



SAFETY DATA SHEET

Revision Date: 21-Feb-2017

Revision Number: 5

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Code: 2845-042A
Product Name: Drag Specialties DRAG 4 Synthetic 20W-50 , 12 x 1 Quart Case

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Lubricant
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Idemitsu Lubricants America Corporation,
701 Port Rd., Jeffersonville, IN. 47130
Telephone: 812-285-8234, Fax:
812-285-8243, Contact Name: Robin
Hutchens, Email: sds@ilacorp.com

Supplier

Idemitsu Lube Europe GmbH
Elberfelder Strasse 2
40213 Duesseldorf, Germany
Telephone: +49-211-175-4370
Fax: +49-211-830-2853

1.4. Emergency telephone number

Netherlands: The phone number of the National Poison Control Center (NVIC). Only for the purpose of informing medical personnel in case of acute intoxications: + 31 030-2748888

Germany: 24-hour emergency service: 00 49 7227 91 22 00 Local contact for emergencies: 00 49 41 46 91 2333

Within USA and Canada: 1 800-424-9300

Outside USA and Canada: + 1 703-741-5970 (collect calls accepted)

Emergency Telephone - §45 - (EC)1272/2008	
Europe	112
Germany	112
Netherlands	112

Section 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

Aspiration toxicity	Not classified
Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Acute toxicity - Inhalation (Gases)	Not classified
Acute toxicity - Inhalation (Vapors)	Not classified
Acute toxicity - Inhalation (Dusts/Mists)	Not classified
Skin corrosion/irritation	Not classified
Serious eye damage/eye irritation	Not classified
Respiratory sensitization	Not classified
Skin sensitization	Not classified

Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified No effects on or via lactation
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Acute aquatic toxicity	Not classified for acute
Chronic aquatic toxicity	Not classified chronic
Ozone	Not classified
Physical Hazards	None

2.2. Label elements

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

EU Specific Hazard Statements

EUH210 - Safety data sheet available on request

2.3. Other hazards

May be harmful in contact with skin

This substance does not meet the criteria for classification as PBT or vPvB

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

Hazardous Components

Chemical Name	EC No	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Notes
Amines, polyethylenepoly-, reaction products with Succinic anhydride polyisobutenyl derivatives	-	84605-20-9	1-5	Acute Tox. 4 (H312)	
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	601-275-5	113706-15-3	1-5	Skin Irrit. 2 (H315) at >= 6.25% Eye Irrit. 2 (H319) >= 10 - 12.5% Aquatic Acute 2 (H401) Aquatic Chronic 3 (H412)	
Phenol, (tetrapropenyl) derivatives	616-100-8	74499-35-7	<1	Reproductive Tox 2 (H361)	

Non-Hazardous Components

Chemical Name	EC No	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Notes
Synthetic Lubricant	-	Mixture	70 - 80		
Lubricating Base Stocks	-	Mixture	10 - 20		

Section 4: FIRST AID MEASURES

4.1 Description of first aid measures

General Advice

If symptoms persist, call a physician. Take a copy of the Safety Data Sheet when going for medical treatment.

Inhalation

If exposure to hydrogen sulfide (H₂S) gas is possible during an emergency, wear an approved, positive pressure air-supplying respirator. Move to fresh air in case of accidental inhalation of vapors. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a physician immediately.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

Eye Contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

Do not induce vomiting without medical advice. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Call a physician or poison control center immediately.

Protection of First-aiders

Use personal protective equipment. Avoid contact with eyes, skin and clothing.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms

None known.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Unsuitable Extinguishing Media:

Do not use a solid water stream as it may scatter and spread fire

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors

Hazardous combustion products:

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and / or irritating. Combustion products may include and are not limited to:

Carbon oxides
Calcium Oxides (CaOx)
Hydrogen Sulfide
Oxides of Magnesium
Nitrogen oxides (NOx)
Oxides of Phosphorus

Sulphur oxides
Zinc oxides

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Use personal protection recommended in Section 8. Ensure adequate ventilation. Remove all sources of ignition.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

See section 12 for additional ecological information. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system. Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

6.3. Methods and material for containment and cleaning up

Methods for Clean-up

Contain and collect spillage 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).

LARGE SPILLS

Contain spilled material if possible. Pump into suitable and properly labeled containers. Only trained and properly protected personnel must be involved in clean-up operations. Keep upwind of spill. Ventilate area of leak or spill. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Absorb with materials such as: non-combustible materials, Vermiculite, Zorb-all.

WATER SPILLS

Prevent liquid entering sewers, watercourses, or low areas. Contain spilled liquid with sand or earth. Recover by pumping or with suitable absorbent. If liquid is too viscous for pumping, scrape up. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations

6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection
SECTION 12: Ecological information
SECTION 13: Disposal considerations

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling

Avoid contact with eyes, skin and clothing. Do not breathe vapors or spray mist. Keep away from open flames, hot surfaces and sources of ignition. Wear personal protective equipment. Use personal protection recommended in Section 8. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

General Hygiene Considerations

When using, do not eat, drink or smoke. Clean equipment, work area and clothing regularly.

7.2. Conditions for safe storage, including any incompatibilities

Storage

Keep in properly labeled containers. Store in tightly closed container.

Technical measures/Precautions

Sulfur compounds in this material may decompose when heated to release hydrogen sulfide gas which may accumulate to potentially lethal concentrations in enclosed air spaces. Vapor concentrations of hydrogen sulfide above 50 ppm, or prolonged exposure at lower concentrations, may saturate human odor perceptions so that the smell of gas may not be apparent. Exposure to concentrations of hydrogen sulfide vapor above 500 ppm may cause rapid death. Do not rely on the sense of smell to detect hydrogen sulfide

Maximum Handling Temperature

< 60C (140F)

Maximum Storage Temperature

< 40°C / 104°F

7.3. Specific end use(s)

No additional information available.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Other Exposure Guidelines (If Generated)

Chemical Name	ACGIH TLV	ACGIH OEL (STEL)	EU	France	Germany	China	Taiwan	Venezuela
Hydrogen sulfide	TWA: 1 ppm STEL: 5 ppm	5 ppm		TWA: 5 ppm TWA: 7 mg/m ³ STEL: 10 ppm STEL: 14 mg/m ³	TWA: 5 ppm TWA: 7.1 mg/m ³ Peak: 10 ppm Peak: 14.2 mg/m ³	Ceiling: 10 mg/m ³ Ceiling		10 ppm TWA [VTRE-L-8/4 0 15 ppm STEL
Oil mist, mineral	TWA: 5 mg/m ³						TWA: 5 mg/m ³	5 mg/m ³ TWA [VTRE-L-8/4 0 10 mg/m ³ STEL

Derived No Effect Level (DNEL)

No information available

Predicted No Effect Concentration (PNEC)

No information available.

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Personal Protective Equipment

Eye/face protection

Safety glasses equipped with side shields are recommended as minimum protection in industrial settings.

Skin protection

Choose the appropriate protective clothing / gloves based on the tasks being performed to avoid exposed skin surfaces.

Hand Protection

Neoprene, Nitriles, Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves

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.

Environmental exposure controls

No information available.

8.3 Reference to other sections

SECTION 2: Hazards identification

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Clear / Brown
Physical State	Liquid
Odor	Mild
Odor Threshold	No information available
pH	Not applicable
Melting point / melting range	Not applicable
Boiling point / boiling range	No information available
Flash Point	> 200 °C / 392 °F COC ASTM D92
Evaporation Rate	No information available
Flammability Limit in Air	No information available
Vapor Pressure	No information available
Vapor Density (Air)	No information available
Density	0.86 g/cm ³ @15°C
Solubility	No information available
Partition Coefficient (n-octanol/water)	No information available
Autoignition Temperature	No information available
Decomposing Temperature	No information available
Viscosity	@ 40C = 153.20 cSt; @ 100C = 20.73 cSt

9.2 Other Information

No additional information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat

10.5. Incompatible materials

None under normal processing.

10.6. Hazardous decomposition products

Thermal decomposition may produce hydrogen sulfide and other sulfur-containing gases at temperatures greater than 150F.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute Toxicity

Skin Contact	May cause skin irritation and/or dermatitis.
Inhalation	May cause irritation of respiratory tract.
Eye contact	May cause slight irritation.
Ingestion	May be harmful if swallowed.

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	> 5,000 mg/kg
ATEmix (dermal)	> 2,000 mg/kg
ATEmix (inhalation-dust/mist)	> 5 mg/l

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Amines, polyethylenepoly-, reaction products with Succinic anhydride polyisobutenyl derivatives	5000 mg/kg	2000 mg/kg	
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	2600 mg/kg	>3160 mg/kg	

Skin corrosion/irritation	Not classified.
Serious eye damage/eye irritation	Not classified.
Sensitization	Not classified.
Mutagenic effects	Not classified.
Carcinogenic effects	Not classified.

Reproductive Effects	Not classified
Developmental Effects	Not classified.
STOT - single exposure	Not classified.
STOT - repeated exposure	Not classified
Aspiration hazard	Not classified.
Carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, OSHA or ACGIH.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

No known significant effects or critical hazards. Plants and animals may experience harmful or fatal effects when coated with petroleum products. Petroleum-based (mineral) lubricating oils normally will float on water. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway may be sufficient to cause fish kill or create an anaerobic environment.

Unknown acute aquatic toxicity 3.99 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae (72HICA)	Fish (96HLCF)	Water Flea (48HECD)
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	2.1 mg/l 96h (Selenastrum capricornutum (green algae))	4.5 mg/l 96h (Oncorhynchus mykiss (rainbow trout))	5.4 mg/l 48h (Daphnia magna (water flea))

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

Chemical Name	log Pow
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts	0.9

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB)
This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT)

12.6. Other adverse effects

None known based on information supplied

Section 13: DISPOSAL CONSIDERATIONS

Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.

13.1. Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations.

Contaminated packaging

Clean container with water. Empty containers should be taken for local recycling, recovery or waste disposal.

Other Information

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: TRANSPORT INFORMATION

DOT - Non bulk Not regulated

IATA Not regulated

IMDG/IMO Not regulated

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

France

Occupational Illnesses (R-463-3, France)

Chemical Name	CAS No.	Weight-%	French RG number
Diphenylamine	122-39-4	<0.1	RG 15, RG 15bis
Ethylene glycol	107-21-1	<0.1	RG 84
Benzene	71-43-2	<0.1	RG 4, RG 4bis, RG 84
Ethylene diamine	107-15-3	<0.01	RG 49, RG 49bis
Lead	7439-92-1	<0.0001	RG 1
Cadmium	7440-43-9	<0.0001	RG 61, RG 61bis
Nickel	7440-02-0	<0.0001	RG 37ter

Germany

WGK Classification: Hazardous to water/Class 1

TA Luft (German Air Pollution Control Regulation)

Chemical Name	CAS No.	Weight-%	Germany - TA Luft List
Diphenylamine	122-39-4	<0.1	X
Benzene	71-43-2	<0.1	X
Ethylene diamine	107-15-3	<0.01	X
Lead	7439-92-1	<0.0001	X
Cadmium	7440-43-9	<0.0001	X

Nickel	7440-02-0	<0.0001	X
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European Union

REACH (1907/2006) - Annex XIV (Authorization List) Recommendations by ECHA - None

REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances

Chemical Name	CAS No.	Weight-%	EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances
Benzene	71-43-2	<0.1	X
Lead	7439-92-1	<0.0001	X
Cadmium	7440-43-9	<0.0001	X
Nickel	7440-02-0	<0.0001	X

REACH (1907/2006) - Potential Substances of Very High Concern

Chemical Name	CAS No.	Weight-%	REACH (1907/2006) - Potential Substances of Very High Concern
Cadmium	7440-43-9	<0.0001	X

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Chemical Name	CAS No.	Weight-%	Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work
Lead	7439-92-1	<0.0001	X

Regulation EC No. 850/2004: Prohibiting and restricting persistent organic pollutants (POPs) - None

EU - Substances Depleting the Ozone layer (1005/2009) - None

EU - Seveso III Directive (2012/18/EU) - None

EU Regulation EC No. 689/2008: Annex 1, Export & Import Restrictions, Part 1

Chemical Name	CAS No.	Weight-%	EU - EU Regulation EC No. 689/2008: Annex 1, Export and Import Restrictions
Diphenylamine	122-39-4	<0.1	Banned as a pesticide in the group of plant protection products
Benzene	71-43-2	<0.1	Severe restriction as an industrial chemical for public use (except motor fuels subject to Directive 98/70/EC)
Cadmium	7440-43-9	<0.0001	Severe restriction as an industrial chemical for professional use

EU Regulation EC No. 689/2008: Annex 1, Export & Import Restrictions Part 2 - None

EU Regulation EC No. 689/2008: Annex 1, Export & Import Restrictions, Part 3 - None

International Inventories

TSCA	All ingredients are on the inventory or exempt from listing
DSL	All ingredients are on the inventory or exempt from listing
NDSL	There are ingredients listed on the NDSL Inventory List
EINECS	All ingredients are on the inventory or exempt from listing
ELINCS	Not Listed
ENCS	All ingredients are on the inventory or exempt from listing
CHINA	All ingredients are on the inventory or exempt from listing

KECL	All ingredients are on the inventory or exempt from listing
PICCS	All ingredients are on the inventory or exempt from listing
AICS	All ingredients are on the inventory or exempt from listing
NZIoC	All ingredients are on the inventory or exempt from listing

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

NZLOC - New Zealand Inventory of Chemicals

INSQ - Mexico National Inventory of Chemical Substances

AICS - Australian Inventory of Chemical Substances

REACH - Registration, Evaluation, Authorisation, and Restriction of Chemicals

15.2. Chemical safety assessment

No information available

Section 16: OTHER INFORMATION

Prepared By	Lakyn Neumeyer
Revision Date:	21-Feb-2017
Reason for revision	Review New GHS Classification

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

End of Safety Data Sheet