SAFETY DATA SHEET

According to the Hazard Communication Standard, 29 CFR 1910.1200

SDS # : 083725

AEL COOLANT 50/50

Date of the previous version: 2015-10-13 **Revision Date:** *2016-03-02* **Version** *1.02*

1. IDENTIFICATION

Product identifier

Product name AEL COOLANT 50/50

Other means of identification

Product Code(s) 083725

Number 7OG

Substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Identified uses Coolant.

Uses advised against Do not use for any purpose other than the one for which it is intended

Details of the supplier of the safety data sheet

Supplier Address

TOTAL Specialties USA Inc
1201 Louisiana Street, Suite 1800
Houston, TX 77002
Phone: +1 800 323 3198

Contact Point Technical/ HSEQ

Emergency telephone number

Emergency telephone

+1 866 928 0789 (24h/24, 7d/7)
+1 215 207 0061 (24h/24, 7d/7)

2. HAZARDS IDENTIFICATION

Classification

Acute Toxicity - Oral - Category 4
Reproductive toxicity - Category 2
Specific target organ systemic toxicity (repeated exposure) - Category 2

Label elements

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DANGER

Harmful if swallowed
May cause damage to organs through prolonged or repeated exposure
Suspected of damaging fertility or the unborn child

Precautionary Statements - Prevention
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response
Get medical advice/attention if you feel unwell
Ingestion
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/ container to an approved waste disposal plant

Unknown Acute Toxicity
No information available

Hazards not otherwise classified (HNOC)
None known

Other information
Physical-Chemical Properties No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical Name	CAS-No	Weight %

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Monoethyleneglycol	107-21-1	45 – 95
sodium 2-ethylhexanoate	19766-89-3	1 – 5
2,2'-oxydiethanol	111-46-6	0-5

** The exact percentage (concentration) of composition has been withheld as a trade secret*

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice If symptoms persist, call a physician. Show this material safety data sheet to the doctor in attendance. Do not breathe dust/fume/gas/mist/vapors/spray.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.

Skin contact Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Inhalation Move to fresh air. Consult a physician. If not breathing, give artificial respiration.

Ingestion Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Protection of First-aiders Use personal protective equipment.

Most important symptoms/effects, acute and delayed

Skin contact Causes mild skin irritation. May be harmful in contact with skin.

Eye contact May cause temporary eye irritation.

Inhalation Vapors may irritate throat and respiratory system.

Ingestion Harmful if swallowed.

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Coughing and/ or wheezing. Difficulty breathing. Itching.

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

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Dry powder. Use:. Carbon dioxide (CO_2). Foam. Water spray. Sand.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

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Special Hazard Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.

Explosion Data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate non-essential personnel.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

General Information Ensure adequate ventilation. For personal protection see section 8.

Other information See Section 12 for additional information.

Environmental precautions

General Information Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system.

Methods and materials for containment and cleaning up

Methods for cleaning up Keep in suitable, closed containers for disposal. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Prevent the formation of vapors, mists and aerosols. Do not eat, drink or smoke when using this product.

Hygiene measures When using, do not eat, drink or smoke. Wear suitable gloves and eye/face protection. Wash hands before breaks and at the end of workday. Wash hands with water as a precaution. Regular cleaning of equipment, work area and clothing is recommended. Avoid breathing vapors, mist or gas.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep container tightly closed in a dry and well-ventilated place. Keep out of reach of children.

Materials to Avoid Strong oxidizing agents. Strong reducing agents. Strong acids. Strong bases.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Monoethyleneglycol 107-21-1	Ceiling 100 mg/m³	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m³	

Exposure controls

Engineering Measures Ensure adequate ventilation.

Individual protection measures, such as personal protective equipment

General Information If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.

Eye/Face Protection If splashes are likely to occur, wear:. Safety glasses with side-shields.

Skin and body protection Wear suitable protective clothing. Protective shoes or boots.

Hand Protection Protective gloves. Nitrile rubber. Impervious gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures When using, do not eat, drink or smoke. Wear suitable gloves and eye/face protection. Wash hands before breaks and at the end of workday. Wash hands with water as a precaution. Regular cleaning of equipment, work area and clothing is recommended. Avoid breathing vapors, mist or gas.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Color yellow

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Physical State @20°C		liquid	
Odor		No information available	
Odor Threshold		No information available	
Property	**Values**	**Remarks**	**Method**
pH	8.2 - 8.8		
Melting point/range		No information available	
Boiling point/boiling range		No information available	
Flash point	**> 120 °C**		Cleveland Open Cup (COC)
	> 250 °F		Cleveland Open Cup (COC).
Evaporation rate		No information available	
Flammability Limits in Air		No information available	
upper	-	No information available	
Lower	-	No information available	
Vapor Pressure		No information available	
Vapor density		No information available	
Relative density	1.068	@ 20 °C	ASTM D 1298
Density	1066 kg/m³	@ 20 °C	ASTM D 1298
Water solubility		Not applicable	
Solubility in other solvents		No information available	
logPow		No information available	
Autoignition temperature		No information available	
Decomposition temperature		No information available	
Viscosity, kinematic		No information available	
Explosive properties	Not explosive		
Oxidizing Properties	Not applicable		
Possibility of hazardous reactions	None under normal processing		
Other information			
Specific Gravity	1.068	@ 15 °C	
Freezing Point	-40 - -36.4 °C	No information available	

10. STABILITY AND REACTIVITY

Reactivity No dangerous reaction known under conditions of normal use.

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to Avoid Heat, flames and sparks. Take precautionary measures against static discharges.

Incompatible Materials Strong oxidizing agents. Strong reducing agents. Strong acids. Strong bases.

Hazardous Decomposition Products None under normal use.

11. TOXICOLOGICAL INFORMATION

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Information on likely routes of exposure

Principle Routes of Exposure Inhalation, Ingestion, Eye contact, Skin contact.

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Coughing and/ or wheezing. Difficulty breathing. Itching.

Skin contact Causes mild skin irritation. May be harmful in contact with skin.

Eye contact May cause temporary eye irritation.

Inhalation Vapors may irritate throat and respiratory system.

Ingestion Harmful if swallowed.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Acute toxicity - Product Information

Product Information Harmful if swallowed

Oral
ATEmix (oral) 526 mg/kg

Dermal
ATEmix (dermal) 3812 mg/kg

Inhalation
ATEmix (inhalation-dust/mist) 5.7 mg/l

Acute toxicity - Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Monoethyleneglycol 107-21-1	LD50 7712 mg/kg Oral (Rat)	LD50 > 3500 mg/kg Dermal (Mouse)	LC50(6h) >2.5 mg/l Inhalation (Rat)
2,2'-oxydiethanol 111-46-6		LD50 13300 mg/kg bw (rabbit)	LC50 (4h) > 4.6 mg/l (rat - aerosol)

Skin corrosion/irritation Not classified.
Sensitization Not classified as a sensitizer.
Carcinogenicity This product is not classified carcinogenic.

Mutagenicity No known effect based on information supplied.
Reproductive toxicity Suspected of damaging fertility or the unborn child.
Aspiration Hazard Not classified.

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12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute aquatic toxicity - Product Information

No experimental data available

Acute aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates	Toxicity to microorganisms
Monoethyleneglycol 107-21-1	EC50(48h) >10000 mg/l	LC50 (95h) 72860 mg/l (Phimephales promelas) LC50(96h) 18500 mg/l (Rainbow trout) EC50(96h) 6500-13000 mg/l (Selenastrum capricornulum)	EC50(48h) >100 mg/l Daphnia magna (OECD 202)	
2,2'-oxydiethanol 111-46-6	EC50 (96h) 9362 mg/l (green algae)	LC50 (96h) 75200 mg/l (Pimephales promelas)	EC100 (24h) >10000 mg/l (Daphnia magna) EC50 (24h) >10000 mg/l (Daphnia magna)	

Chronic aquatic toxicity - Product Information

No experimental data available

Chronic aquatic toxicity - Component Information

No information available

Effects on terrestrial organisms No experimental data available .

Persistence and degradability

General Information No information available.

Bioaccumulative potential

Product Information No information available.

logPow No information available

Component Information .

Chemical Name	log Pow
Monoethyleneglycol 107-21-1	-1.36

Mobility

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Soil No information available

Other adverse effects

General Information No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO/IATA Not regulated

IMDG/IMO Not regulated

ADR/RID Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

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International Inventories

All the substances contained in this product are listed or exempted from listing in the following inventories:
U.S.A. (TSCA)
Canada (DSL/NDSL)
Europe (EINECS/ELINCS/NLP)
China (IECSC)
Japan (ENCS)
Philippines (PICCS)
New Zealand (NZIoC)
Korea (KECL)
Australia (AICS)

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Monoethyleneglycol	107-21-1	45-95	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Monoethyleneglycol	107-21-1	45 – 95		Group I		
2,2'-oxydiethanol	111-46-6	0-5		Group I		

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Monoethyleneglycol	5000 lb	

U.S. State Regulations

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California Proposition 65
This product contains chemicals known to the State of California to cause cancer or reproductive toxicity

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois
Monoethyleneglycol 107-21-1	X	X	X	X
2,2'-oxydiethanol 111-46-6			X	

16. OTHER INFORMATION

NFPA	**Health Hazard** 2	**Flammability** 1	**Instability** 0	**Physical and chemical hazards** -
HMIS	**Health Hazard** 2	**Flammability** 1	**Physical Hazard** 0	**Personal protection** X

NFPA (National Fire Protection Association)
HMIS (Hazardous Material Information System)
Hazards are split into categories each with a 0 to 4 rating, 0 meaning no hazard and 4 meaning high hazard

Revision Date: 2016-03-02
Revision Note *** Indicates updated section
Abbreviations, acronyms
ACGIH = American Conference of Governmental Industrial Hygienists
bw = body weight
bw/day = body weight/day
EC x = Effect Concentration associated with x% response
GLP = Good Laboratory Practice
IARC = International Agency for Research of Cancer
LC50 = 50% Lethal concentration - Concentration of a chemical in air or a chemical in water which causes the death of 50% (one half) of a group of test animals
LD50 = 50% Lethal Dose - Chemical amount, given at once, which causes the death of 50% (one half) of a group of test animals
LL = Lethal Loading
NIOSH = National Institute of Occupational Safety and Health
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
NOEL = No Observed Effect Level
OECD = Organization for Economic Co-operation and Development
OSHA = Occupational Safety and Health Administration
UVCB = Substance of unknown or Variable composition, Complex reaction products or Biological material

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Legend
Section 8
ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
NIOSH - National Institute for Occupational Safety and Health
TLV - Threshold Limit Values
PEL - Permissible Exposure Limits
IDHL - Immediately Dangerous to Life or Health concentrations
TWA - Time Weight Average
STEL - Short Term Exposure Limits
S* - Skin notation
TSCA - Toxic Substance Control Act

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above.It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk.The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity.The user bears sole liability for the precautions required when using the product.The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive.It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

End of the Safety Data Sheet