



# SAFETY DATA SHEET

## ADVANTAGE GP40-LD-SS

SDS according to the Work Health and Safety Regulations (WHS)

### Section 1. Identification

**Product name** : ADVANTAGE GP40-LD-SS  
**Product code** : 42200342  
**Other means of identification** : Not available.  
**UN number** : Not regulated.

#### Relevant identified uses of the substance or mixture and uses advised against

**Relevant uses** : Not available.  
**Uses advised against** : Any other purpose.

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### Section 2. Hazard(s) identification

This product is considered hazardous under the Work Health and Safety Regulations.

**Classification of the substance or mixture** : SKIN CORROSION/IRRITATION - Category 2  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

#### GHS label elements

**Hazard pictograms** :



Corrosion

**Signal word** : **DANGER**

## Section 2. Hazard(s) identification

**Hazard statements** : Causes skin irritation.  
Causes serious eye damage.

### Precautionary statements

**Prevention** : Wear eye or face protection. Wash thoroughly after handling.

**Response** : Immediately call a POISON CENTER or doctor. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Storage** : Not applicable.

**Disposal** : Not applicable.

**Supplemental label elements** : Not applicable.

**Other hazards which do not result in classification** : None known.

## Section 3. Composition and ingredient information

**Substance/mixture** : Mixture

| Ingredient name                               | % (w/w) | CAS number |
|---|---------|------------|
| Amine neutralized inorganic acid              | <10     | -          |
| 2,2'-iminodiethanol                           | <10     | 111-42-2   |
| Mineral oil                                   | ≤10     | **         |
| Amides, tall-oil fatty, N,N-bis(hydroxyethyl) | ≤5      | 68155-20-4 |
| 2-(2-butoxyethoxy)ethanol                     | ≤3      | 112-34-5   |

\*\* May contain : 101316-72-7,101316-73-8

The mineral oils in the product contain < 3% DMSO extract (IP 346).

**The remaining composition is a mixture of non-classified ingredients or additives below the threshold for disclosure.**

## Section 4. First aid measures

### Description of necessary first aid measures

**General advice** : Get medical attention immediately. If medical advice is needed, have product container or label at hand. Use personal protective equipment as required. Remove contaminated clothing and wash it before reuse. Wash skin surfaces thoroughly after contact.

**Inhalation** : Move affected person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention.

**Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and wash it before reuse. Get medical attention if symptoms occur.

**Eye contact** : Get medical attention immediately. Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do.

**Ingestion** : Ingestion may cause gastrointestinal irritation and diarrhea. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

### Most important symptoms/effects, acute and delayed

**Inhalation** : Not expected under normal use.

**Skin contact** : pain or irritation, redness

## Section 4. First aid measures

- Eye contact** : pain, redness, watering, burns
- Ingestion** : Not expected under normal use.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Use personal protective equipment as required.

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire. Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

**Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products** : In a fire, hazardous decomposition products may be produced. carbon oxides (CO, CO<sub>2</sub>) nitrogen oxides sulfur oxides metal oxide/oxides

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Put on appropriate personal protective equipment (see Section 8). Keep unnecessary personnel away. Avoid breathing vapor or mist. Provide adequate ventilation.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". Evacuate area.

**Environmental precautions** : Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Do not allow any potentially contaminated water, including rain water, runoff from fire fighting or spills, to enter any waterway, sewer or drain.

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## Section 6. Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. For large spills, dike spilled material or otherwise contain it to ensure runoff does not reach a waterway. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls and personal protection

### Control parameters

#### Occupational exposure limits

| Ingredient name           | Exposure limits  |
|---------------------------|--|
| 2,2'-iminodiethanol       | <b>Safe Work Australia (Australia, 4/2018).</b><br>TWA: 13 mg/m <sup>3</sup> 8 hours.<br>TWA: 3 ppm 8 hours.     |
| Mineral oil               | <b>ACGIH TLV (United States).</b><br>STEL: 10 mg/m <sup>3</sup> 15 minutes.<br>TWA: 5 mg/m <sup>3</sup> 8 hours. |
| 2-(2-butoxyethoxy)ethanol | <b>ACGIH TLV (United States, 3/2019).</b><br>TWA: 10 ppm 8 hours. Form: Inhalable fraction and vapor             |

#### Biological Exposure Indices (BEI)

None.

- Appropriate engineering controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Keep equipment clean.

## Section 8. Exposure controls and personal protection

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Face shield. If inhalation hazards exist, a full-face respirator may be required instead.
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers.
- Other skin protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- Thermal hazards** : Not expected under normal use. Not relevant/applicable due to nature of the product.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid.
- Color** : Hazy, Green.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : 9.8
- Melting point** : Not available.
- Boiling point** : Not available.
- Flash point** : Not available.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : 1.045
- Solubility** : Not available.
- Solubility in water** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Flow time (ISO 2431)** : Not available.

## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific measures identified.
- Incompatible materials** : Strong oxidizing materials. strong acids. strong alkalis
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

**Acute toxicity** : Based on available data, the classification criteria are not met.

#### Acute toxicity estimates

Oral 15383.91 mg/kg

#### Numerical measures of toxicity

| Product/ingredient name  | Result      | Species | Dose        | Exposure |
|--|-------------|---------|-------------|----------|
| 2,2'-iminodiethanol<br>Amides, tall-oil fatty, N,N-bis<br>(hydroxyethyl) | LD50 Oral   | Rat     | 1100 mg/kg  | -        |
|  | LD50 Dermal | Rabbit  | >2000 mg/kg | -        |
| 2-(2-butoxyethoxy)ethanol  | LD50 Oral   | Rat     | 7430 mg/kg  | -        |
|  | LD50 Dermal | Rabbit  | 2700 mg/kg  | -        |
|  | LD50 Oral   | Rat     | 3384 mg/kg  | -        |

**Irritation/Corrosion** : Causes serious eye damage. Causes skin irritation.

| Product/ingredient name   | Result                   | Species | Score | Exposure        | Observation |
|---------------------------|--------------------------|---------|-------|-----------------|-------------|
| 2,2'-iminodiethanol       | Eyes - Severe irritant   | Rabbit  | -     | 24 hours 750 ug | -           |
|                           | Eyes - Severe irritant   | Rabbit  | -     | 5500 mg         | -           |
|                           | Skin - Mild irritant     | Rabbit  | -     | 24 hours 500 mg | -           |
| 2-(2-butoxyethoxy)ethanol | Skin - Mild irritant     | Rabbit  | -     | 50 mg           | -           |
|                           | Eyes - Moderate irritant | Rabbit  | -     | 24 hours 20 mg  | -           |
|                           | Eyes - Severe irritant   | Rabbit  | -     | 20 mg           | -           |

**Sensitization** : Based on available data, the classification criteria are not met.

**Mutagenicity** : Based on available data, the classification criteria are not met.

**Carcinogenicity** : Based on available data, the classification criteria are not met.

| Product/ingredient name | IARC |
|-------------------------|------|
| 2,2'-iminodiethanol     | 2B   |

**Reproductive toxicity** : Based on available data, the classification criteria are not met.

**Specific target organ toxicity (single exposure)** : Based on available data, the classification criteria are not met.

**Specific target organ toxicity (repeated exposure)** : Based on available data, the classification criteria are not met.

## Section 11. Toxicological information

| Name  | Category                 | Route of exposure | Target organs  |
|---|--------------------------|-------------------|--|
| Amine neutralized inorganic acid<br>2,2'-iminodiethanol | Category 2<br>Category 2 | -<br>-            | -<br>blood, central nervous system (CNS), kidneys, liver |

**Aspiration hazard** : Based on available data, the classification criteria are not met.

**Other information** : None identified.

### Information on the likely routes of exposure

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : Causes skin irritation.

**Eye contact** : Causes serious eye damage.

**Ingestion** : No known significant effects or critical hazards.

### Delayed and immediate effects and also chronic effects from short and long term exposure

None identified.

### Symptoms related to the physical, chemical and toxicological characteristics

**Inhalation** : Not expected under normal use.

**Skin contact** : pain or irritation, redness

**Eye contact** : pain, redness, watering, burns

**Ingestion** : Not expected under normal use.

## Section 12. Ecological information

This material is toxic to aquatic life. This material is harmful to aquatic life with long lasting effects.

### Toxicity

| Product/ingredient name   | Result                              | Species                                    | Exposure |
|---------------------------|-------------------------------------|--|----------|
| 2,2'-iminodiethanol       | Acute EC50 2.2 mg/l                 | Algae - Pseudokirchnerella subcapitata     | 96 hours |
|                           | Acute LC50 28800 µg/l Fresh water   | Crustaceans - Ceriodaphnia dubia - Neonate | 48 hours |
|                           | Acute LC50 2150 µg/l Fresh water    | Daphnia - Daphnia pulex                    | 48 hours |
|                           | Acute LC50 775 mg/l Fresh water     | Fish - Lepomis macrochirus                 | 96 hours |
| 2-(2-butoxyethoxy)ethanol | Acute LC50 1300000 µg/l Fresh water | Fish - Lepomis macrochirus                 | 96 hours |

### Persistence and degradability

Not available.

### Bioaccumulative potential

| Product/ingredient name   | LogP <sub>ow</sub> | BCF | Potential |
|---------------------------|--------------------|-----|-----------|
| 2,2'-iminodiethanol       | -1.43              | -   | low       |
| 2-(2-butoxyethoxy)ethanol | 1                  | -   | low       |

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 12. Ecological information

## Section 13. Disposal considerations

**Disposal methods** : Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Empty containers or liners may retain some product residues. Empty containers retain product residue and can be hazardous. Care should be taken when handling emptied containers that have not been cleaned or rinsed out.

## Section 14. Transport information

|                            | ADG            | IMDG           | IATA           |
|----------------------------|----------------|----------------|----------------|
| UN number                  | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name    | -              | -              | -              |
| Transport hazard class(es) | -              | -              | -              |
| Packing group              | -              | -              | -              |
| Environmental hazards      | No.            | No.            | No.            |

### Additional information

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to IMO instruments** : Not available.

## Section 15. Regulatory information

### Standard for the Uniform Scheduling of Medicines and Poisons

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### Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

### International regulations

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.



## Section 15. Regulatory information

### Inventory list

**Australian Inventory of Industrial Chemicals (AIIC)** : All components are listed or exempted.

**New Zealand Inventory of Chemicals (NZIoC)** : All components are listed or exempted.

## Section 16. Any other relevant information

**Date of issue/Date of revision** : 3/18/2021

**Version** : 1

**Key to abbreviations** :

- ADG = Australian Dangerous Goods
- ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- N/A = Not available
- SGG = Segregation Group
- SUSMP = Standard Uniform Schedule of Medicine and Poisons
- UN = United Nations
- IARC = International Agency for Research on Cancer.

**References** : **Safety data sheets of raw materials, global regulatory body information, scientific literature, and testing data .**

✔ Indicates information that has changed from previously issued version.

### Notice to reader

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