**Chemwatch Material Safety Data Sheet** 

Issue Date: 22-Jun-2011

9317SP

**Hazard Alert Code: MODERATE** 

**CHEMWATCH 62101** Version No:6.1.1.1 Page 1 of 8

## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### PRODUCT NAME

Wynn's Kwik Kool

## **SYNONYMS**

"60205 500 ml"

### **PRODUCT USE**

Corrosion inhibitor for engine cooling systems.

## **SUPPLIER**

Company: ITW AAMTech

Address:

100 Hassall Street Wetherill Park NSW. 2164 Australia

Telephone: +61 2 9828 0900

Emergency Tel:1800 039 008 (24 hours) Emergency Tel:+61 3 9573 3112 (24 hours)

Fax: +61 2 9725 4698

## **Section 2 - HAZARDS IDENTIFICATION**

## STATEMENT OF HAZARDOUS NATURE

HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.

**RISK** 

Risk Codes Risk Phrases

R22 · Harmful if swallowed.

R36/37/38 · Irritating to eyes, respiratory system and skin.

• Repeated exposure may cause skin dryness and cracking. R66 R67

· Vapours may cause drowsiness and dizziness.

**SAFETY** 

S13

Safety Codes Safety Phrases

• Do not breathe gas/fumes/vapour/spray. S23

S24 · Avoid contact with skin. S25 · Avoid contact with eyes. S36 · Wear suitable protective clothing.

S37 · Wear suitable gloves. S39 · Wear eye/face protection.

S40 • To clean the floor and all objects contaminated by this material, use water.

· Keep away from food, drink and animal feeding stuffs.

S26 · In case of contact with eyes, rinse with plenty of water and contact Doctor or

Poisons Information Centre.

S46 • If swallowed, IMMEDIATELY contact Doctor or Poisons Information Centre. (show

this container or label).

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
ethylene glycol	107-21-1	30-60
sodium nitrite	7632-00-0	<10
sodium molybdate	7631-95-0	<10
other non- hazardous ingredients		<10

**Hazard Alert Code: MODERATE** 

Chemwatch Material Safety Data Sheet

Issue Date: 22-Jun-2011 9317SP

CHEMWATCH 62101
Version No:6.1.1.1
Page 2 of 8
Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

water 7732-18-5 30-60

### Section 4 - FIRST AID MEASURES

### **SWALLOWED**

- For advice, contact a Poisons Information Centre or a doctor at once.
- Urgent hospital treatment is likely to be needed.
- · If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

### **EYE**

- If this product comes in contact with the eyes:
- · Wash out immediately with fresh running water.
- 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.
- · Seek medical attention without delay; if pain persists or recurs seek medical attention.
- · Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

#### SKIN

- If skin contact occurs:
- · Immediately remove all contaminated clothing, including footwear.
- · Flush skin and hair with running water (and soap if available).
- · Seek medical attention in event of irritation.

### **INHALED**

- If fumes, aerosols or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

## NOTES TO PHYSICIAN

Treat symptomatically.

To treat poisoning by the higher aliphatic alcohols (up to C7):

- · Gastric lavage with copious amounts of water.
- It may be beneficial to instill 60 ml of mineral oil into the stomach.
- · Oxygen and artificial respiration as needed.
- Electrolyte balance: it may be useful to start 500 ml. M/6 sodium bicarbonate intravenously but maintain a cautious and conservative attitude toward electrolyte replacement unless shock or severe acidosis threatens.

## Section 5 - FIRE FIGHTING 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.

### FIRE FIGHTING

- · Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves in the event of a fire.
- Prevent, by any means available, spillage from entering drains or water courses.
- Use fire fighting procedures suitable for surrounding area.

## FIRE/EXPLOSION HAZARD

- WARNING: May EXPLODE on heating!!!.
- The material is not readily combustible under normal conditions.
- · However, it will break down under fire conditions and the organic component may burn.
- · Not considered to be a significant fire risk.
- · Heat may cause expansion or decomposition with violent rupture of containers.

Decomposes on heating and produces toxic fumes of: carbon dioxide (CO2), metal oxides, other pyrolysis products typical of

**Chemwatch Material Safety Data Sheet** 

Issue Date: 22-Jun-2011

9317SP

**Hazard Alert Code: MODERATE** 

CHEMWATCH 62101 Version No:6.1.1.1 Page 3 of 8

Section 5 - FIRE FIGHTING MEASURES

burning organic material. May emit poisonous fumes. May emit corrosive fumes.

## FIRE INCOMPATIBILITY

■ None known.

## HAZCHEM

None

## **Section 6 - ACCIDENTAL RELEASE MEASURES**

## 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.

### **MAJOR SPILLS**

Minor hazard.

- · Clear area of personnel.
- · Alert Fire Brigade and tell them location and nature of hazard.
- Control personal contact with the substance, by using protective equipment as required.
- · Prevent spillage from entering drains or water ways.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

## Section 7 - HANDLING AND STORAGE

## PROCEDURE FOR HANDLING

- DO NOT allow clothing wet with material to stay in contact with skin.
- · Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- · Use in a well-ventilated area.
- · Prevent concentration in hollows and sumps.

## SUITABLE CONTAINER

- DO NOT use aluminium or galvanised containers.
- Polyethylene or polypropylene container.
- Packing as recommended by manufacturer.
- Check all containers are clearly labelled and free from leaks.

## STORAGE INCOMPATIBILITY

None known.

## STORAGE REQUIREMENTS

- · Store in original containers.
- Keep containers securely sealed.
- · Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

## **EXPOSURE CONTROLS**

**Chemwatch Material Safety Data Sheet** 

Issue Date: 22-Jun-2011

9317SP

**Hazard Alert Code: MODERATE** 

CHEMWATCH 62101 Version No:6.1.1.1

Page 4 of 8

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Source	Material	TWA ppm	TWA mg/m³	STEL ppm	STEL mg/m³	Peak ppm	Peak mg/m³	TWA F/CC	Notes
Australia Exposure Standards	Wynn' s Kwik Kool (Molybdenum, soluble compounds (as Mo))		5						
Australia Exposure Standards Australia Exposure Standards	ethylene glycol (Ethylene glycol (vapour)) ethylene glycol (Ethylene glycol (particulate))	20	52 10	40	104				

The following materials had no OELs on our records

• sodium nitrite: CAS:7632- 00- 0
• water: CAS:7732- 18- 5

### MATERIAL DATA

SODIUM MOLYBDATE:

SODIUM NITRITE:

It is the goal of the ACGIH (and other Agencies) to recommend TLVs (or their equivalent) for all substances for which there is evidence of health effects at airborne concentrations encountered in the workplace.

At this time no TLV has been established, even though this material may produce adverse health effects (as evidenced in animal experiments or clinical experience).

NOTE: The ACGIH occupational exposure standard for Particles Not Otherwise Specified (P.N.O.S) does NOT apply.

## ETHYLENE GLYCOL:

WYNN'S KWIK KOOL:

for ethylene glycol:

Odour Threshold: 25 ppm

NOTE: Detector tubes for ethylene glycol, measuring in excess of 10 mg/m3, are commercially available.

It appears impractical to establish separate TLVs for ethylene glycol vapour and mists.

### SODIUM MOLYBDATE:

WYNN'S KWIK KOOL:

An increased incidence of non-specific symptoms including headache, weakness, fatigue, anorexia and joint and muscle weakness has been reported to occur in mining and metallurgy workers exposed to 60-600 mg (as Mo). Some investigators have attributed gout and elevated uric acid concentration found in some Armenians to result from exposures to Armenian soils rich in molybdenum, whilst exposure has been implicated as a cause of bone disease amongst Indians.

## SODIUM MOLYBDATE:

SODIUM NITRITE:

Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically occupational exposure standards for these irritants have been based on observation of workers' responses to various airborne concentrations.

### WYNN'S KWIK KOOL:

None assigned. Refer to individual constituents.

### WATER:

No exposure limits set by NOHSC or ACGIH.

### PERSONAL PROTECTION

### **RESPIRATOR**

•Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

### EYE

- · Safety glasses with side shields.
- · Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a

**Hazard Alert Code: MODERATE** 

**Chemwatch Material Safety Data Sheet** 

Issue Date: 22-Jun-2011

9317SP

CHEMWATCH 62101 Version No:6.1.1.1 Page 5 of 8

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent].

#### HANDS/FFFT

- Wear chemical protective gloves, e.g. PVC.
- Wear safety footwear or safety gumboots, e.g. Rubber.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:

### **OTHER**

- Overalls.
- P.V.C. apron.
- · Barrier cream.
- · Skin cleansing cream.

### **ENGINEERING CONTROLS**

■ Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Not Available

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

### **APPEARANCE**

Clear dark green liquid with a mild alkaline salts odour; mixes with water.

## PHYSICAL PROPERTIES

Liquid.

Mixes with water.

State	Liquid	Molecular Weight	Not Applicable
Melting Range (°C)	- 32	Viscosity	Not Available
Boiling Range (°C)	107	Solubility in water (g/L)	Miscible
Flash Point (°C)	Not Applicable	pH (1% solution)	Not Available
Decomposition Temp (°C)	Not Available	pH (as supplied)	10.5
			(concentrated)
Autoignition Temp (°C)	Not Available	Vapour Pressure (kPa)	Not Available
Upper Explosive Limit (%)	Not Applicable	Specific Gravity (water=1)	1.10@15C
Lower Explosive Limit (%)	Not Applicable	Relative Vapour Density	Not Available

# Section 10 - STABILITY AND REACTIVITY

(air=1)

**Evaporation Rate** 

## CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.

Volatile Component (%vol)

Hazardous polymerisation will not occur.

For incompatible materials - refer to Section 7 - Handling and Storage.

Not Available

**Chemwatch Material Safety Data Sheet** 

Issue Date: 22-Jun-2011

9317SP

**Hazard Alert Code: MODERATE** 

CHEMWATCH 62101 Version No:6.1.1.1

Page 6 of 8

## **Section 11 - TOXICOLOGICAL INFORMATION**

### POTENTIAL HEALTH EFFECTS

### **ACUTE HEALTH EFFECTS**

### **SWALLOWED**

■ Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.

If swallowed, the toxic effects of glycols (dihydric alcohols) are similar to those of alcohol, with depression of the central nervous system, nausea, vomiting, and degenerative changes in the liver and kidney.

#### EYE

■ This material can cause eye irritation and damage in some persons.

#### SKIN

■ Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. This material can cause inflammation of the skin oncontact in some persons.

### INHALED

■ If inhaled, this material can irritate the throat andlungs of some persons.

Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.

### **CHRONIC HEALTH EFFECTS**

■ Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

There is some evidence from animal testing that exposure to this material may result in reduced fertility.

There is some evidence from animal testing that exposure to this material may result in toxic effects to the unborn baby.

### **TOXICITY AND IRRITATION**

■ No significant acute toxicological data identified in literature search.

For ethylene glycol:

Ethylene glycol is quickly and extensively absorbed through the gastrointestinal tract. Limited information suggests that it is also absorbed through the respiratory tract; dermal absorption is apparently slow.

**CARCINOGEN** 

sodium nitrite International Agency for Group 2A

Research on Cancer (IARC) -Agents Reviewed by the IARC

Monographs

SKIN

ethylene glycol Australia Exposure Notes Sk

Standards - Skin
ethylene glycol GESAMP/EHS Composite D1: skin 0

List - GESAMP Hazard irritation/corrosion

Profiles

sodium nitrite GESAMP/EHS Composite D1: skin 0

List - GESAMP Hazard irritation/corrosion

**Profiles** 

## **Section 12 - ECOLOGICAL INFORMATION**

No data

**Ecotoxicity** 

Ingredient Persistence: Persistence: Air Bioaccumulation Mobility
Water/Soil

**Chemwatch Material Safety Data Sheet** 

Issue Date: 22-Jun-2011

9317SP

Hazard Alert Code: MODERATE

CHEMWATCH 62101 Version No:6.1.1.1 Page 7 of 8

Section 12 - ECOLOGICAL INFORMATION

ethylene glycol	LOW	MED	LOW	HIGH
sodium nitrite	LOW	No Data	LOW	HIGH
		Available		
sodium molybdate	HIGH	No Data	LOW	HIGH
		Available		

## **Section 13 - DISPOSAL CONSIDERATIONS**

- · Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible.

#### Otherwise:

- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
- · Where possible retain label warnings and MSDS and observe all notices pertaining to the product.
- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- · Where in doubt contact the responsible authority.
- Recycle wherever possible
- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
- Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or incineration in a licenced apparatus (after admixture with suitable combustible material).
- Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

## Section 14 - TRANSPORTATION INFORMATION

## HAZCHEM:

None (ADG7)

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: UN, IATA, IMDG

## Section 15 - REGULATORY INFORMATION

## Indications of Danger:

Xn Harmful

## POISONS SCHEDULE

S6

## **REGULATIONS**

## Wynn's Kwik Kool (CAS: ) is found on the following regulatory lists;

"Australia Exposure Standards"

### Regulations for ingredients

## ethylene glycol (CAS: 107-21-1) is found on the following regulatory lists;

"Australia - Victoria Occupational Health and Safety Regulations - Schedule 9: Materials at Major Hazard Facilities (And Their Threshold Quantity) Table 2", "Australia Exposure Standards", "Australia Hazardous Substances", "Australia High Volume Industrial Chemical List (HVICL)", "Australia Inventory of Chemical Substances (AICS)", "Australia National Pollutant Inventory", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix C", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2)", "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", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO IBC Code Chapter 17: Summary of minimum requirements", "IMO MARPOL

**Chemwatch Material Safety Data Sheet** 

Issue Date: 22-Jun-2011

9317SP

**Hazard Alert Code: MODERATE** 

CHEMWATCH 62101 Version No:6.1.1.1 Page 8 of 8

Section 15 - REGULATORY INFORMATION

73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances", "IMO Provisional Categorization of Liquid Substances - List 2: Pollutant only mixtures containing at least 99% by weight of components already assessed by IMO", "International Council of Chemical Associations (ICCA) - High Production Volume List", "International Fragrance Association (IFRA) Survey: Transparency List", "OECD List of High Production Volume (HPV) Chemicals", "OSPAR National List of Candidates for Substitution – Norway"

## sodium nitrite (CAS: 7632-00-0) is found on the following regulatory lists;

"Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (AQUA/1 to 6 inorganic chemicals)", "Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (Domestic water supply - inorganic chemicals)", "Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (STOCK - inorganic chemicals)", "Australia - Australian Capital Territory -Environment Protection Regulation: Pollutants entering waterways taken to cause environmental harm - Domestic water supply quality", "Australia - Australian Capital Territory - Environment Protection Regulation: Pollutants entering waterways taken to cause environmental harm (Aquatic habitat)", "Australia - Australian Capital Territory - Environment Protection Regulation: Pollutants entering waterways taken to cause environmental harm (STOCK)", "Australia - Victoria Occupational Health and Safety Regulations - Schedule 9: Materials at Major Hazard Facilities (And Their Threshold Quantity) Table 2", "Australia - Western Australia Hazardous Substances Prohibited for Specified Uses or Methods of Handling", "Australia Drinking Water Guideline Values For Physical and Chemical Characteristics", "Australia Hazardous Substances", "Australia Inventory of Chemical Substances (AICS)", "Australia National Pollutant Inventory", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) Appendix E (Part 2)", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix F (Part 3)", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 2", "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", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 7", "Australia Work Health and Safety Regulations 2011 - Restricted hazardous chemicals", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO IBC Code Chapter 17: Summary of minimum requirements", "International Agency for Research on Cancer (IARC) Agents Reviewed by the IARC Monographs", "International Council of Chemical Associations (ICCA) - High Production Volume List", "OECD List of High Production Volume (HPV) Chemicals"

## sodium molybdate (CAS: 7631-95-0, 10102-40-6) is found on the following regulatory lists;

"Australia Exposure Standards", "Australia Hazardous Substances", "Australia Inventory of Chemical Substances (AICS)", "Australia National Pollutant Inventory", "OECD List of High Production Volume (HPV) Chemicals"

## water (CAS: 7732-18-5) is found on the following regulatory lists;

"Australia High Volume Industrial Chemical List (HVICL)", "Australia Inventory of Chemical Substances (AICS)", "IMO IBC Code Chapter 18: List of products to which the Code does not apply", "International Fragrance Association (IFRA) Survey: Transparency List", "OECD List of High Production Volume (HPV) Chemicals", "OSPAR National List of Candidates for Substitution – Norway"

## **Section 16 - OTHER INFORMATION**

## **INGREDIENTS WITH MULTIPLE CAS NUMBERS**

Ingredient Name CAS

sodium molybdate 7631-95-0, 10102-40-6

- 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/references.
- The (M)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.

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Issue Date: 22-Jun-2011 Print Date: 12-Dec-2012

This is the end of the MSDS.