

MATERIAL SAFETY DATA SHEET

Revision #: 02

Section 1 - Product Identification & Use

Product Name: **Advance Dishwasher Rinse-Aid Extreme**
WHMIS Classification: Class D, Div. 2, Sensitizer
TDG Classification: Not regulated
Manufacturer: Advance Chemicals Ltd.
2023 Kingsway Ave
Port Coquitlam, B.C. Canada V3C 1S9
Phone (604) 945-9666, fax (604) 945-9617
Emergency phone: CANUTEC 24 hrs (613) 996-6666

Section 2 - Hazardous Ingredients

Hazardous Components	%(w/w)	C.A.S. No.	LD ₅₀ & LC ₅₀
2-Propanol	10-30	67-63-0	(oral, rat) 5840 mg/kg TLV 400 ppm
Poly-oxyethylene, poly-oxypropylene block polymers	5-40	9003-11-6	(oral, rat) 5000 mg/kg

Section 3 - Physical Data

Physical state: liquid Boiling point: no data
Liquid density: 0.96 kg/L @ 21°C Freezing point: no data
pH: no data Solubility in water: 100%
Vapour pressure: no data found Evaporation rate: no data
Odour & Appearance: Clear, deep to brilliant blue, liquid solution, more viscous than water. There is a sweet, blended odour above the open liquid.

Section 4 - Fire or Explosion Hazard

Flash point: No data found.
Lower flammable limit: No data found.
Upper flammable limit: No data found.
Extinguishing media: Use an alcohol-type or all purpose foam by manufacturer's recommended techniques for large fires. Use carbon dioxide or dry chemical media for small fires. Do not use a direct water stream.
Special Fire Fighting Procedures: Use self-contained breathing apparatus and full personal protective clothing. Use water spray to cool nearby containers and structures to prevent vapour build-up and rupture. Water may be used to flush spills away from dangerous exposures.
Hazardous Combustion Products: This product may produce carbon monoxide and/or carbon dioxide gas when burned. Carbon monoxide gas is highly toxic if inhaled. Carbon dioxide gas in sufficient quantities is considered an asphyxiate. Wear approved self contained breathing apparatus. May also produce acrid smoke and fumes when heated to the decomposition point.
Unusual Fire & Explosion Hazards: This material may produce a floating fire hazard in extreme fire conditions.

Section 5 - Reactivity Data

Stability: Stable.
Polymerization: No data found.
Conditions to Avoid: Heat, sparks and open flames. Avoid contamination with strong alkalis. Strong oxidizing materials.
Hazardous Combustion Products: Burning can produce carbon monoxide and/or carbon dioxide. Carbon monoxide is highly toxic if inhaled, and carbon dioxide in sufficient quantities can act as an asphyxiate. May also produce acrid smoke and fumes when heated to the decomposition point.
Conditions of Reactivity: None currently known.

Section 6 - Toxicological Properties

Carcinogenicity: No data found.
Irritancy: Product may cause skin and eye irritation.
Teratogenicity: No data found.
Reproductive effects: No data found.
Mutagenicity: No data found.
Toxicologically synergistic products: No data found.
Environmental effects: No data found.

Section 7 - Preventative Measures

Personal Protective Equipment:
Respiratory: Respiratory protection is not normally necessary when handling this product. In extreme situations of high atmospheric

concentrations, an approved NIOSH or MSHA half-face or full-face respirator with acid/organic vapour cartridges will be necessary.

Eyes: Chemical protective goggles, may cause persistent eye irritation which can lead to permanent damage.

Clothing: Chemical apron or other rubber protective covering.

Footwear: No data found.

Hands: Butyl rubber gloves, or other chemical protective gloves.

Other protective measures: Eye bath and safety shower should be accessible to all personnel working with this product.

Action to take for spills & leaks: Wear chemical protective clothing, rubber gloves and suitable respiratory protection. Small spills should be wiped up with absorbent material and disposed of in government approved waste containers. The spill area may then be flushed with large quantities of water. Larger spills should be contained by diking with sand, soil or other absorbent, non-combustible material, then transferred into approved waste containers for proper disposal. Keep product out of sewers, storm drains, surface run-off water and soil. Comply with all government regulations on spill reporting, and handling and disposal of waste.

Disposal methods: Dispose of contaminated product and materials used in cleaning up spills or leaks in a manner approved for this material. Consult appropriate federal, provincial and local regulatory agencies to ascertain proper disposal procedures.

Note: Empty containers can have residues, gasses and mists, and are subject to proper waste disposal as mentioned above.

Storage & Handling Precautions: Warning, harmful or fatal if swallowed. Causes eye, skin and respiratory irritation. Avoid contact with eyes and repeated contact with skin and clothing. Do not ingest. Keep away from sources of heat and open flame. Keep container tightly closed when not in use. Store upright in a cool, dry, well ventilated place away from incompatible materials. Do not use pressure to empty container. Wash thoroughly after handling. Use with adequate ventilation.

Repair and Maintenance Precautions: Do not cut, grind, weld or drill in, on or near this container.

Section 8 - First Aid Measures

If inhaled: Remove victim to fresh air. Give artificial respiration if not breathing. Get immediate emergency medical attention.

In case of eye contact: Immediately flush eyes with clean water for at least fifteen (15) minutes, lifting the upper and lower eye lids occasionally. Get immediate emergency medical attention.

In case of skin contact: Immediately flush skin with plenty of clean running water for at least fifteen (15) minutes. Remove contaminated clothing and shoes. If irritation persists after washing, get immediate medical attention. Wash and launder clothes before re-use.

In case of ingestion or swallowing: DO NOT INDUCE VOMITING. If victim is conscious, give several glasses of water to dilute. Do not give anything by mouth to an unconscious victim. Get immediate emergency medical attention.

Section 9 - Preparation Information

Advance Chemicals Limited expressly disclaims all expressed or implied warranties of merchantability and fitness for a particular purpose with respect to the product provided. The information contained herein is offered only as a guide to the handling of this specific product, and has been prepared in good faith by technically knowledgeable personnel. This M.S.D.S. is not intended to be all inclusive, and the manner and conditions of use may involve other and additional considerations.

Revised: 14 December 2004; 22 November 2006