Safety Data Sheet

DuraPlex 3, NLGI 1 and 2

Revision date 20-March-2015 **Version** 1

1. IDENTIFICATION

1.1. **Product identifier**

Product name DuraPlex 3, NLGI 1 and 2
Synonyms None

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

Recommended use Lubricating grease
Uses advised against No information available

1.3. **Details of the supplier of the safety data sheet**

Supplier D-A Lubricant Company, Inc.
801 Edwards Drive
Lebanon, IN 46052 USA
317-923-5321

Revision date: **20 March 2015**

Preparation date: **20 March 2015**

1.4. **Emergency telephone number**

ChemTel Emergency telephone 1-800-255-3924

International Emergency telephone +01-813-248-0585

2. HAZARDS IDENTIFICATION

2.1. **Classification of the substance or mixture**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

2.2. **Label elements**

Signal word Warning

Symbols/Pictograms

2.3. **Hazards not otherwise classified (HNOC)**
May be harmful if swallowed. May be harmful in contact with skin. Causes mild skin irritation.

2.4. **Other information**
0.9% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Chemical name	CAS No	weight-%
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (2:1)	68649-42-3	<2.5

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

Ingredient comments This product is a anhydrous calciumgrease based on mineral oil with additives . The mineral oils in the product contain <3% DMSO-extract (IP 346).

4. FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation Move to fresh air in case of accidental inhalation of vapors or decomposition products.

Skin contact Wash skin with soap and water.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids.

Ingestion Do not induce vomiting without medical advice. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

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

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media Use CO2, dry chemical, or foam.

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

Not flammable. Fire may produce irritating and/or toxic gases.

Hazardous combustion products 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.

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.

6. ACCIDENTAL RELEASE MEASURES

6.1. **Personal precautions, protective equipment and emergency procedures**

Personal precautions Extremely slippery when spilled. Avoid contact with eyes and skin. Avoid breathing vapors or mists. Use personal protection recommended in Section 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. **Environmental precautions**

See Section 12 for additional Ecological Information.

6.3. **Methods and material for containment and cleaning up**

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Use personal protective equipment as required. Take up with sand or other non-combustible absorbent material and place into containers for later disposal.

7. HANDLING AND STORAGE

7.1. **Precautions for safe handling**

Advice on safe handling Extremely slippery when spilled. Avoid prolonged or repeated contact with skin. Avoid breathing vapors or mists.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

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

Storage conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and open flame. Keep at a temperature not exceeding 45°C.

Incompatible materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. **Control parameters**

Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Molybdenum disulfide	TWA: 10 mg/m³ Mo inhalable fraction TWA: 3 mg/m³ Mo respirable fraction	TWA: 15 mg/m³ total dust (vacated) TWA: 10 mg/m³ Mo	IDLH: 5000 mg/m³ Mo
Antimony Dialkyldithiocarbamate	TWA: 0.5 mg/m³ Sb	TWA: 0.5 mg/m³ Sb (vacated) TWA: 0.5 mg/m³ Sb	IDLH: 50 mg/m³ Sb TWA: 0.5 mg/m³ Sb

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

8.2. **Exposure controls**

Engineering controls Eyewash stations
Ventilation systems

8.3.**Individual protection measures, such as personal protective equipment**

Hand protection	Wear protective nitrile rubber gloves. Thickness ≥ 0.38 mm - breakthrough time >480 minutes. Thickness 0.1 mm - splash protection.
Eye/face Protection	No special technical protective measures are necessary.
Skin and body protection	No special technical protective measures are necessary.
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.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Smooth
Physical state	Semi-solid
Color	No information available
Odor	No information available
Odor threshold	No information available

Property	**Values**	**Remarks • Method**
pH		Not applicable
Melting point/freezing point		No information available
Boiling point/boiling range		Not applicable
Flash point	> 150 °C / > 302 °F	Based on base oils
Evaporation rate		Not applicable
Flammability (solid, gas)		No information available
Flammability limits in air		No information available
Upper flammability limit		
Lower flammability limit		
Vapor pressure		Not applicable
Vapor Density		Not applicable
Relative density		No information available
Water solubility		No information available
Solubility in other solvents		No information available
Partition coefficient (n-octanol/water)		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Kinematic viscosity		No information available
Dynamic viscosity		No information available

Other information

Density	< 1000 kg/m³ @ 25 °C / 77 °F

10. STABILITY AND REACTIVITY

10.1.**Reactivity**
Stable.

10.2.**Chemical stability**
Stable under recommended storage conditions.

10.3.**Possibility of hazardous reactions**
None under normal processing.

10.4.**Conditions to avoid**
Heat.

10.5.**Incompatible materials**
Strong oxidizing agents.

10.6.**Hazardous decomposition products**
None under normal processing.

11. TOXICOLOGICAL INFORMATION

11.1.**Information on likely routes of exposure**

Inhalation Inhalation of oil mist may cause irritation, headaches, nausea and breathing difficulties.

Ingestion Malaise (vague feeling of discomfort).

Skin contact May be harmful in contact with skin.

Eye contact May cause slight irritation.

11.2.**Information on toxicological effects**

Symptoms No information available.

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

Skin corrosion/irritation Not hazardous based on component data.

Serious eye damage/eye irritation Not hazardous based on component data.

Sensitization Not hazardous based on component data.

Germ cell mutagenicity Not hazardous based on component data.

Carcinogenicity Not hazardous based on component data.

Reproductive toxicity Not hazardous based on component data.

STOT-single exposure Not hazardous based on component data.

STOT-repeated exposure Not hazardous based on component data.

Aspiration hazard Not hazardous based on component data.

11.4. Numerical measures of toxicity

Chemical name	Oral LD50	Dermal LD50	LC50 (lethal concentration)

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (2:1) 68649-42-3	= 3600 mg/kg (Rat)	> 20 000 mg/kg (Rabbit)	-

Acute toxicity 0.9% of the mixture consists of ingredient(s) of unknown toxicity.

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

ATEmix (oral) 4715 mg/kg

ATEmix (dermal) 4087 mg/kg

12. ECOLOGICAL INFORMATION

12.1.**Ecotoxicity**

Not regarded as dangerous for the environment. Occasional major emissions or frequently recurring minor emissions may have a harmful or disturbing effect.

Chemical name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Toxicity to daphnia and other aquatic invertebrates
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (2:1) 68649-42-3	-	1.0 - 5.0: 96 h Pimephales promelas mg/L LC50 static 10.0 - 35.0: 96 h Pimephales promelas mg/L LC50 semi-static	-	1 - 1.5: 48 h Daphnia magna mg/L EC50

12.2.**Persistence and degradability**

Not readily biodegradable.

12.3.**Bioaccumulative potential**

Material does not bioaccumulate.

12.4.**Mobility in soil**

After release, adsorbs onto soil.

12.5.**Results of PBT and vPvB assessment**

No information available

12.6.**Other adverse effects**

No information available

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Disposal of wastes Dispose of contents/container to industrial incineration plant. Use personal protection recommended in Section 8.

Contaminated packaging Dispose of contents/container to industrial incineration plant

US EPA waste number No information available

Other information Waste codes should be assigned by the user based on the application for which the product was used

Chemical name	California hazardous waste status
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (2:1) 68649-42-3	Toxic

14. TRANSPORT INFORMATION

14.1.**UN number**
Not regulated

14.2.**UN proper shipping name**
Not regulated

14.3.**Transport hazard class(es)**
Not regulated

14.4.**Packing group**
Not applicable

14.5.**Environmental hazards**
None

14.6.**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**
No information available

14.7.**Special precautions for user**
None

15. REGULATORY INFORMATION

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

CWA (Clean Water Act) This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (2:1) 68649-42-3		X		

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies
NZIoC	Complies

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - 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
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

US 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 %

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (2:1) 68649-42-3	68649-42-3	<2.5	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65 This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

US State Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (2:1) 68649-42-3	X		X
Barium alkylnaphthalensulfonate 25619-56-1	X		X
Antimony Dialkyldithiocarbamate 15890-25-2	X		X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

HMIS **Health hazards** 1 **Flammability** 1 **Physical hazards** 0 **Personal protection** p

NFPA **Health hazards** 1 **Flammability** 1 **Instability** 0 **Special Hazard** -

Revision date 07-Jan-2015

Revision note No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Material Safety Data Sheet