



SAFETY DATA SHEET

According to the Hazard Communication Standard, 29 CFR 1910.1200

SDS # : 084012

TRANSMISSION SYN SAE 50

Date of the previous version: 2015-06-11

Revision Date: 2015-10-13

Version 2.01

1. IDENTIFICATION

Product identifier

Product name TRANSMISSION SYN SAE 50

Other means of identification

Product Code(s) 084012

Number 3V4
Substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Identified uses synthetic. Transmission fluid. Hydraulic 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

Skin sensitization - Category 1

Label elements

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WARNING

May cause an allergic skin reaction

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

Precautionary Statements - Response

Specific treatment (see section 4 on this label)

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 %
Alkylamine phosphates	80939-62-4	1-5
N-phenyl-1-naphthylamine	90-30-2	0.1-1
Alkoxylated long chain alkylamine	^	0.1-1
Dodecylphenol	27193-86-8	0.1-<1

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** 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	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 immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Rinse immediately with plenty of water and seek medical advice.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. If symptoms persist, call a physician. Wash off immediately with soap and plenty of water. Remove contaminated clothing and shoes.
Inhalation	Move to fresh air. If symptoms persist, call a physician. Inhalation of high concentrations of vapor or aerosols may cause irritation of the upper respiratory tract.
Ingestion	Rinse mouth. If swallowed, do not induce vomiting - seek medical advice. Never give anything by mouth to an unconscious person.
Protection of First-aiders	Use personal protective equipment.

Most important symptoms/effects, acute and delayed

Skin contact	May cause an allergic skin reaction. Causes mild skin irritation. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.
Eye contact	Not classified.
Inhalation	Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system.
Ingestion	Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Symptoms	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Itching.

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

Notes to physician	May cause sensitization of susceptible persons.
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5. FIRE-FIGHTING MEASURES

<u>Suitable Extinguishing Media</u>	Water spray or fog. Foam. Carbon dioxide (CO ₂). ABC powder.
<u>Unsuitable Extinguishing Media</u>	Do not use a solid water stream as it may scatter and spread fire.

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Special Hazard 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 Use personal protective equipment. Avoid contact with the skin and the eyes. Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery.

Other information See Section 12 for additional information.

Environmental precautions

General Information Prevent entry into waterways, sewers, basements or confined areas. 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. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for cleaning up Dam up. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. 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 mechanical means such as pumps, skimmers and absorbent materials.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Wear personal protective equipment. 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 Take precautionary measures against static discharges. Ground/bond containers, tanks and transfer/receiving equipment.

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Hygiene measures

Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Regular cleaning of equipment, work area and clothing is recommended. Use personal protective equipment as required. Wash hands before breaks and at the end of workday. Wash hands with water as a precaution. Do not wash off with: Fuel. Solvent. Abrasive. Avoid prolonged and repeated contact with the skin, especially with used or waste product. Avoid breathing vapors, mist or gas. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

Keep out of reach of children. Keep container tightly closed. Keep containers tightly closed in a cool, well-ventilated place. Keep away from food, drink and animal feedingstuffs. Keep in a bunded area. Keep preferably in the original container. Otherwise reproduce all indication of the regulation label on the new container. Do not remove the hazard labels of the containers (even if they are empty). Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Protect from frost, heat and sunlight. Protect from moisture. Store in original container. Keep in properly labeled containers.

Materials to Avoid

Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

We are not aware of any national exposure limit.

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

If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.

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.

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Hand Protection	Protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
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	Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Regular cleaning of equipment, work area and clothing is recommended. Use personal protective equipment as required. Wash hands before breaks and at the end of workday. Wash hands with water as a precaution. Do not wash off with: Fuel. Solvent. Abrasive. Avoid prolonged and repeated contact with the skin, especially with used or waste product. Avoid breathing vapors, mist or gas. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Color	amber
Physical State @20°C	liquid
Odor	Characteristic
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH		Not applicable	
Melting point/range		No information available	
Boiling point/boiling range	> 316 °C > 601 °F		
Flash point	221 °C 430 °F		ASTM D 92 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	< 0.013 kPa	@ 20 °C	
Vapor density	> 2	(Air = 1)	
Relative density	0.860	@ 15 °C	ASTM D 1298
Density	860 kg/m ³	@ 15 °C	ASTM D 1298
Water solubility		Not applicable	
Solubility in other solvents		No information available	



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Autoignition temperature		Not applicable	
Decomposition temperature		No information available	
Viscosity, kinematic	132 mm ² /s	@ 40 °C	ASTM D 445
	17.5 mm ² /s	@ 100 °C	ASTM D 445
Explosive properties	Not explosive		
Oxidizing Properties	Not applicable		
Possibility of hazardous reactions	Not applicable		
Other information			
Specific Gravity	0.860	@ 15 °C	ASTM D 1298
Freezing Point		No information available	
Pour point	- 45 °C		

10. STABILITY AND REACTIVITY

Reactivity	None under normal processing.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to Avoid	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

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

ATEmix (oral)	32112 mg/kg
ATEmix (dermal)	37055 mg/kg
Inhalation	
ATEmix (inhalation-dust/mist)	85 mg/l
ATEmix (inhalation-vapor)	2010 mg/l

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Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Alkylamine phosphates 80939-62-4	LD50 > 2000 mg/kg (Rat)	LD50 > 2000 mg/kg (Rabbit)	
N-phenyl-1-naphthylamine 90-30-2	LD50 1625 mg/kg (Rat)	LD50 > 5000 mg/kg (Rabbit)	
Alkoxylated long chain alkylamine ^	LD50 1350 mg/kg (Rat)		LC50 (1h) 220 ppm (Rat - Vapor)
Dodecylphenol 27193-86-8	LD50 2100 mg/kg (Rat)	LD50 5 ml/kg (Rabbit)	

Information on toxicological effects

Symptoms	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Itching.
Skin contact	May cause an allergic skin reaction. Causes mild skin irritation. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.
Eye contact	Not classified.
Inhalation	Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system.
Ingestion	Not classified. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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

Sensitization	May cause sensitization by skin contact. 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

Acute aquatic toxicity - Product Information

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
Alkylamine phosphates 80939-62-4	EC50 (72h) > 10 mg/l (Algae)	LC50 (96h) 5.5 mg/l (Fish)	EC50 (48h) 1.2 mg/l (Daphnia magna)	

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N-phenyl-1-naphthylamine 90-30-2	EC50 (72h) 0.25 mg/L (Desmodesmus subspicatus)	LC50(96h) 0.44 mg/L (Oncorhynchus mykiss)	EC50 (48h) 0.32 mg/L (Daphnia magna - OECD 202-2)	
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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
N-phenyl-1-naphthylamine 90-30-2		NOEC (21d) 0.025 mg/L (Daphnia magna)		

Effects on terrestrial organisms No experimental data available .

Persistence and degradability

General Information No information available.

Bioaccumulative potential

Product Information No information available.

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Component Information

Chemical Name	log Pow
N-phenyl-1-naphthylamine 90-30-2	4.47
Dodecylphenol 27193-86-8	6.58

Mobility

Soil No information available
Water The product is insoluble and floats on water
Other adverse effects

General Information No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods Dispose of in accordance with local regulations.

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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. Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>ICAO/IATA</u>	Not regulated
<u>IMDG/IMO</u>	Not regulated
<u>ADR/RID</u>	Not regulated
<u>ADN</u>	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)
 Canada (DSL/NDSL)
 Japan (ENCS)
 China (IECSC)
 Australia (AICS)
 Philippines (PICCS)
 Korea (KECL)

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

Acute Health Hazard	Yes
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no

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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
Dodecylphenol	27193-86-8	0.1-<1		Group III		

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

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Revision Note *** Indicates updated section

Abbreviations, acronyms

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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

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