SAFETY DATA SHEET

According to the Hazard Communication Standard, 29 CFR 1910.1200

SDS # : 083653

DYNATRANS AC 50

Date of the previous version: not applicable **Revision Date:** *2015-10-05* **Version** *1*

1. IDENTIFICATION

Product identifier

Product name DYNATRANS AC 50

Other means of identification

Product Code(s) 083653

Number MOX
Substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Identified uses Transmission fluid.

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

E-mail Address USRMLIN-info@total.com

Emergency telephone number
Company Phone Number +1 (908) 862-9300
Emergency telephone CHEMTREC: +1 800 424 9300 (24h)

2. HAZARDS IDENTIFICATION

Classification

Serious eye damage/eye irritation - Category 2B
Skin sensitization - Category 1

Label elements

SDS # : 083653

DYNATRANS AC 50

Date of the previous version: not applicable **Revision Date:** 2015-10-05 **Version** 1

WARNING

Hazard Statements
May cause an allergic skin reaction
Causes eye irritation

Precautionary Statements - Prevention
Avoid breathing dust/fume/gas/mist/vapours/ spray
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
Wash hands and face thoroughly after handling

Precautionary Statements - Response
Specific treatment (see Section 4 on this label)
Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
Skin
IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse

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 Contaminated surfaces will be extremely slippery.

Environmental properties Should not be released into the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Nonylphenol, branched, ethoxylated	68412-54-4	< 0.4

SDS # : 083653

DYNATRANS AC 50

Date of the previous version: not applicable **Revision Date:** 2015-10-05 **Version** 1

Calcium sulfonate	^	< 0.4
Triphenyl phosphite	101-02-0	<0.1
O,O,O-triphenyl phosphorothioate	597-82-0	< 0.1
Alkylphenol	121158-58-5	< 0.4

** 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. IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.

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

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician. Remove contaminated clothing and shoes. Wash off with soap and water. Wash contaminated clothing before reuse. Immediate medical attention is not required.

Inhalation Move to fresh air in case of accidental inhalation of vapors. Immediate medical attention is not required. If symptoms persist, call a physician. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Inhalation of high concentrations of vapor or aerosols may cause irritation of the upper respiratory tract.

Ingestion Clean mouth with water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician. If swallowed, do not induce vomiting - seek medical advice. Drink plenty of water.

Protection of First-aiders Use personal protective equipment.

Most important symptoms/effects, acute and delayed

Skin contact May cause an allergic skin reaction.

Eye contact Causes eye irritation.

Inhalation Inhalation of vapors in high concentration may cause irritation of respiratory system.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Itching. Asthma-like and/ or skin allergy-like symptoms.

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

Notes to physician Treat symptomatically.

SDS # : 083653

DYNATRANS AC 50

Date of the previous version: not applicable **Revision Date:** 2015-10-05 **Version** 1

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Cool containers / tanks with water spray. Use:. Dry chemical. Carbon dioxide (CO_2). Water spray. Alcohol-resistant foam. Foam. ABC powder.

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

Special Hazard Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Flash back possible over considerable distance. 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 Remove all sources of ignition. Use personal protective equipment. Take precautionary measures against static discharges. Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery. Heat, flames and sparks. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Pay attention to flashback.

Other information See Section 12 for additional information.

Environmental precautions

General Information Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained. Try to prevent the material from entering drains or water courses. Prevention of fire and explosion. A vapor suppressing foam may be used to reduce vapors. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. See Section 12 for additional Ecological Information. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and materials for containment and cleaning up

Methods for cleaning up	Dam up. Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. 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). 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). Use clean non-sparking tools to collect absorbed material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling	There is a hazard associated with rags, paper or any other material used to remove spills which become soaked with product. Avoid accumulation of these: they are to be disposed off safely after use. Avoid static electricity build up with connection to earth. Use only in area provided with appropriate exhaust ventilation. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from open flames, hot surfaces and sources of ignition. Wear personal protective equipment. Prevent the formation of vapors, mists and aerosols. When using, do not eat, drink or smoke. For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing.
Prevention of fire and explosion	Keep away from open flames, hot surfaces and sources of ignition. Design installations (machinery and equipment) to prevent burning product from spreading (tanks, retention systems, interceptors (traps) in drainage systems). OPERATE ONLY ON COLD AND DEGASSED TANKS IN VENTILATED PREMISES (TO AVOID RISK OF EXPLOSION). Do not use compressed air for filling, discharging or handling. Empty containers may contain flammable or explosive vapors.
Hygiene measures	When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Regular cleaning of equipment, work area and clothing is recommended. Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Use personal protective equipment as required. Wash hands before breaks and at the end of workday. Wash hands with water as a precaution. Avoid breathing vapors, mist or gas. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets. Avoid prolonged and repeated contact with the skin, especially with used or waste product.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions	Keep away from direct sunlight.
Materials to Avoid	Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits Mineral oil mist:
USA: OSHA (PEL) TWA 5 mg/m^3, NIOSH (REL) TWA 5 mg/m^3, STEL 10 mg/m^3, ACGIH (TLV) TWA 5 mg/m^3 (highly refined).

Exposure controls

Engineering Measures Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Individual protection measures, such as personal protective equipment

General Information Protective engineering solutions should be implemented and in use before personal protective equipment is considered.

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.

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. Provide regular cleaning of equipment, work area and clothing. Regular cleaning of equipment, work area and clothing is recommended. Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Use personal protective equipment as required. Wash hands before breaks and at the end of workday. Wash hands with water as a precaution. Avoid breathing vapors, mist or gas. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets. Avoid prolonged and repeated contact with the skin, especially with used or waste product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Color	No information available
Physical State @20°C	liquid
Odor	Petroleum distillates
Odor Threshold	No information available

SDS # : 083653

DYNATRANS AC 50

Date of the previous version: not applicable **Revision Date:** 2015-10-05 **Version** 1

Property	Values	Remarks	Method
pH		Not applicable	
Melting point/range	-	No information available	
Boiling point/boiling range		Not applicable	
Flash point	**> 94 °C**		ASTM D 92
	> 201 °F		ASTM D 92.
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	0.890	@ 15 °C	
Density	890 kg/m³	@ 15 °C	
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	225 mm2/s	@ 40 °C	
Explosive properties	Not explosive		
Oxidizing Properties	Not applicable		
Possibility of hazardous reactions	Not applicable		
Other information			
Freezing Point		No information available	
Pour point	-12 °C		ASTM D 97

10. STABILITY AND REACTIVITY

Reactivity No information available.

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to Avoid Heating in air. Heat, flames and sparks. Take precautionary measures against static discharges. Heat (temperatures above flash point), sparks, ignition points, flames, static electricity. Strong oxidizing agents.

Incompatible Materials Strong oxidizing agents.

Hazardous Decomposition Products Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

11. TOXICOLOGICAL INFORMATION

SDS # : 083653

DYNATRANS AC 50

Date of the previous version: not applicable **Revision Date:** 2015-10-05 **Version** 1

Acute toxicity

Product Information Product does not present an acute toxicity hazard based on known or supplied information.

Information on likely routes of exposure

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

Numerical measures of toxicity - Product Information

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Nonylphenol, branched, ethoxylated 68412-54-4	LD50 > 2000 mg/kg (Rat female) LD50 5000 mg/kg (Rat male)		
Triphenyl phosphite 101-02-0	LD50 1590 mg/kg (Rat - OECD 401)	> 2000 mg/kg (Rabbit) = 1180 mg/kg (Rat)	LC50 (1h) > 6.7 mg/l (Rat - aerosol - OECD 403)

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Itching. Asthma-like and/ or skin allergy-like symptoms.

Skin contact May cause an allergic skin reaction.

Eye contact Causes eye irritation.

Inhalation Inhalation of vapors in high concentration may cause irritation of respiratory system.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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

Serious eye damage/eye irritation Irritating to eyes.
Sensitization May cause an allergic skin reaction.
Carcinogenicity This product is not classified carcinogenic.

Mutagenicity This product is not classified as mutagenic.
Reproductive toxicity This product does not present any known or suspected reproductive hazards.
Aspiration Hazard Not classified.

12. ECOLOGICAL INFORMATION

Ecotoxicity Harmful to aquatic life
Harmful to aquatic life with long lasting effects

Acute aquatic toxicity - Product Information

SDS # : 083653

DYNATRANS AC 50

Date of the previous version: not applicable **Revision Date:** 2015-10-05 **Version** 1

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
Nonylphenol, branched, ethoxylated 68412-54-4		LC50 (96h) 0.323 mg/l (Pimephales promelas)	LC50 (48h) 0.716 mg/l (Ceriodaphnia dubia semi-static)	
Triphenyl phosphite 101-02-0			EC50(48h) 0.94 mg/l (Cladocère)	

Chronic aquatic toxicity - Product Information

No experimental data available

Chronic aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Toxicity to microorganisms
Nonylphenol, branched, ethoxylated 68412-54-4		NOEC (21d) 0.1 mg/l (daphnia magna semi-static - OECD 211)		

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
Nonylphenol, branched, ethoxylated 68412-54-4	5.39
Triphenyl phosphite 101-02-0	6.62

Mobility

Soil No information available

Other adverse effects

SDS # : 083653

DYNATRANS AC 50

Date of the previous version: not applicable **Revision Date:** 2015-10-05 **Version** 1

General Information No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods Dispose of in accordance with local regulations.

Contaminated packaging Empty containers may contain flammable or explosive vapors. Do not burn, or use a cutting torch on, the empty drum. Empty containers should be taken to an approved waste handling site for recycling or disposal.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

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

International Inventories All the substances contained in this product are listed or exempted from listing in the following inventories:
U.S.A. (TSCA)

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

SDS # : 083653

DYNATRANS AC 50

Date of the previous version: not applicable **Revision Date:** 2015-10-05 **Version** 1

Acute Health Hazard	Yes
Chronic Health Hazard	no
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
Alkylphenol	121158-58-5	< 0.4		Group V		

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.

U.S. State Regulations

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

U.S. State Right-to-Know Regulations

No information available

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: 2015-10-05
Revision Note *** Indicates updated section
Abbreviations, acronyms

SDS # : 083653

DYNATRANS AC 50

Date of the previous version: not applicable **Revision Date:** 2015-10-05 **Version** 1

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