

SECTION 1: Identification

1.1. Identification

Product name : GearTec MGO ISO 150, GearTec MGO ISO 220, GearTec MGO ISO 320, GearTec MGO ISO 460

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Lubricant
Restrictions on use : No additional information available

1.3. Supplier

D-A Lubricant Company, Inc.
801 Edwards Dr
Lebanon, IN 46052
T 317-923-5321, Toll Free 1-800-873-2582
www.dalube.com

1.4. Emergency telephone number

Emergency number : 1-800-899-9004 Toll-Free USA/CAN 24 hours

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labelling

No labelling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%)	(CAS-No.) 64742-54-7	0 - 50	Asp. Tox. 1, H304
C12-C14 t-alkyl amines	(CAS-No.) 68955-53-3	0.1 - 0.3	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 2 (Inhalation), H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

GearTec MGO ISO 150, GearTec MGO ISO 220, GearTec MGO ISO 320, GearTec MGO ISO 460

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash skin thoroughly with mild soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : No significant signs or symptoms indicative of any health hazard are expected to occur.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Burning produces irritating, toxic and noxious fumes.
Reactivity : No dangerous reactions known.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Wear fire/flare resistant/retardant clothing. Wear recommended personal protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid all eye and skin contact and do not breathe vapour and mist. Use personal protective equipment as required.

6.1.1. For non-emergency personnel

Protective equipment : Refer to section 8.2.
Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Refer to section 8.2.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers. Collect spillage. Minimise generation of dust. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

GearTec MGO ISO 150, GearTec MGO ISO 220, GearTec MGO ISO 320, GearTec MGO ISO 460

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool well ventilated place.

Incompatible products : Strong bases. Strong acids. Strong oxidizers.

Incompatible materials : Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

GearTec MGO ISO 150, GearTec MGO ISO 220, GearTec MGO ISO 320, GearTec MGO ISO 460		
ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³ oil mist
ACGIH	ACGIH STEL (mg/m ³)	10 mg/m ³ oil mist
Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%) (64742-54-7)		
ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³
ACGIH	ACGIH STEL (mg/m ³)	10 mg/m ³
OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³
C12-C14 t-alkyl amines (68955-53-3)		
Not applicable		

8.2. Appropriate engineering controls

Appropriate engineering controls : Avoid creating mist or spray. Avoid splashing. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide local exhaust or general room ventilation.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear suitable gloves resistant to chemical penetration. nitrile rubber gloves. natural rubber gloves

Eye protection:

Chemical goggles or safety glasses

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Use an approved respirator equipped with oil/mist cartridges.

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : red
Odour : petroleum
Odour threshold : No data available
pH : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : > 222 °C

GearTec MGO ISO 150, GearTec MGO ISO 220, GearTec MGO ISO 320, GearTec MGO ISO 460

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: 150 - 460 mm ² /s @ 40°C
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%) (64742-54-7)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5.53 mg/l/4h
C12-C14 t-alkyl amines (68955-53-3)	
LD50 oral rat	612 mg/kg
LD50 dermal rat	251 mg/kg
LC50 inhalation rat (ppm)	157 ppm/4h
ATE US (oral)	612 mg/kg bodyweight
ATE US (dermal)	251 mg/kg bodyweight
ATE US (gases)	157 ppmv/4h
ATE US (vapours)	0.5 mg/l/4h
ATE US (dust,mist)	0.05 mg/l/4h

Skin corrosion/irritation	: Not classified
---------------------------	------------------

GearTec MGO ISO 150, GearTec MGO ISO 220, GearTec MGO ISO 320, GearTec MGO ISO 460

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified. (Component. No sensitizing reaction was observed for guinea pigs)
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: 150 - 460 mm ² /s @ 40°C
Likely routes of exposure	: Inhalation. Skin and eye contact.
Symptoms/effects	: No significant signs or symptoms indicative of any health hazard are expected to occur.

SECTION 12: Ecological information

12.1. Toxicity

Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%) (64742-54-7)	
EC50 Daphnia 1	> 10000 mg/l
C12-C14 t-alkyl amines (68955-53-3)	
LC50 fish 1	1.3 mg/l
EC50 Daphnia 1	2.5 mg/l Calculated
ErC50 (algae)	0.44 mg/l
NOEC (chronic)	0.078 mg/l

12.2. Persistence and degradability

GearTec MGO ISO 150, GearTec MGO ISO 220, GearTec MGO ISO 320, GearTec MGO ISO 460	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

GearTec MGO ISO 150, GearTec MGO ISO 220, GearTec MGO ISO 320, GearTec MGO ISO 460	
Bioaccumulative potential	Not established.
C12-C14 t-alkyl amines (68955-53-3)	
Bioaccumulative potential	Not expected to bioaccumulate.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Sewage disposal recommendations	: Do not dispose of waste into sewer.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated.

GearTec MGO ISO 150, GearTec MGO ISO 220, GearTec MGO ISO 320, GearTec MGO ISO 460

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Transport by sea

Not regulated.

Air transport

Not regulated.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Propylene oxide	CAS-No. 75-56-9	0.00026%
vinyl acetate	CAS-No. 108-05-4	0.00009%

15.2. International regulations

CANADA

Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%) (64742-54-7)

Listed on the Canadian DSL (Domestic Substances List) inventory.

C12-C14 t-alkyl amines (68955-53-3)

Listed on the Canadian DSL (Domestic Substances List) inventory.

EU-Regulations

Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%) (64742-54-7)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

C12-C14 t-alkyl amines (68955-53-3)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%) (64742-54-7)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on NZIoC (New Zealand Inventory of Chemicals)

C12-C14 t-alkyl amines (68955-53-3)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on Taiwan National Chemical Inventory
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on NZIoC (New Zealand Inventory of Chemicals)

15.3. US State regulations



WARNING:

This product can expose you to Ethylene oxide, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

GearTec MGO ISO 150, GearTec MGO ISO 220, GearTec MGO ISO 320, GearTec MGO ISO 460

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Component	Carcinogenicity	Developmental toxicity	Reproductive toxicity male	Reproductive toxicity female	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Ethylene oxide(75-21-8)	X	X	X	X	2 µg/day	20 µg/day
Propylene oxide(75-56-9)	X					
1,4-dioxane(123-91-1)	X				30 µg/day	

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Data sources : European Chemicals Agency (ECHA) C&L Inventory database. Accessed at <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>. Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition. National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition. OSHA 29CFR 1910.1200 Hazard Communication Standard. TSCA Chemical Substance Inventory. Accessed at <http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html>.

Other information : Updated viscosity grades from SAE to ISO.

Full text of H-statements:

Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 4	Flammable liquids, Category 4
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Sens. 1A	Skin sensitisation, category 1A
H227	Combustible liquid
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:

	ATE: Acute Toxicity Estimate
	CAS (Chemical Abstracts Service) number
	EC50: Environmental Concentration associated with a response by 50% of the test population.
	GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
	LD50: Lethal Dose for 50% of the test population

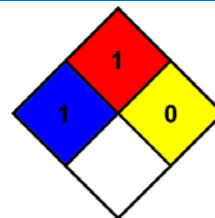
GearTec MGO ISO 150, GearTec MGO ISO 220, GearTec MGO ISO 320, GearTec MGO ISO 460

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

	STEL: Short Term Exposure Limits
	TSCA: Toxic Substances Control Act
	TWA: Time Weighted Average
	WEL: Workplace Exposure Limit

- NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.
- NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.
- NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and not reactive with water.



SDS prepared by The Redstone Group
6077 Frantz Rd.
Suite 206
Dublin, OH USA 43017
+1.614.923.7472
www.redstonegrp.com

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.