Cancer, but this evidence is insufficient to place the substance in Category 2.

**Inhalation:** Harmful by inhalation. Inhalation of product vapours will cause irritation of the nose, throat and respiratory system.

**Ingestion:** Harmful if swallowed. Ingestion of this product will irritate the gastric tract causing nausea and vomiting.

**Skin:** Harmful and corrosive in contact with the skin. Will cause irritation in contact with the skin, which can result in drying and defatting of the skin and possible dermatitis. This product may also cause sensitization in some individuals.

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**Eye:** Will cause severe irritation to the eyes, which can result in redness, stinging, pain, loss of colour vision (blue vision), corneal oedema, lachrymation and possibly irreversible eye damage, i.e. corneal burns.

**Chronic Effects:** Prolonged or repeated skin contact may cause defatting leading to dermatitis.

#### ECOLOGICAL INFORMATION

**Ecotoxicity (Aquatic & Terrestrial):** Toxic to aquatic organisms, may cause long-lasting effects in the aquatic environment.

**Persistence & degradability:** No data is available for this material.

**Bioaccumulative potential:** No data is available for this material.

**Mobility in soil:** No data is available for this material.

**Other adverse effects:** No data is available for this material.

#### DISPOSAL CONSIDERATIONS

**Appropriate disposal methods:** Dispose of waste according to local, regional and EPA regulations. Labels should not be removed from containers until they have been cleaned. Do not cut, puncture or weld on or near containers. Empty containers may contain hazardous residues. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers.

#### TRANSPORT INFORMATION

<b>UN Number:</b>	2924
<b>UN Proper Shipping name:</b>	Flammable Liquid, Corrosive, N.O.S
<b>UN Dangerous Goods Class:</b>	3 – Flammable Liquid
<b>UN Dangerous Goods Sub Class:</b>	8 – Corrosive Liquid
<b>UN Packing group:</b>	III
<b>Hazchem Code:</b>	3W

#### REGULATORY INFORMATION

<b>HSNO Approval number:</b>	HSR002497
<b>HSNO Classifications:</b>	3.1C, 6.1D, 6.5A, 6.5B, 6.6A, 6.7A, 6.9B, 8.2C, 8.3A, 9.1C, 9.2C, 9.3B
<b>Licensing Requirements:</b>	None

#### OTHER INFORMATION

**Date of SDS:** June 2018

**End of SDS.**

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