# SAFETY DATA SHEET

## DEX COOL

**Infosafe No.: LQ9UG**
**ISSUED Date : 26/11/2019**
**ISSUED by: AC DELCO**

## 1. IDENTIFICATION

**GHS Product Identifier**
DEX COOL

**Company Name**
AC DELCO

**Address**
Australia: 191 Salmon St, Port Melbourne, Vic
New Zealand: 2/118 Savill Drive, Mangere East, Auckland

**Emergency phone number**
Australia: 1800 638 556 (24hrs) / New Zealand: 0800 154 666 (24hrs)

**Recommended use of the chemical and restrictions on use**
Superconcentrated product to be diluted with MEG.

**Additional Information**
Supplier
ARTECO NV
Metropoolstraat 25
B-2900 Schoten (Antwerpen)
Belgium
e-mail customerservice@arteco-coolants.com
Product Information Technical Information: +32 (0) 9 397 06 00

## 2. HAZARD IDENTIFICATION

**GHS classification of the substance/mixture**
Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.
Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)
Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand.
Not classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2012 Transport of Dangerous Goods on Land.
Acute Toxicity - Oral: Category 5
Skin Corrosion/Irritation: Category 3
Eye Damage/Irritation: Category 2A
Toxic to Reproduction: Category 2
STOT Single Exposure: Category 3 (respiratory tract irritation)
STOT Single Exposure: Category 1
STOT Repeated Exposure: Category 1

**Signal Word (s)**
DANGER

**Hazard Statement (s)**
H303 May be harmful if swallowed.
H316 Causes mild skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H361d Suspected of damaging the unborn child.
H370 Causes damage to organs (kidney, centre nervous system) by ingestion.
H372 Causes damage to organs (kidney) through prolonged or repeated exposure by ingestion and other routes.

H433 Harmful to terrestrial vertebrates.

**Precautionary Statement (s)**
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.

**Pictogram (s)**
Exclamation mark,Health hazard

**Precautionary statement – Prevention**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash contaminated skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Precautionary statement – Response**
P308+P313 IF exposed or concerned: Get medical advice/attention.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P314 Get medical advice/attention if you feel unwell.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P332+P313 If skin irritation occurs: Get medical advice/attention.

**Precautionary statement – Storage**
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

**Precautionary statement – Disposal**
P501 Dispose of contents/container to an approved waste disposal plant.

**Other Information**
New Zealand classification:
6.1E (Oral) - Substance that is acutely toxic
6.1E (respiratory tract irritant)
6.3B Substance that is mildly irritating to the skin
6.4A - Substance that is irritating to the eyes
6.8B Substance that is suspected to be a human reproductive or developmental toxicant
6.9A (Single exposure) - Substance that is toxic to human target organs or systems
6.9A (Repeated exposure) - Substance that is toxic to human target organs or systems
9.3C - Substance that is harmful to terrestrial vertebrates

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Ingredients**

| Name | CAS | Proportion |
|---|---|---|
| Ethylene glycol | 107- 21- 1 | 34- <80 % |
| Sodium 2- ethylhexanoate | 19766- 89- 3 | 10- 30 % |
| Imidazole | 288- 32- 4 | 0. 1- <0. 3 % |

## 4. FIRST-AID MEASURES

**Inhalation**
If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

**Ingestion**
Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.

**Skin**
Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse or discard. Seek medical attention.

**Eye contact**
If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. Seek medical attention.

**First Aid Facilities**
Eyewash, safety shower and normal washroom facilities.

**Advice to Doctor**
Treat symptomatically.

**Other Information**
For advice in an emergency, contact a Poisons Information Centre (phone Australia 131 126; New Zealand 0800 764 766) or a doctor at once.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Use carbon dioxide, dry chemical or alcohol resistant foam.

**Unsuitable Extinguishing Media**
Do not use water jet.

**Hazards from Combustion Products**
Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, carbon dioxide and oxides of nitrogen.

**Specific Hazards Arising From The Chemical**
This product will burn if exposed to fire.

**Decomposition Temperature**
Not available

**Precautions in connection with Fire**
Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed containers. Fight fire from safe location. This product should be prevented from entering drains and watercourses.

## 6. ACCIDENTAL RELEASE MEASURES

**Emergency Procedures**
Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling**
Avoid inhalation of vapours and mists, and skin or eye contact. Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of mists or vapours in the work atmosphere. Do not use near ignition sources. Do not pressurise, cut, heat or weld containers as they may contain hazardous residues. Maintain high standards of personal hygiene by washing hands prior to eating, drinking, smoking or using toilet facilities.
Avoid exposure. Do not handle until all safety precautions have been read and understood.

It is recommended that pregnant or breastfeeding women should not handle this product unless adequate exposure protection can be assured at all times. Female personnel planning pregnancy should be made aware of the potential risks.

**Conditions for safe storage, including any incompatibilities**

Store in a cool, dry, well-ventilated area away from sources of ignition, oxidising agents, strong acids, foodstuffs, and clothing. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations.
For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids.

**Storage Regulations**

Classified as a Class C2 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS1940 (2017).

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational exposure limit values**

No exposure value assigned for this material. However, the available exposure limits for ingredients are listed below:
Australia:
Ethylene glycol
TWA: 20 ppm (vapour); 52 mg/m³ (vapour), 10 mg/m³ (particulate)
STEL: 40 ppm (vapour); 104 mg/m³ (vapour)
Note: Sk
New Zealand:
Ethylene glycol
TWA: 50 ppm (vapour and mist);127 mg/m³ (vapour and mist) (Ceiling)
TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.
STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.
'Sk' Notice: Absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.
Ceiling: A concentration that should not be exceeded during any part of the working day.
Source: Safe Work, Australia and Workplace Exposure Standards and Biological Exposure Indices (NZ).

**Biological Limit Values**

No biological limits allocated.

**Appropriate Engineering Controls**

This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. A flame-proof exhaust ventilation system is required. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn. Refer to relevant regulations for further information concerning ventilation requirements.

**Respiratory Protection**

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.
Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

**Eye Protection**

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations.
Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337(series) - Eye Protectors for Industrial Applications.

**Hand Protection**

Wear gloves of impervious material such as Neoprene, butyl rubber, nitrile or Viton gloves. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations.

Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

**Body Protection**
Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form**
Liquid

**Appearance**
Clear liquid

**Colour**
Colourless

**Odour**
Mild

**Decomposition Temperature**
Not available

**Melting Point**
-20 °C (Typical)

**Boiling Point**
144 °C (Estimated)

**Solubility in Water**
Miscible

**pH**
8.7 - 9.2 (20°C)

**Vapour Pressure**
Not available

**Vapour Density (Air=1)**
Not available

**Evaporation Rate**
Not available

**Odour Threshold**
Not available

**Viscosity**
Not available

**Partition Coefficient: n-octanol/water**
Not available

**Density**
1.110 kg/L (20 °C) (Typical)

**Flash Point**
115.0 °C Pensky-Martens Closed Cup (Minimum)

**Flammability**
Not flammable

**Auto-Ignition Temperature**
Not available

**Flammable Limits - Lower**
Not available

**Flammable Limits - Upper**
Not available

**Explosion Properties**
Not explosive

**Oxidising Properties**
Not oxidizing

## 10. STABILITY AND REACTIVITY

**Reactivity**
Reacts with incompatible materials.

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

**Conditions to Avoid**
Heat, open flames and other sources of ignition.

**Incompatible materials**
Strong acids. Strong oxidizing agents. Nitrates. Peroxides. Chlorates.

**Hazardous Decomposition Products**
Thermal decomposition may result in the release of toxic and/or irritating fumes, smoke and gases including: Ketones, Aldehydes, carbon monoxide, carbon dioxide and oxides of nitrogen.

**Possibility of hazardous reactions**
None known

## 11. TOXICOLOGICAL INFORMATION

**Toxicology Information**
The available toxicity data for the product and ingredients is given below.

**Acute Toxicity - Oral**
Acute toxicity estimate for product : 2215 mg/kg

**Acute Toxicity - Inhalation**
Ethylene glycol:
LC50 (Rat): > 2.5 mg/l, 6 Hours (Aerosol)

**Acute Toxicity - Dermal**
Ethylene glycol:
LD50 (Mouse): > 3,500 mg/kg

**Ingestion**
May be harmful if swallowed. Ingestion of this product may cause irritation to the mouth, throat, oesophagus and stomach with symptoms of nausea, abdominal discomfort, vomiting and diarrhoea.

**Inhalation**
May cause respiratory irritation. Inhalation of product vapours can cause irritation of the nose, throat and respiratory system.

**Skin**
Causes mild skin irritation. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

**Eye**
Causes serious eye irritation. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

**Respiratory sensitisation**
Not expected to be a respiratory sensitiser.

**Skin Sensitisation**
Not expected to be a skin sensitiser.

**Germ cell mutagenicity**
Not considered to be a mutagenic hazard.

**Carcinogenicity**
Not considered to be a carcinogenic hazard.

**Reproductive Toxicity**
Suspected of damaging the unborn child. Classified as a suspected human developmental toxicant.

**STOT-single exposure**
Causes damage to organs (Kidney, Central nervous system) by ingestion. May cause respiratory irritation.

**STOT-repeated exposure**
Causes damage to organs (Kidney) through prolonged or repeated exposure by ingestion and other routes.

**Aspiration Hazard**
Not expected to be an aspiration hazard.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**
Harmful to terrestrial vertebrates.

**Persistence and degradability**
Expected to be readily biodegradable.

**Mobility**
Not available

**Bioaccumulative Potential**
Ethylene glycol:
Partition coefficient: n-octanol/water: log Pow: -1.36

**Other Adverse Effects**
Not available

**Environmental Protection**
Prevent this material entering waterways, drains and sewers.

**Acute Toxicity - Fish**
Ethylene glycol:
LC50 (Pimephales promelas (fathead minnow)): 72,860 mg/l/96h
Imidazole
LC50 (Golden orfe): 283.6 mg/l/48h

**Acute Toxicity - Daphnia**
Ethylene glycol:
EC50 (Daphnia magna): > 100 mg/l/48h
Imidazole
EC50 (Daphnia magna): 341.5 mg/l/48h

**Acute Toxicity - Algae**
Imidazole
EC50 (Scenedesmus subspicatus (Desmodesmus subspicatus)): 133 mg/l/72h

## 13. DISPOSAL CONSIDERATIONS

**Disposal considerations**
Australia:
The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations.
New Zealand:
Product Disposal:
Product wastes are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. This product can be disposed through a licensed commercial waste collection service.In this specific case the product is a combustible substance and therefore can be sent to an approved high temperature incineration plant for disposal.
Personal protective clothing and equipment as specified in Section 8 of this SDS must be worn during handling and disposal of this product. The ventilation requirements as specified in the same section must be followed, and the precautions given in Section 7 of this SDS regarding handling must also be followed.
Do not dispose into the sewerage system. Do not discharge into drains or watercourses or dispose where ground or surface waters may be affected.
In New Zealand, the disposal agency or contractor must comply with the New Zealand Hazardous Substances (Disposal) Regulations 2001. Further details regarding disposal can be obtained on the EPA New Zealand website under specific group standards.
Container Disposal:
The container or packaging must be cleaned and rendered incapable of holding any substance. It can then be disposed of in a manner consistent with that of the substance it contained. In this instance the packaging can be disposed through a commercial waste collection service.
Alternatively, the container or packaging can be recycled if the hazardous residues have been thoroughly cleaned or rendered non-hazardous.
In New Zealand, the packaging (that may or may not hold any residual substance) that is lawfully disposed of by householders or other consumers through a public or commercial waste collection service is a means of compliance with regulations.

## 14. TRANSPORT INFORMATION

**Transport Information**
Australia:
Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) (7th edition).
New Zealand:
Not classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433: 2012 Transport of Dangerous Goods on Land.
Marine Transport (IMO/IMDG):
Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.
Air Transport (ICAO/IATA):
Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

**U.N. Number**
None Allocated

**UN proper shipping name**
None Allocated

**Transport hazard class(es)**
None Allocated

**IMDG Marine pollutant**
No

**Transport in Bulk**
Not available

**Special Precautions for User**
Not available

## 15. REGULATORY INFORMATION

**Regulatory information**
Australia:
Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.
Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
New Zealand:
Classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.
Group Standard: Lubricants, Lubricant Additives, Coolants and Anti-freeze Agents (Subsidiary Hazard) Group Standard 2006.

**Poisons Schedule**
S6

**HSNO Approval Number**
HSR002606

## 16. OTHER INFORMATION

**Date of preparation or last revision of SDS**
SDS created: October 2019

**References**
Australia
Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.
Standard for the Uniform Scheduling of Medicines and Poisons.
Australian Code for the Transport of Dangerous Goods by Road & Rail.
Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
Workplace exposure standards for airborne contaminants, Safe work Australia.
American Conference of Industrial Hygienists (ACGIH).
Globally Harmonised System of Classification and Labelling of Chemicals.

New Zealand
Workplace Exposure Standards and Biological Exposure Indices.
Transport of Dangerous goods on land NZS 5433.
Preparation of Safety Data Sheets - Approved Code of Practice Under the HSNO Act 1996 (HSNO CoP 8-1 09-06).
Assigning a hazardous substance to a group standard.
Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).

**User Codes**

| User Title Label | User Codes |
|---|---|
| Part Number | 19375292 |
| Part Number | 19375293 |
| Part Number | 19375294 |

## END OF SDS

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