



MATERIAL SAFETY DATA SHEET
WELCO RINSE AID

1. IDENTIFICATION OF THE PREPARATION AND THE COMPANY:

SUBSTANCE NAME: WELCO RINSE AID
APPLICATIONS: CONNECT DISTRIBUTION SERVICES LTD.

SUPPLIER: McKLords Ltd
Bodelwyddan
Denbighshire. NORTH WALES. LL18 5SX

EMERGENCY TEL: 01745 585995 **FAX:** 01745 585755

2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	EC No.	Cas. No.	Contents	Symbol	Risk (R No.)
Isopropyl alcohol		67-63-0	<25%	F;Xi	R11, R36, R67

The full text for all Risk Phrases (R No.) are shown in section 15.

3. HAZARD IDENTIFICATION

Human health hazards: Flammable, Irritating to the eyes and skin. Contact with skin and eyes should be avoided.

4. FIRST AID MEASURES

Symptoms and effects:	Headache. Dizziness. Nausea. Narcosis. Dryness of the skin. Ingestion may cause inebriation and coma. Irritation of the skin, eyes and respiratory tract.
Eye Contact	Flush eye with water. If persistent irritation occurs, obtain medical attention.
Skin Contact	Wash promptly with soap and water if available. If persistent irritation occurs, obtain medical attention.
Inhalation	Remove person to fresh air. If rapid recovery does not occur, obtain medical attention.
Ingestion	DO NOT induce vomiting. If rapid recovery does not occur, obtain medical attention. Give water to drink, providing patient is conscious.
Advice to physicians:	Dermatitis may result from prolonged or repeated exposure. May cause central nervous system depression.

5. FIRE FIGHTING MEASURES

Specific hazards:	Hazardous combustion products may include carbon monoxide. The vapour is heavier than air, spreads along the ground and distant ignition is possible.
Extinguishing Media:	Alcohol resistant foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable extinguishing media:	Water in a jet.
Protective equipment:	Full protective clothing and self contained breathing apparatus.
Other information:	Keep adjacent containers cool by spraying with water.

6. ACCIDENTAL RELEASE MEASURES:

Personal precautions:	Avoid contact with skin and eyes. Ventilate contaminated area thoroughly. Do not breathe vapour. Extinguish naked flames. Remove ignition sources. No smoking. Avoid sparks. Evacuate the area of all non-essential personnel. Shut off leaks, if possible without personal risk.
Personal protection:	Wear PVC, neoprene, or nitrile rubber gloves, PVC one-piece suit with integral hood, safety boots, rubber, knee length. Wear full face-piece respirator with organic vapour canister NPF 400. In a confined space, wear self-contained breathing apparatus open circuit type NPF 2000.
Environmental precautions:	Prevent contamination of soil and water. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers.
Clean-up methods - small spillage:	Absorb or contain liquid with sand, earth or spill control material. Shovel up and place in a labelled, sealable container for subsequent safe disposal. Put leaking containers in a labelled drum or overdrum. Flush contaminated area with plenty of water. Retain washings as contaminated waste.
Clean-up methods - large spillage:	Transfer to a labelled, sealable container for product recovery or safe disposal. Treat residues as for small spillage.
Other information:	Risk of explosion. Inform the emergency services if liquid enters surface water drains. Vapour may form an explosive mixture with air. See section 13 for information on disposal.

7. HANDLING AND STORAGE

Handling:	Avoid prolonged or repeated contact with skin. Extinguish any naked flames. Remove ignition sources. Avoid sparks. Do not smoke. Take precautionary measures against static discharges. Earth all equipment. Do not empty into drains.
Handling temperatures:	Ambient.
Storage:	Tanks should be fitted with a vapour recovery system. Keep away from direct sunlight and other sources of heat or ignition. Do not smoke in storage areas. Keep container tightly closed and in a well-ventilated place.
Storage temperatures:	Ambient.
Product transfer:	Take precautionary measures against static discharges. Earth all e

quipment. Avoid splash filling.

Recommended materials: For containers or container linings, use mild steel or stainless steel. For container paints, use zinc silicate. If diluted with de-ionised water, steel containers may be unsuitable.

Unsuitable materials: Most plastics, aluminium if > 50C, neoprene rubber.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

Occupational exposure standards:

Component name	Limit type	Value	Unit	Other information
Isopropyl alcohol	TLV/TWA	999	mg/m ³	(400ppm for 8 hours)
	STEL	1250	mg/m ³	(500ppm for 15 mins)

Respiratory protection: No specific measures.

Eye protection: Monogoggles.

Body protection: Standard issue work clothes. Safety shoes or boots - chemical resistant.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid at ambient temperature.
Colour:	Clear.
Odour:	Characteristic.
Initial boiling point:	82°C
Final boiling point:	83°C
Melting point:	-90°C
Vapour pressure:	4.3kPa @ 20°C
Density:	785 kg/m ³ @ 20°C
Dynamic viscosity:	2.43 mPa.s @ 20°C
Vapour density (air = 1):	2.0 @ 20°C
Conductivity:	6 pS/m x 10 ⁶ @ 20°C
Flash point:	12°C (Abel)
Explosion limit - upper:	12% (v/v)
Explosion limit - lower:	2% (v/v)
Auto-ignition temperature:	425°C
Solubility in water:	Complete.
n-octanol/water partition coefficient:	< 3 log POW
Evaporation rate:	(relative) 1.5 (n-Bu.Ac=1).

10. STABILITY AND REACTIVITY:

Stability:	Stable under normal conditions. Reacts with strong oxidising agents. Reacts with strong acids.
Conditions to avoid:	Heat, flames and sparks.
Materials to avoid:	Strong oxidising agents. Strong acids.
Hazardous Decomposition	Products: None Known.

11.TOXICOLOGICAL INFORMATION:

Basis for assessment:	Information given is based on product data.
Acute toxicity - oral:	LD50 > 2000 mg/kg
Acute toxicity - dermal:	LD50 > 2000 mg/kg
Acute toxicity - inhalation:	LC50 > 5 mg/l
Eye irritation:	Slight irritant.
Skin irritation:	Slight irritant.
Respiratory irritaion:	Irritant in animal studies.
Skin sensitisation:	May cause skin sensitisation.
(Sub) chronic toxicity:	Repeated exposure causes liver damage.
Human effects:	Repeated exposure can lead to allergic contact dermatitis. High exposures can cause drowsiness and dizziness. Can cause liver damage.

12.ECOLOGICAL INFORMATION

Basis for assessment:	Information is given on product data.
Mobility:	Dissolves in water. Lost within a day by evaporation and dissolution. Large volumes may penetrate soil and could contaminate groundwater.
Persistence/Degradability:	Readily biodegradable. Oxidises rapidly by photochemicals in air.
Bio-accumulation:	Does not bio-accumulate.

Acute toxicity - fish:	LC50 > 100 mg/l
Acute toxicity - daphnia:	EC50 > 100 mg/l
Acute toxicity - algae:	IC50 > 100 mg/l
Acute toxicity - bacteria:	IC50 > 100 mg/l
Sewage treatment:	Practically non-toxic, EC50 > 100 mg/l, to organisms in sewage treatment plants.
Other information:	Poses a significant risk of oxygen depletion in aquatic systems.

13. DISPOSAL CONSIDERATIONS.

Precautions:	Refer to Section 7 before handling the products or containers.
Waste disposal:	Recover or recycle if possible. Otherwise incineration.
Product disposal:	Recover or recycle if possible. Otherwise incineration.
Container disposal:	Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Send to drum recoverer or metal reclaimer. Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums.

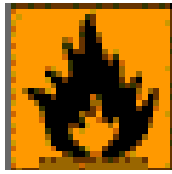
Dispose of in accordance with local authority regulations.

14. TRANSPORT INFORMATION:

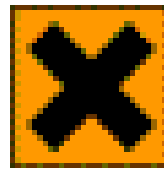
US Number:	1219
UN Class/Packing Group:	3/II
U.N. Proper shipping name:	ISOPROPANOL (Isopropyl alcohol)
UN Number (sea transport, IMO):	1219
IMO Class/Packing Group:	3.2/II
IMO Symbol:	Flammable liquid
IMO Marine pollutant:	No
IMO Proper shipping name:	ISOPROPANOL (Isopropyl alcohol)
ADR/RID Class/Item:	3/3b
ADR/RID Symbol:	Flammable liquid
ADR/RID Kemler number:	33/1219
ADR/RID Proper shipping name:	ISOPROPYL ALCOHOL
UN Number (air transport, ICAO):	1219
IATA/ICAO Class/Packing Group:	3/II
IATA/ICAO Symbol:	Flammable liquid
IATA/ICAO Proper shipping name:	ISOPROPANOL (Isopropyl alcohol)

15. REGULATORY INFORMATION:

LABEL FOR SUPPLY:



FLAMMABLE



IRRITANT

EC Label name: Isopropanol

EC Classification: Highly flammable

EC Symbols: F, Xi

EC Safety phrases: S7 Keep container tightly closed
S16 Keep away from sources of ignition - no smoking.

R-phrase(s): R11: Highly Flammable
R36: Irritating to eyes
R67: Vapours may cause drowsiness or dizziness

EINECS (EC): 200-661-7

EC Annex I Number: 603-003-00-0

16. OTHER INFORMATION:

This document is produced as a guide only. A good standard of industrial hygiene should always be employed with all substances used in the work place. Always ensure that the inside of gloves or clothing do not become saturated and work allowed to continue, especially with acidic and alkaline products, as serious skin damage could result.

To comply with our continuing Quality Policy we reserve the right to change any specifications deemed appropriate, or to conform to alterations under the Health and Safety Act.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.