



SAFETY DATA SHEET

Section 1. Identification

CHS Inc. P.O. Box 64089 Mail station 525 St. Paul, MN 55164-0089	Transportation Emergency (CHEMTREC) Technical Information SDS Information	: : :	1-800-424-9300 1-651-355-8443 1-651-355-8445
Product name	: (FO) ROLLER CHAIN LUBRICANT	SDS no.	: FO-1333-881389
Common name	: High-flash lubricant aerosol	Revision date	: 04/22/2015
Chemical name	: Liquefied aerosol	Chemical formula	: Mixture
Chemical family	: Liquefied gas		
Relevant identified uses of the substance or mixture and uses advised against			
Not available.			

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: FLAMMABLE AEROSOLS - Category 1 SKIN SENSITIZATION - Category 1 GERM CELL MUTAGENICITY - Category 1B CARCINOGENICITY - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
GHS label elements	
Hazard pictograms	: 
Signal word	: Danger
Hazard statements	: Extremely flammable aerosol. May cause an allergic skin reaction. May cause genetic defects. May cause cancer. Causes damage to organs through prolonged or repeated exposure.
Precautionary statements	
General	: Not applicable.
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Pressurized container: Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Do not breathe dust or mist. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	: Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention.
Storage	: Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified (HNOC)	: Unstable. Sensitive to heat or shock. May become explosive.
Hazardous Material Information System (U.S.A.)	Health : 2 * Flammability : 4 Physical hazards : 0
National Fire Protection Association (U.S.A.)	Health : 2 Flammability : 4 Instability : 0

Section 3. Composition/information on ingredients

Substance/mixture : Mixture
 Chemical name : Liquefied aerosol
 Other means of identification : High-flash lubricant aerosol

Ingredient name	%	CAS number
Distillates (petroleum), solvent-refined heavy paraffinic	60 - 100	64741-88-4
Stoddard solvent	5 - 10	8052-41-3
Amides, coco, N,N-bis(hydroxyethyl)	1 - 5	68603-42-9
Solvent naphtha (petroleum), medium aliph.	1 - 5	64742-88-7
Sulfonic acids, petroleum, calcium salts	0.1 - 1	61789-86-4
Diethanolamine	0.1 - 1	111-42-2

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : If material comes in contact with the eyes, immediately wash the eyes with large amounts of water for 15 minutes, occasionally lifting the lower and upper lids. Get medical attention.

Inhalation : If person breathes in large amounts of material, move the exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Keep the person warm and at rest. Get medical attention as soon as possible.

Skin contact : If the material comes in contact with the skin, wash the contaminated skin with soap and water promptly. If the material penetrates through clothing, remove the clothing and wash the skin with soap and water promptly. If irritation persists after washing, get medical attention immediately.

Ingestion : If material has been swallowed, do not induce vomiting. Get medical attention immediately.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact : May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following: pain or irritation, watering, redness.

Inhalation : Adverse symptoms may include the following: respiratory tract irritation, coughing.

Skin contact : Adverse symptoms may include the following: irritation, redness.

Ingestion : No known significant effects or critical hazards.

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

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Dry Chemical, Foam, Carbon Dioxide (CO₂), Water (fog pattern).

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : Vapors are heavier than air and may travel along the ground to a source of ignition (pilot light, heater, electric motor) some distance away. Containers, drums (even empty) can explode when heat (welding, cutting, etc.) is applied.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
 carbon dioxide
 carbon monoxide
 nitrogen oxides

- Special protective actions for fire-fighters** : Water may be ineffective on flames, but should be used to keep fire-exposed containers cool. Water or foam sprayed into container of hot burning product could cause frothing and endanger fire fighters. Large fires, such as tank fires, should be fought with caution. If possible, pump the contents from the tank and keep adjoining structures cool with water. Avoid spreading burning liquid with water used for cooling purposes. Do not flush down public sewers. Avoid inhalation of vapors. Firefighters should wear self-contained breathing apparatus.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Fire-fighters' protective clothing will only provide limited protection.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Keep unnecessary and unprotected personnel from entering. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Methods and materials for containment and cleaning up

- Spill** : Contain with dikes or absorbent to prevent migration to sewers/streams. Take up small spill with dry chemical absorbent; large spills may require pump or vacuum prior to absorbent. May require excavation of severely contaminated soil.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.
- Conditions for safe storage, including any incompatibilities** : Do not store above the following temperature: 113°C (235.4°F). Odorous and toxic fumes may form from the decomposition of this product if stored at excessive temperatures for extended periods of time. Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), solvent-refined heavy paraffinic	<p>ACGIH TLV (United States, 6/2013). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction.</p> <p>NIOSH REL (United States, 4/2013). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist</p> <p>OSHA PEL (United States, 2/2013). TWA: 5 mg/m³ 8 hours.</p>
Stoddard solvent	<p>ACGIH TLV (United States, 4/2014). TWA: 525 mg/m³ 8 hours. TWA: 100 ppm 8 hours.</p> <p>NIOSH REL (United States, 10/2013). CEIL: 1800 mg/m³ 15 minutes. TWA: 350 mg/m³ 10 hours.</p> <p>OSHA PEL (United States, 2/2013). TWA: 2900 mg/m³ 8 hours. TWA: 500 ppm 8 hours.</p>
Solvent naphtha (petroleum), medium aliph.	<p>OSHA PEL (United States, 2/2013). TWA: 100 ppm 8 hours. TWA: 400 mg/m³ 8 hours.</p>
Diethanolamine	<p>ACGIH TLV (United States, 6/2013). Absorbed through skin. TWA: 1 mg/m³ 8 hours. Form: Inhalable fraction and vapor</p> <p>NIOSH REL (United States, 4/2013). TWA: 15 mg/m³ 10 hours. TWA: 3 ppm 10 hours.</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 15 mg/m³ 8 hours. TWA: 3 ppm 8 hours.</p>

- Appropriate engineering controls** : Use only with adequate ventilation.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Recommended: Splash goggles and a face shield, where splash hazard exists.
- Skin protection**
- Hand protection** : 4 - 8 hours (breakthrough time): Nitrile gloves.
- Body protection** : Recommended: Long sleeved coveralls.
- Other skin protection** : Recommended: Impervious boots.
- Respiratory protection** : If ventilation is inadequate, use a NIOSH-certified respirator with an organic vapor cartridge and P95 particulate filter.

Section 9. Physical and chemical properties

Appearance		Relative density	: 0.6776
Physical state	: Liquid. [Compressed liquefied gas]	Evaporation rate	: >1 (Ether. = 1)
Color	: Not available.	Solubility	: Insoluble in the following materials: cold water and hot water.
Odor	: Mild hydrocarbon.	Solubility in water	: Insoluble
Odor threshold	: Not available.	Partition coefficient: n-octanol/water	: Not available.
pH	: Not available.	Auto-ignition temperature	: Not available.
Melting point	: Not available.	Decomposition temperature	: Not available.
Boiling point	: Not available.	SADT	: Not available.
Flash point	: Closed cup: -104.4°C (-155.9°F)	Viscosity	: Not available.
Flammability	: Not available.	Vapor pressure	: 7.3 to 9.3 kPa (55 to 70 mm Hg) [room temperature]
Lower and upper explosive (flammable) limits	: Not available.	Vapor density	: >1 [Air = 1]

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product may not be stable under certain conditions of storage or use. See "Possibility of Hazardous Reactions" for further information.
Possibility of hazardous reactions	: Hazardous reactions or instability may occur under certain conditions of storage or use. Conditions may include the following: shock friction high temperature Reactions may include the following: risk of explosion
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Avoid shock and friction.
Incompatible materials	: Reactive or incompatible with the following materials: Strong oxidizing agents.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Sulfonic acids, petroleum, calcium salts	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	>5 g/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Stoddard solvent	Eyes - Moderate irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Mild irritant	Human	-	100 ppm	-
Amides, coco, N,N-bis(hydroxyethyl)	Eyes - Severe irritant	Rabbit	-	100 µL	-
	Skin - Moderate irritant	Rabbit	-	300 µL	-
Diethanolamine	Eyes - Severe irritant	Rabbit	-	24 hours 750 µg	-
	Eyes - Severe irritant	Rabbit	-	5500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	50 mg	-

Sensitization

Skin : There is no data available.

Respiratory : There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity**Classification**

Product/ingredient name	OSHA	IARC	NTP
Amides, coco, N,N-bis(hydroxyethyl)	-	2B	-
Diethanolamine	-	2B	-

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Solvent naphtha (petroleum), medium aliph.	Category 1	Not determined	central nervous system (CNS)
Diethanolamine	Category 2	Not determined	Not determined

Aspiration hazard

Name	Result
Stoddard solvent	ASPIRATION HAZARD - Category 1
Solvent naphtha (petroleum), medium aliph.	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation. Ingestion.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Diethanolamine	Acute EC50 12 mg/L Fresh water Acute LC50 28800 µg/L Fresh water	Algae - Pseudokirchneriella subcapitata Crustaceans - Ceriodaphnia dubia - Neonate	96 hours 48 hours
	Acute LC50 2150 µg/L Fresh water Acute LC50 100 mg/L Fresh water	Daphnia - Daphnia pulex Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	48 hours 96 hours

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Distillates (petroleum), solvent-refined heavy paraffinic	3.9 to 6	-	high
Stoddard solvent	3.16 to 7.06	-	high
Diethanolamine	-1.43	-	low

Mobility in soilSoil/water partition coefficient (K_{oc}) : There is no data available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Section 14. Transport information

DOT IDENTIFICATION NUMBER UN1950 **DOT proper shipping name** AEROSOLS, Marine pollutant (Stoddard solvent) RQ (Diethanolamine)

DOT Hazard Class(es) 2.1 **PG** - **DOT EMER. RESPONSE GUIDE NO.** Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined
United States inventory (TSCA 8b): All components are listed or exempted.
Clean Air Act (CAA) 112 regulated flammable substances: Propane

Clean Air Act Section 602 Class I Substances : Not listed **DEA List I Chemicals (Precursor Chemicals)** : Not listed

Clean Air Act Section 602 Class II Substances : Not listed **DEA List II Chemicals (Essential Chemicals)** : Not listed

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Listed

SARA 302/304**Composition/information on ingredients**

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Hazard classifications : Fire hazard
 Reactive
 Immediate (acute) health hazard
 Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Distillates (petroleum), solvent-refined heavy paraffinic	60 - 100	No.	No.	No.	No.	Yes.
Stoddard solvent	5 - 10	Yes.	No.	No.	No.	Yes.
Amides, coco, N,N-bis(hydroxyethyl)	1 - 5	No.	No.	No.	Yes.	Yes.
Solvent naphtha (petroleum), medium aliph.	1 - 5	No.	No.	No.	No.	Yes.
Sulfonic acids, petroleum, calcium salts	0.1 - 1	No.	No.	No.	Yes.	No.
Diethanolamine	0.1 - 1	No.	No.	No.	Yes.	Yes.

SARA 313 : This product (does/not) contain toxic chemicals subject to the reporting requirements of SARA Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

Product name	CAS number	%
Diethanolamine	111-42-2	0.1 - 1

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: Propane; Stoddard solvent; Diethanolamine

New York : The following components are listed: Diethanolamine

New Jersey : The following components are listed: Distillates (petroleum), solvent-refined heavy paraffinic; Propane; Stoddard solvent; Diethanolamine

Pennsylvania : The following components are listed: Propane; Stoddard solvent; Diethanolamine

California Prop. 65 : **WARNING:** This product contains a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Amides, coco, N,N-bis(hydroxyethyl) Diethanolamine	Yes. Yes.	No. No.	No. No.	No. No.

Section 16. Other information

Revision date : 04/22/2015

Supersedes : 03/20/2015

Revised Section(s) : 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16.

Prepared by : KMK Regulatory Services Inc.

Notice to reader

THE INFORMATION CONTAINED IN THIS SDS RELATES ONLY TO THE SPECIFIC MATERIAL IDENTIFIED. IT DOES NOT COVER USE OF THAT MATERIAL IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PARTICULAR PROCESS. IN COMPLIANCE WITH 29 C.F.R. 1910.1200(g), CHS HAS PREPARED THIS SDS IN SEGMENTS, WITH THE INTENT THAT THOSE SEGMENTS BE READ TOGETHER AS A WHOLE WITHOUT TEXTUAL OMISSIONS OR ALTERATIONS. CHS BELIEVES THE INFORMATION CONTAINED HEREIN TO BE ACCURATE, BUT MAKES NO REPRESENTATION, GUARANTEE, OR WARRANTY, EXPRESS OR IMPLIED, ABOUT THE ACCURACY, RELIABILITY, OR COMPLETENESS OF THE INFORMATION OR ABOUT THE FITNESS OF CONTENTS HEREIN FOR EITHER GENERAL OR PARTICULAR PURPOSES. PERSONS REVIEWING THIS SDS SHOULD MAKE THEIR OWN DETERMINATION AS TO THE MATERIAL'S SUITABILITY AND COMPLETENESS FOR USE IN THEIR PARTICULAR APPLICATIONS.



A BRAND OF CHS