



# Material Safety Data Sheet Index

October 2000



Click on a product name to jump  
to the proper MSDS page.

If you can't find your MSDS,  
call (216) 566-2902

TRI-FLOW™ Industrial Lubricant with Teflon® (Non-Aerosol)

TRI-FLOW™ Industrial Lubricant With Teflon® (Aerosol)

TRI-FLOW™ Synthetic Food Grade Grease (Non-Aerosol)

TRI-FLOW™ Synthetic Food Grade Oil

TRI-FLOW™ Synthetic Grease With Teflon® (Aerosol)



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**Section 5 - Health Hazard Data**

## ROUTES OF EXPOSURE

Exposure may be by INHALATION and/or SKIN or EYE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.

## ACUTE Health Hazards

## EFFECTS OF OVEREXPOSURE

Irritation of eyes, skin and upper respiratory system. In a confined area vapors in high concentration may cause headache, nausea or dizziness.

## SIGNS AND SYMPTOMS OF OVEREXPOSURE

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

## MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

## EMERGENCY AND FIRST AID PROCEDURES

If INHALED: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

If on SKIN: Wash affected area thoroughly with soap and water.

If in EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.

If SWALLOWED: Get medical attention.

## CHRONIC Health Hazards

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.

**Section 6 - Reactivity Data**

STABILITY -- Stable

## CONDITIONS TO AVOID

None known.

## INCOMPATIBILITY

None known.

## HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

## HAZARDOUS POLYMERIZATION

Will not occur

**Section 7 - Spill or Leak Procedures**

## STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate and remove with inert absorbent.

## WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Incinerate in approved facility. Do not incinerate closed container.

Dispose of in accordance with Federal, State, and Local regulations regarding pollution.

**Section 8 - Protection Information**

## PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation. Avoid breathing vapor and spray mist. Avoid contact with skin and eyes. Wash hands after using.

## VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits.

Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

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## =====

RESPIRATORY PROTECTION  
If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

## PROTECTIVE GLOVES

Required for long or repeated contact.

## EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

**Section 9 - Precautions**

## DOL STORAGE CATEGORY

3B

## PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

**Section 10 - Other Regulatory Information**

## SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.			

## TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.



# Material Safety Data Sheet

TF-FG-GREASE-AER  
2000

MANUFACTURER'S NAME  
THE SHERWIN-WILLIAMS COMPANY  
Consumer Group - Industrial  
Cleveland, OH 44115

EMERGENCY TELEPHONE NO.  
(216) 566-2917

DATE OF PREPARATION  
23-AUG-00

INFORMATION TELEPHONE NO.  
(800) 251-2486

## Section 1 - Product Identification

PRODUCT NUMBER

HMIS CODES

22020

Health 2  
Flammability 4  
Reactivity 0

PRODUCT NAME  
TRI-FLOW™ Synthetic Grease With Teflon® (Aerosol)

PRODUCT CLASS  
Aerosol Lubricant

## Section 2 - Hazardous Ingredients

INGREDIENT CAS No.	% by WT	ACGIH TLV	OSHA PEL	UNITS	V.P.
Propane 74-98-6	10	2500	1000	PPM	760.00
Heavy Aliphatic Naphtha. 68551-20-2	74	Not Established			0.50

## Section 3 - Physical Data

PRODUCT WEIGHT 6.43 lb/gal 770 g/l  
 SPECIFIC GRAVITY 0.77  
 BOILING POINT <0 - 550 F <-18 - 287 C  
 MELTING POINT Not Available  
 VOLATILE VOLUME 86 %  
 EVAPORATION RATE Faster than ether  
 VAPOR DENSITY Heavier than air  
 SOLUBILITY IN WATER N.A.  
 VOLATILE ORGANIC COMPOUNDS (VOC Theoretical)  
 Volatile Weight 84.00 % Less Federally Exempt Solvents

## Section 4 - Fire and Explosion Hazard Data

FLASH POINT LEL UEL  
 Propellant < 0 F 0.6 9.5  
 EXTINGUISHING MEDIA  
 Carbon Dioxide, Dry Chemical, Foam

## =====

UNUSUAL FIRE AND EXPLOSION HAZARDS

Isolate from heat, electrical equipment, sparks, and open flame. Closed containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

## SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

**Section 5 - Health Hazard Data**

## ROUTES OF EXPOSURE

Exposure may be by INHALATION and/or SKIN or EYE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.

## ACUTE Health Hazards

## EFFECTS OF OVEREXPOSURE

Irritation of eyes, skin and respiratory system. May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

## SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

## MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

## EMERGENCY AND FIRST AID PROCEDURES

If INHALED: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

If on SKIN: Wash affected area thoroughly with soap and water. Remove contaminated clothing and launder before re-use.

If in EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.

If SWALLOWED: Never give anything by mouth to an unconscious person. DO NOT INDUCE VOMITING. Give conscious patient several glasses of water. Seek medical attention.

## CHRONIC Health Hazards

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

**Section 6 - Reactivity Data**

STABILITY -- Stable

## CONDITIONS TO AVOID

None known.

## INCOMPATIBILITY

None known.

## =====

## HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide HAZARDOUS POLYMERIZATION

Will not occur

**Section 7 - Spill or Leak Procedures**

## STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate and remove with inert absorbent.

## WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Do not incinerate. Depressurize container. Dispose of in accordance with Federal, State, and Local regulations regarding pollution.

**Section 8 - Protection Information**

## PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation. Avoid breathing vapor and spray mist. Avoid contact with skin and eyes. Wash hands after using.

## VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

## RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

## PROTECTIVE GLOVES

None required for normal application of aerosol products where minimal skin contact is expected. For long or repeated contact, wear chemical resistant gloves.

## EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

**Section 9 - Precautions**

## DOL STORAGE CATEGORY

1A

## PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep away from heat, sparks, and open flame. Vapors will accumulate readily and may ignite explosively.

During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.

Consult NFPA Code. Use approved Bonding and Grounding procedures.

Contents under pressure. Do not puncture, incinerate, or expose to temperature above 120F. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally. Keep out of the reach of children.

## OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

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**Section 10 - Other Regulatory Information**

## SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.			

## TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.



# Material Safety Data Sheet

TF-FG-OIL  
2000

MANUFACTURER'S NAME  
THE SHERWIN-WILLIAMS COMPANY  
Consumer Group - Industrial  
Cleveland, OH 44115

EMERGENCY TELEPHONE NO.  
(216) 566-2917

DATE OF PREPARATION  
18-AUG-00

INFORMATION TELEPHONE NO.  
(800) 251-2486

## Section 1 - Product Identification

PRODUCT NUMBERS

23011 23013  
23012 23014

HMIS CODES

Health 2  
Flammability 1  
Reactivity 0

PRODUCT NAME  
TRI-FLOW™ Synthetic Food Grade Oil  
PRODUCT CLASS  
Lubricant

## Section 2 - Hazardous Ingredients

INGREDIENT	ACGIH	OSHA			
CAS No.	% by WT	TLV	PEL	UNITS	V.P.
=====					

No ingredients in this product are hazardous as defined by the Department of Labor.

## Section 3 - Physical Data

PRODUCT WEIGHT -- 7.00 lb./gal.	EVAPORATION RATE -- Slower than Ether
SPECIFIC GRAVITY -- 0.84	VAPOR DENSITY -- Heavier than Air
BOILING POINT -- N.A.	MELTING POINT -- N.Ap.
VOLATILE VOLUME -- 0 %	SOLUBILITY IN WATER -- N.Av.
VOC (Theoretical) -- 0.00 lb.	0 gm. (less Federally Exempt Solvents)

## Section 4 - Fire and Explosion Hazard Data

FLASH POINT	LEL	UEL
>200 °F PMCC	N.Ap.	N.Ap.
FLAMMABILITY CLASSIFICATION		
Not Applicable		
EXTINGUISHING MEDIA		
Carbon Dioxide, Dry Chemical, Foam		
UNUSUAL FIRE AND EXPLOSION HAZARDS		
Not Applicable		
SPECIAL FIRE FIGHTING PROCEDURES		
Not Applicable		

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## Section 5 - Health Hazard Data

### ROUTES OF EXPOSURE

Exposure may be by INHALATION and/or SKIN or EYE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.

### ACUTE Health Hazards

#### EFFECTS OF OVEREXPOSURE

Irritation of eyes, skin and upper respiratory system. In a confined area vapors in high concentration may cause headache, nausea or dizziness.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

#### MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

#### EMERGENCY AND FIRST AID PROCEDURES

If INHALED: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

If on SKIN: Wash affected area thoroughly with soap and water. Remove contaminated clothing and launder before re-use.

If in EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.

If SWALLOWED: Get medical attention.

#### CHRONIC Health Hazards

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.

## Section 6 - Reactivity Data

STABILITY -- Stable

#### CONDITIONS TO AVOID

None known.

#### INCOMPATIBILITY

None known.

#### HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

#### HAZARDOUS POLYMERIZATION

Will not occur

## Section 7 - Spill or Leak Procedures

#### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate and remove with inert absorbent.

#### WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State, and Local regulations regarding pollution.

## Section 8 - Protection Information

#### PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation. Avoid breathing vapor and spray mist. Avoid contact with skin and eyes. Wash hands after using.

## =====

VENTILATION  
Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

## RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

## PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

## EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

**Section 9 - Precautions**

## DOL STORAGE CATEGORY

3B

## PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

**Section 10 - Other Regulatory Information**

## SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.			

## TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.



# Material Safety Data Sheet

TF-FG-OIL-AER  
2000

MANUFACTURER'S NAME  
THE SHERWIN-WILLIAMS COMPANY  
Consumer Group - Industrial  
Cleveland, OH 44115

EMERGENCY TELEPHONE NO.  
(216) 566-2917

DATE OF PREPARATION  
23-AUG-00

INFORMATION TELEPHONE NO.  
(800) 251-2486

## Section 1 - Product Identification

PRODUCT NUMBER

HMIS CODES

23010

Health 2  
Flammability 4  
Reactivity 0

PRODUCT NAME  
TRI-FLOW™ Synthetic Oil With Teflon® (aerosol)  
PRODUCT CLASS  
Aerosol Lubricant

## Section 2 - Hazardous Ingredients

INGREDIENT CAS No.	% by WT	ACGIH TLV	OSHA PEL	UNITS	V.P.
Propane 74-98-6	8	2500	1000	PPM	760.00
Heavy Aliphatic Naphtha. 68551-20-2	68	Not Established			0.50

## Section 3 - Physical Data

PRODUCT WEIGHT 6.47 lb/gal 774 g/l  
SPECIFIC GRAVITY 0.78  
BOILING POINT <0 - 550 F <-18 - 287 C  
MELTING POINT Not Available  
VOLATILE VOLUME 78 %  
EVAPORATION RATE Faster than ether  
VAPOR DENSITY Heavier than air  
SOLUBILITY IN WATER N.A.  
VOLATILE ORGANIC COMPOUNDS (VOC Theoretical)  
Volatile Weight 76.41 % Less Federally Exempt Solvents

## Section 4 - Fire and Explosion Hazard Data

FLASH POINT LEL UEL  
Propellant < 0 F 0.6 9.5  
EXTINGUISHING MEDIA  
Carbon Dioxide, Dry Chemical, Foam

## =====

UNUSUAL FIRE AND EXPLOSION HAZARDS

Isolate from heat, electrical equipment, sparks, and open flame. Closed containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

## SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

**Section 5 - Health Hazard Data**

## ROUTES OF EXPOSURE

Exposure may be by INHALATION and/or SKIN or EYE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.

## ACUTE Health Hazards

## EFFECTS OF OVEREXPOSURE

Irritation of eyes, skin and respiratory system. May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

## SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

## MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

## EMERGENCY AND FIRST AID PROCEDURES

If INHALED: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

If on SKIN: Wash affected area thoroughly with soap and water. Remove contaminated clothing and launder before re-use.

If in EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.

If SWALLOWED: Never give anything by mouth to an unconscious person. DO NOT INDUCE VOMITING. Give conscious patient several glasses of water. Seek medical attention.

## CHRONIC Health Hazards

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

**Section 6 - Reactivity Data**

STABILITY -- Stable

## CONDITIONS TO AVOID

None known.

## INCOMPATIBILITY

None known.

## =====

HAZARDOUS DECOMPOSITION PRODUCTS  
By fire: Carbon Dioxide, Carbon Monoxide  
HAZARDOUS POLYMERIZATION  
Will not occur

## Section 7 - Spill or Leak Procedures

### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate and remove with inert absorbent.

### WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Do not incinerate. Depressurize container. Dispose of in accordance with Federal, State, and Local regulations regarding pollution.

## Section 8 - Protection Information

### PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation. Avoid breathing vapor and spray mist. Avoid contact with skin and eyes. Wash hands after using.

### VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section II is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

### RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section II.

### PROTECTIVE GLOVES

None required for normal application of aerosol products where minimal skin contact is expected. For long or repeated contact, wear chemical resistant gloves.

### EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

## Section 9 - Precautions

### DOL STORAGE CATEGORY

1A

### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep away from heat, sparks, and open flame. Vapors will accumulate readily and may ignite explosively.

During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.

Consult NFPA Code. Use approved Bonding and Grounding procedures.

Contents under pressure. Do not puncture, incinerate, or expose to temperature above 120F. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally. Keep out of the reach of children.

### OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

=====  
**Section 10 - Other Regulatory Information**

## SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.			

## TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.



# Material Safety Data Sheet

TF-LUBE  
2000

MANUFACTURER'S NAME  
THE SHERWIN-WILLIAMS COMPANY  
Consumer Group - Industrial  
Cleveland, OH 44115

EMERGENCY TELEPHONE NO.  
(216) 566-2917

DATE OF PREPARATION  
23-AUG-00

INFORMATION TELEPHONE NO.  
(800) 251-2486

## Section 1 - Product Identification

PRODUCT NUMBER

HMIS CODES

22025 26020 29200

Health 2  
Flammability 2  
Reactivity 0

PRODUCT NAME

TRI-FLOW™ Industrial Lubricant with Teflon® (Non-Aerosol)

PRODUCT CLASS

Lubricant

## Section 2 - Hazardous Ingredients

INGREDIENT CAS No.	% by WT	ACGIH TLV	OSHA PEL	UNITS	V.P.
Heavy Aliphatic Solvent. 64742-96-7	29	Not Established			1.00
Naphthenic Oil. 64742-63-8	23	5		MG/M3 as Mist	0.00
Heavy Naphthenic Petroleum Oil. 64742-52-5	2	5		5 MG/M3 as Mist	0.00
Highly refined Naphthenic Oil. 64742-53-6	4	5		5 MG/M3 as Mist	0.00
Heavy Mineral Oil. 64741-96-4	23	5		5 MG/M3 as Mist	0.10
Distillates, petroleum, solvent-degr. 64742-65-0	4	5		5 MG/M3 as Mist	0.00
2-Methoxymethylethoxypropanol 34590-94-8	2	100 STEL 150		100 PPM (Skin) 150 PPM (Skin)	0.40
Amyl Acetate. 628-63-7	3	100		100 PPM	4.00
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Barium (as Ba; total)	0.9				

### Section 3 - Physical Data

PRODUCT WEIGHT	7.30 lb/gal	875 g/l
SPECIFIC GRAVITY	0.88	
BOILING POINT	288 - 701 F	142 - 371 C
MELTING POINT	Not Available	
VOLATILE VOLUME	38 %	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	N.A.	
VOLATILE ORGANIC COMPOUNDS (VOC Theoretical)		
2.57 lb/gal	308 g/l	Less Federally Exempt Solvents
2.57 lb/gal	308 g/l	Emitted VOC

### Section 4 - Fire and Explosion Hazard Data

FLASH POINT	LEL	UEL
146 F TCC	0.6	7.5

#### FLAMMABILITY CLASSIFICATION

Combustible, Flash above 99 and below 200 F

#### EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

#### UNUSUAL FIRE AND EXPLOSION HAZARDS

Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, and open flame. Closed containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

#### SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

### Section 5 - Health Hazard Data

#### ROUTES OF EXPOSURE

Exposure may be by INHALATION and/or SKIN or EYE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.

#### ACUTE Health Hazards

#### EFFECTS OF OVEREXPOSURE

Irritation of eyes, skin and respiratory system. May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

#### MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

Continued on page 3

## =====

EMERGENCY AND FIRST AID PROCEDURES

If INHALED: If affected, remove from exposure. Restore breathing.  
Keep warm and quiet.

If on SKIN: Wash affected area thoroughly with soap and water.  
Remove contaminated clothing and launder before re-use.

If in EYES: Flush eyes with large amounts of water for 15 minutes.  
Get medical attention.

If SWALLOWED: Get medical attention.

## CHRONIC Health Hazards

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

**Section 6 - Reactivity Data**

STABILITY -- Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide, Oxides of Metals in Section II

HAZARDOUS POLYMERIZATION

Will not occur

**Section 7 - Spill or Leak Procedures**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate and remove with inert absorbent.

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for extractability to determine the applicable EPA hazardous waste numbers.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State, and Local regulations regarding pollution.

**Section 8 - Protection Information**

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation. Avoid breathing vapor and spray mist. Avoid contact with skin and eyes. Wash hands after using.

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section II is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section II.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section II.

=====
  
EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

**Section 9 - Precautions**

## DOL STORAGE CATEGORY

3A

## PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Contents are COMBUSTIBLE. Keep away from heat and open flame.

Consult NFPA Code. Use approved Bonding and Grounding procedures.

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

## OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

**Section 10 - Other Regulatory Information**

## SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
	Barium Compound.	3	0.9

## TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.



# Material Safety Data Sheet

TF-LUBE-AER  
2000

MANUFACTURER'S NAME  
THE SHERWIN-WILLIAMS COMPANY  
Consumer Group - Industrial  
Cleveland, OH 44115

EMERGENCY TELEPHONE NO.  
(216) 566-2917

DATE OF PREPARATION  
23-AUG-00

INFORMATION TELEPHONE NO.  
(216) 566-2902

## Section 1 - Product Identification

PRODUCT NUMBER

HMIS CODES

20025 20027

Health 2  
Flammability 4  
Reactivity 0

PRODUCT NAME

TRI-FLOW™ Industrial Lubricant With Teflon® (Aerosol)

PRODUCT CLASS

Aerosol Lubricant

## Section 2 - Hazardous Ingredients

INGREDIENT CAS No.	% by WT	ACGIH TLV	OSHA PEL	UNITS	V.P.
Propane 74-98-6	10	2500	1000	PPM	760.00
Butane 106-97-8	10	800	800	PPM	760.00
Heavy Aliphatic Solvent. 64742-96-7	24	Not Established			1.00
Naphthenic Oil. 64742-63-8	18	5		Mg/M3 as Mist	0.00
Heavy Naphthenic Petroleum Oil. 64742-52-5	2	5		5 Mg/M3 as Mist	0.00
Highly refined Naphthenic Oil. 64742-53-6	3	5		5 Mg/M3 as Mist	0.00
Heavy Mineral Oil. 64741-96-4	19	5		5 Mg/M3 as Mist	0.10
Distillates, petroleum, solvent-degr. 64742-65-0	3	5		5 Mg/M3 as Mist	0.00
2-Methoxymethylethoxypropanol 34590-94-8	2	100 STEL 150		100 PPM (Skin) 150 PPM (Skin)	0.40
Amyl Acetate. 628-63-7	2	100		100 PPM	4.00
-----					
Barium (as Ba; total)	0.7				

Continued on page 2

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**Section 3 - Physical Data**

PRODUCT WEIGHT 6.46 lb/gal 774 g/l  
SPECIFIC GRAVITY 0.78  
BOILING POINT <0 - 701 F <-18 - 371 C  
MELTING POINT Not Available  
VOLATILE VOLUME 56 %  
EVAPORATION RATE Faster than ether  
VAPOR DENSITY Heavier than air  
SOLUBILITY IN WATER N.A.  
VOLATILE ORGANIC COMPOUNDS (VOC Theoretical)  
Volatile Weight 48.20 % Less Federally Exempt Solvents

**Section 4 - Fire and Explosion Hazard Data**

FLASH POINT LEL UEL  
40 F TCC 0.6 9.5

**EXTINGUISHING MEDIA**

Carbon Dioxide, Dry Chemical, Foam

**UNUSUAL FIRE AND EXPLOSION HAZARDS**

Isolate from heat, electrical equipment, sparks, and open flame. Closed containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

**SPECIAL FIRE FIGHTING PROCEDURES**

Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

**Section 5 - Health Hazard Data****ROUTES OF EXPOSURE**

Exposure may be by INHALATION and/or SKIN or EYE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.

**ACUTE Health Hazards****EFFECTS OF OVEREXPOSURE**

Irritation of eyes, skin and respiratory system. May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

**SIGNS AND SYMPTOMS OF OVEREXPOSURE**

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE**

None generally recognized.

## =====

EMERGENCY AND FIRST AID PROCEDURES

If INHALED: If affected, remove from exposure. Restore breathing.  
Keep warm and quiet.

If on SKIN: Wash affected area thoroughly with soap and water.  
Remove contaminated clothing and launder before re-use.

If in EYES: Flush eyes with large amounts of water for 15 minutes.  
Get medical attention.

If SWALLOWED: Get medical attention.

## CHRONIC Health Hazards

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

**Section 6 - Reactivity Data**

STABILITY -- Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide, Oxides of Metals in Section 2

HAZARDOUS POLYMERIZATION

Will not occur

**Section 7 - Spill or Leak Procedures**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate and remove with inert absorbent.

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability and extractability to determine the applicable EPA hazardous waste numbers.

Do not incinerate. Depressurize container. Dispose of in accordance with Federal, State, and Local regulations regarding pollution.

**Section 8 - Protection Information**

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation. Avoid breathing vapor and spray mist. Avoid contact with skin and eyes. Wash hands after using.

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

PROTECTIVE GLOVES

None required for normal application of aerosol products where minimal skin contact is expected. For long or repeated contact, wear chemical resistant gloves.

## =====

## EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

**Section 9 - Precautions**

## DOL STORAGE CATEGORY

1A

## PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep away from heat, sparks, and open flame.

During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.

Consult NFPA Code. Use approved Bonding and Grounding procedures.

Contents under pressure. Do not puncture, incinerate, or expose to temperature above 120F. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally. Keep out of the reach of children.

## OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

**Section 10 - Other Regulatory Information**

## SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

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