Safety Data Sheet

Section 1: Identification

Product identifier

Product Name • **Mopar Transfer Case Lubricant NV245 NV247 NV249**

Synonyms • 05016796AC

Product Description • Base Oil and Additives.

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

Recommended use • Hydraulic fluid

Restrictions on use • No data available

Details of the supplier of the safety data sheet

Manufacturer • Mopar (FCA US LLC Service & Customer Care Division)
26311 Lawrence Ave.
Center Line, MI 48015
United States

MoparSDS@fcagroup.com

Telephone (General) • 1-800-84-Mopar

Supplier • Mopar (FCA US LLC Service & Customer Care Division)
26311 Lawrence Ave.
Center Line, MI 48015
United States

MoparSDS@fcagroup.com

Telephone (General) • 1-800-84-Mopar

Emergency telephone number

Manufacturer • 248-512-8002

Supplier • 248-512-8002

Section 2: Hazard Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012 • This material is not hazardous according to regulatory guidelines.

Label elements

OSHA HCS 2012

Other hazards

OSHA HCS 2012

- None as defined under 29 CFR 1900.1200. PHYSICAL / CHEMICAL HAZARDS: No significant hazards. HEALTH HAZARDS: High-pressure injection under skin may cause serious damage. Excessive exposure may result in eye, skin, or respiratory irritation. ENVIRONMENTAL HAZARDS: No significant hazards.

Other information

NFPA

HMIS

- Health: 0; Flammability: 1; Reactivity: 0

Key to abbreviations

= NFPA (National Fire Protection Association) HMIS (Hazardous Material Information System)

Note: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

Section 3 - Composition/Information on Ingredients

Substances

Mixtures

Composition					
Chemical Name	**Identifiers**	**%**	**Hazardous**	**Classifications According to Regulation/Directive**	**Comments**
CALCIUM SULFONATE		1% TO 5%	Yes	**OSHA HCS 2012:** H413: May cause long lasting harmful effects to aquatic life; Chronic Environment Toxicity, Category 4	NDA
HYDROTREATED MIDDLE DISTILLATE (PETROLEUM)	**CAS:**64742-46-7	1% TO 5%	Yes	**OSHA HCS 2012:** H304: May be fatal if swallowed and enters airways; Aspiration, Category 1	NDA
SEVERELY HYDROTREATED HEAVY PARAFFINIC DISTILLATE	**CAS:**64742-54-7	20% TO 30%	Yes	**OSHA HCS 2012:** H304: May be fatal if swallowed and enters airways; Aspiration, Category1	NDA
SOLVENT DEWAXED HEAVY PARAFFINIC DISTILLATE	**CAS:**64742-65-0	20% TO 30%	Yes	**OSHA HCS 2012:** H304: May be fatal if swallowed and enters airways; Aspiration, Category 1	NDA
ZINC ALKYLDITHIOPHOSPHATE	**CAS:**68649-42-3	1% TO 2.5%	Yes	**OSHA HCS 2012:** H318: Causes serious eye damage; Serious Eye Damage/Irritation, Category 1; H401: Toxic to aquatic life; Acute Environment Toxicity, Category 2; H411: Toxic to aquatic life with long lasting effects; Chronic Environment Toxicity, Category 2	NDA

* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume. As per

paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

Section 4: First-Aid Measures

Description of first aid measures

Inhalation
- Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

Skin
- Wash contact areas with soap and water. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

Eye
- If contact with material occurs flush eyes with water. If eye irritation persists: Get medical advice/attention.

Ingestion
- First aid is normally not required. Seek medical attention if discomfort occurs.

Most important symptoms and effects, both acute and delayed

- No data available

Indication of any immediate medical attention and special treatment needed

Notes to Physician
- No data available.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media
- Water spray (fog), foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media
- Straight Streams of Water.

Firefighting Procedures
- Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards
- Pressurized mists may form a flammable mixture.

Hazardous Combustion Products
- Oxides of carbon, Smoke, Fume, Sulfur oxides, Incomplete combustion products, Aldehydes.

Advice for firefighters

- FLAMMABILITY PROPERTIES Flash Point [Method]: >198°C (389°F) [ASTM D-92] Flammable Limits (Approximate volume % in air): LEL: 0.9 UEL: 7.0 Autoignition Temperature: N/D

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions
- Avoid contact with spilled material. See Section 5 for fire fighting information. See the

Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

Emergency Procedures

- For emergency responders: Respiratory protection: respiratory protection will be necessary only in special cases, e.g., formation of mists. Half-face or full-face respirator with filter(s) for dust/organic vapor or Self Contained Breathing Apparatus (SCBA) can be used depending on the size of spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended. Work gloves that are resistant to hydrocarbons are recommended. Gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use. Chemical goggles are recommended if splashes or contact with eyes is possible. Small spills: normal antistatic work clothes are usually adequate. Large spills: full body suit of chemical resistant, antistatic material is recommended.

Environmental precautions

- Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Land Spill: Stop leak if you can do it without risk. Recover by pumping or with suitable absorbent. Water Spill: Stop leak if you can do it without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants. Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

Other Information

- In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

Section 7 - Handling and Storage

Precautions for safe handling

Handling

- Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). When the material is handled in bulk, an electrical spark could ignite any flammable vapors from liquids or residues that may be present (e.g., during switch-loading operations). Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity). Static Accumulator: This material is a static accumulator.

Conditions for safe storage, including any incompatibilities

Storage

- The container choice, for example storage vessel, may effect static accumulation and dissipation. Do not store in open or unlabeled containers. Keep away from incompatible materials.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines

- HYDROTREATED MIDDLE DISTILLATE (PETROLEUM) (64742-46-7) Mist: TWA-5 mg/m3 OSHA Z1; HYDROTREATED MIDDLE DISTILLATE (PETROLEUM) (64742-46-7) Inhalable fraction: TWA-5 mg/m3 ACGIH; SEVERELY HYDROTREATED HEAVY PARAFFINIC DISTILLATE (64742-54-7) Inhalable fraction: TWA-5 mg/m3 ACGIH; SEVERELY HYDROTREATED HEAVY PARAFFINIC DISTILLATE (64742-54-7) Mist: TWA-5 mg/m3 ACGIH; SOLVENT DEWAXED HEAVY PARAFFINIC DISTILLATE (64742-65-0) Mist: TWA-5 mg/m3 OSHA Z1; SOLVENT DEWAXED HEAVY PARAFFINIC DISTILLATE (64742-65-0): TWA-2000 mg/m3, 500 ppm OSHA Z1; SOLVENT DEWAXED HEAVY PARAFFINIC DISTILLATE (64742-65-0) Mist: TWA-5 mg/m3 ACGIH. Exposure limits/standards for materials that can be formed when handling this product: When mists/aerosols can occur the following are recommended: 5 mg/m³ - ACGIH TLV (inhalable fraction), 5 mg/m³ - OSHA PEL. NOTE: Limits/standards shown for guidance only. Follow applicable regulations. No biological limits allocated.

Exposure controls

Engineering Measures/Controls

- The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider: No special requirements under ordinary conditions of use and with adequate ventilation.

Personal Protective Equipment

Respiratory

- If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include: No protection is ordinarily required under normal conditions of use and with adequate ventilation. For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

Eye/Face

- If contact is likely, safety glasses with side shields are recommended.

Hands

- Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include: No protection is ordinarily required under normal conditions of use.

Skin/Body

- Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include: No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

General Industrial Hygiene Considerations

- Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

Environmental Exposure Controls

- Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

Additional Protection Measures

- Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	No data available
Color	Amber	Odor	Characteristic

Taste	No data available	Particulate Type	No data available
Particulate Size	No data available	Aerosol Type	No data available
Odor Threshold	No data available	Physical and Chemical Properties	Liquid
General Properties			
Boiling Point	> 316 C(> 600.8 F)	Melting Point	Not applicable
Decomposition Temperature	No data available	Heat of Decomposition	No data available
pH	Not applicable	Specific Gravity/Relative Density	= 0.884 @ 15 C(59 F) Water=1
Density	No data available	Bulk Density	No data available
Water Solubility	Negligible	Solvent Solubility	No data available
Viscosity	55 Centistoke (cSt, cS) or mm2/sec @ 40 C(104 F) 9.6 cSt (9.6 mm2/sec) at 100°C	Explosive Properties	No data available
Oxidizing Properties:	See Hazards Identification Section.		
Volatility			
Vapor Pressure	< 0.013 kPa @ 20 C(68 F) (0.1 mm Hg)	Vapor Density	> 2 Air=1 @ 101 kPa
Evaporation Rate	No data available	VOC (Wt.)	No data available
VOC (Vol.)	No data available	Volatiles (Wt.)	No data available
Volatiles (Vol.)	No data available		
Flammability			
Flash Point	> 198 C(> 388.4 F)	UEL	7 %
LEL	0.9 %	Flame Duration	No data available
Heat of Combustion (ΔHc)	No data available	Burning Time	No data available
Flame Height	No data available	Flame Extension	No data available
Ignition Distance	No data available	Self-Accelerating Decomposition Temperature (SADT)	No data available
Autoignition	No data available	Flammability (solid, gas)	Not applicable.
Environmental			
Half-Life	No data available	Octanol/Water Partition coefficient	> 3.5 Log Pow
Coefficient of water/oil distribution	No data available	Bioaccumulation Factor	No data available
Bioconcentration Factor	No data available	Biochemical Oxygen Demand BOD/BOD5	No data available
Chemical Oxygen Demand	No data available	Persistence	No data available
Degradation	No data available		

Other Information

- NOTE: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Most physical properties above are for the oil component in the material. Contact the Supplier for additional information. Freezing Point: N/D Pour Point: -36°C (-33°F) DMSO Extract (mineral oil only), IP-346: < 3 %wt.

Section 10: Stability and Reactivity

Reactivity

- See sub-sections below.

Chemical stability

- Material is stable under normal conditions.

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- Excessive heat. High energy sources of ignition.

Incompatible materials

- Strong oxidizers.

Hazardous decomposition products

- Material does not decompose at ambient temperatures.

Section 11 - Toxicological Information

Information on toxicological effects

Components		
ZINC ALKYLDITHIOPHOSPHATE (1% TO 2.5%)	68649-42-3	**Acute Toxicity:** Ingestion/Oral-Rat LD50 • >2000 mg/kg; Skin-Rabbit LD50 • >2000 mg/kg

GHS Properties	Classification
Acute toxicity	**OSHA HCS 2012** • Data lacking
Aspiration Hazard	**OSHA HCS 2012** • Data lacking
Carcinogenicity	**OSHA HCS 2012** • Data lacking
Germ Cell Mutagenicity	**OSHA HCS 2012** • Data lacking
Skin corrosion/Irritation	**OSHA HCS 2012** • Data lacking
Skin sensitization	**OSHA HCS 2012** • Data lacking
STOT-RE	**OSHA HCS 2012** • Data lacking
STOT-SE	**OSHA HCS 2012** • Data lacking
Toxicity for Reproduction	**OSHA HCS 2012** • Data lacking
Respiratory sensitization	**OSHA HCS 2012** • Data lacking
Serious eye damage/Irritation	**OSHA HCS 2012** • Data lacking

Potential Health Effects

Inhalation

Acute (Immediate)
- Acute Toxicity: No end point data for material. Minimally Toxic. Based on assessment of the components. Irritation: No end point data for material. Negligible hazard at ambient/normal handling temperatures.

Chronic (Delayed)
- No data available

Skin

Acute (Immediate)
- Acute Toxicity: No end point data for material. Minimally Toxic. Based on assessment of the components. Skin Corrosion/Irritation: No end point data for material. Negligible irritation to skin at ambient temperatures. Based on assessment of the components.

Chronic (Delayed)
- No data available

Eye

Acute (Immediate)
- Serious Eye Damage/Irritation: No end point data for material. May cause mild, short-lasting discomfort to eyes. Based on assessment of the components.

Chronic (Delayed)
- No data available

Ingestion

Acute (Immediate)
- Acute Toxicity: No end point data for material. Minimally Toxic. Based on assessment of the components.

Chronic (Delayed)
- No data available

Other

Acute (Immediate)
- Specific Target Organ Toxicity (STOT): Single Exposure: No end point data for material. Not expected to cause organ damage from a single exposure.

Chronic (Delayed)
- Specific Target Organ Toxicity (STOT) Repeated Exposure -: No end point data for material. Not expected to cause organ damage from prolonged or repeated exposure based on assessment of the components.

Mutagenic Effects
- Not expected to be a germ cell mutagen. Based on assessment of the components.

Carcinogenic Effects
- Not expected to cause cancer. Based on assessment of the components.

Reproductive Effects
- Not expected to be a reproductive toxicant. Based on assessment of the components.

Other information

- Sensitization: Not expected to be a respiratory sensitizer. Not expected to be a skin sensitizer. Based on assessment of the components. Aspiration: Not expected to be an aspiration hazard based on physico-chemical properties of the material. Lactation: Not expected to cause harm to breast-fed children. Base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346, Modified Ames test, and/or other screening tests. Dermal and inhalation studies showed minimal effects; lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation. Not sensitizing in test animals. Middle distillates: Carcinogenic in animal tests. Lifetime skin painting tests produced tumors, but the mechanism is due to repeated cycles of skin damage and restorative hyperplasia. This mechanism is considered unlikely in humans where such prolonged skin irritation would not be tolerated. Did not cause mutations In Vitro. Inhalation of vapors did not result in reproductive or developmental effects in laboratory animals. Inhalation of high concentrations in animals resulted in respiratory tract irritation, lung changes and some reduction in lung function. Non-sensitizing in test animals. The following ingredients are cited on the lists below: None. --REGULATORY LISTS SEARCHED-- 1 = NTP CARC 3 = IARC 1 5 = IARC 2B 2 = NTP SUS 4 = IARC 2A 6 = OSHA CARC

Section 12 - Ecological Information

Toxicity

- Material: Not expected to be harmful to aquatic organisms.

Persistence and degradability

- Base oil component - Expected to be inherently biodegradable.

Bioaccumulative potential

- Base oil component -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

Mobility in Soil

- Base oil component -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

Other adverse effects

- No data available.

Other Information

- The information given is based on data available for the material, the components of the material, and similar materials.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste

- Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products. Protect the environment. Dispose of used oil at designated sites. Minimize skin contact. Do not mix used oils with solvents, brake fluids or coolants' from product waste section of disposal. RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

Packaging waste

- Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class (es)	Packing group	Environmental hazards
DOT	NDA	NDA	NDA	NDA	NDA
TDG	NDA	NDA	NDA	NDA	NDA
IMO/IMDG	NDA	NDA	NDA	NDA	NDA
ADN	NDA	NDA	NDA	NDA	NDA
ADR/RID	NDA	NDA	NDA	NDA	NDA
IATA/ICAO	NDA	NDA	NDA	NDA	NDA

Special precautions for user

- No data available

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- No

Other information

DOT

- Not Regulated for Land Transport.

TDG

- Not Regulated for Land Transport.

IMO/IMDG

- Not Regulated for Sea Transport according to IMDG-Code. Marine pollutant: No.

IATA/ICAO

- Not Regulated for Air Transport.

Section 15 - Regulatory Information

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

- This material is not considered hazardous in accordance with OSHA HazCom 2012, 29 CFR 1910.1200.

SARA Hazard Classifications

- SARA (311/312) REPORTABLE HAZARD CATEGORIES: None, SARA (313) TOXIC RELEASE INVENTORY: Chemical Name:ZINC DITHIOPHOSPHATE; CAS Number:

68649-42-3; Typical Value: 1 - 2.5%.

Inventory				
Component	**CAS**	**Canada DSL**	**EU EINECS**	**TSCA**
HYDROTREATED MIDDLE DISTILLATE (PETROLEUM)	64742-46-7	Yes	Yes	Yes
SEVERELY HYDROTREATED HEAVY PARAFFINIC DISTILLATE	64742-54-7	Yes	Yes	Yes
SOLVENT DEWAXED HEAVY PARAFFINIC DISTILLATE	64742-65-0	Yes	Yes	Yes
ZINC ALKYLDITHIOPHOSPHATE	68649-42-3	Yes	Yes	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

• HYDROTREATED MIDDLE DISTILLATE (PETROLEUM)	64742-46-7	Uncontrolled product according to WHMIS classification criteria
• SEVERELY HYDROTREATED HEAVY PARAFFINIC DISTILLATE	64742-54-7	Not Listed
• SOLVENT DEWAXED HEAVY PARAFFINIC DISTILLATE	64742-65-0	Not Listed
• ZINC ALKYLDITHIOPHOSPHATE	68649-42-3	Not Listed

Section 16 - Other Information

Last Revision Date • 26/February/2015

Preparation Date • 26/February/2015

Disclaimer/Statement of Liability • No data available

Key to abbreviations

= N/D = Not determined, N/A = Not applicable KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only): H304: May be fatal if swallowed and enters airways; Aspiration, Cat 1 H318: Causes serious eye damage; Serious Eye Damage/Irr, Cat 1 H401: Toxic to aquatic life; Acute Env Tox, Cat 2 H411: Toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 2 H413: May cause long lasting harmful effects to aquatic life; Chronic Env Tox, Cat 4