

MATERIAL SAFETY DATA SHEET

21013
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DATE OF PREPARATION
Apr 6, 2010

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER

21013

PRODUCT NAME

TRI-FLOW™ Superior Dry Lubricant with PTFE

MANUFACTURER'S NAME

THE SHERWIN-WILLIAMS COMPANY
Consumer Group - Industrial
Cleveland, OH 44115

Telephone Numbers and Websites

Regulatory Information	(216) 566-2902 www.paintdocs.com
Medical Emergency	(216) 566-2917
Transportation Emergency*	(800) 424-9300

**for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)*

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

% by Weight	CAS Number	Ingredient	Units	Vapor Pressure
35	110-54-3	Hexane	ACGIH TLV 50 PPM OSHA PEL 50 PPM	127 mm
16	107-83-5	2-Methylpentane	ACGIH TLV OSHA PEL Not Available Not Available	211 mm
6	96-14-0	3-Methylpentane	ACGIH TLV OSHA PEL 500 PPM Not Available	211 mm
5	79-29-8	2,3-Dimethylbutane	ACGIH TLV OSHA PEL Not Available Not Available	230 mm
2	75-83-2	2,2-Dimethylbutane	ACGIH TLV OSHA PEL Not Available Not Available	317 mm
7	64742-88-7	Mineral Spirits	ACGIH TLV OSHA PEL 100 PPM 100 PPM	2 mm
10	64742-52-5	Heavy Naphthenic Petroleum Oil	ACGIH TLV OSHA PEL Not Available Not Available	
2	110-82-7	Cyclohexane	ACGIH TLV OSHA PEL 100 PPM 300 PPM	100 mm
1	628-63-7	Amyl Acetate	ACGIH TLV OSHA PEL 100 PPM 100 PPM	4 mm

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.
EYE or SKIN contact with the product, vapor or spray mist.

EFFECTS OF OVEREXPOSURE

EYES: Irritation.
SKIN: Prolonged or repeated exposure may cause irritation.
INHALATION: Irritation of the upper respiratory system.

HMIS Codes

Health	2*
Flammability	3
Reactivity	0

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death. Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems:

- the liver
- the urinary system

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.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

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

SKIN: Wash affected area thoroughly with soap and water.

Remove contaminated clothing and launder before re-use.

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

INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT

-15 °F TCC

LEL

1.0

UEL

8.4

FLAMMABILITY CLASSIFICATION

RED LABEL -- Extremely Flammable, Flash below 21 °F (-6 °C)

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

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 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

- Remove all sources of ignition. Ventilate the area.
- Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

DOL Storage Class IB

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Contents are **EXTREMELY FLAMMABLE**. 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.

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 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

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.

OTHER PRECAUTIONS

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

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	6.26 lb/gal	750 g/l
SPECIFIC GRAVITY	0.75	
BOILING POINT	136 - 395 °F	57 - 201 °C
MELTING POINT	Not Available	
VOLATILE VOLUME	82%	
EVAPORATION RATE	Slower than ether	
VAPOR DENSITY	Heavier than air	
SOLUBILITY IN WATER	N.A.	
VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)		
	4.72 lb/gal	565 g/l
	4.72 lb/gal	565 g/l
		Less Water and Federally Exempt Solvents Emitted VOC

SECTION 10 — STABILITY AND REACTIVITY**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 11 — TOXICOLOGICAL INFORMATION**CHRONIC HEALTH HAZARDS**

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

Prolonged and repeated exposure to Hexane may cause damage to nerve tissue of the arms and legs (peripheral neuropathy), resulting in muscular weakness and loss of sensation. This effect may be increased by the presence of Methyl Ethyl Ketone.

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

TOXICOLOGY DATA

CAS No.	Ingredient Name			
110-54-3	Hexane	LC50 RAT	4HR	Not Available
		LD50 RAT		28700 mg/kg
107-83-5	2-Methylpentane	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
96-14-0	3-Methylpentane	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
79-29-8	2,3-Dimethylbutane	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
75-83-2	2,2-Dimethylbutane	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
64742-88-7	Mineral Spirits	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
64742-52-5	Heavy Naphthenic Petroleum Oil	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
110-82-7	Cyclohexane	LC50 RAT	4HR	Not Available
		LD50 RAT		Not Available
628-63-7	Amyl Acetate	LC50 RAT	4HR	Not Available
		LD50 RAT		6500 mg/kg

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

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

SECTION 14 — TRANSPORT INFORMATION

US Ground (DOT)

1 Quart and Less may be Classed as CONSUMER COMMODITY, ORM-D

Larger Containers are Regulated as:

UN1993, FLAMMABLE LIQUIDS, N.O.S. (HEXANES, METHYLPENTANES), 3, PG II, (ERG#128)

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities

Hexane 5000 lb RQ

Bulk Containers may be Shipped as (check reportable quantities):

UN1993, FLAMMABLE LIQUIDS, N.O.S. (HEXANES, METHYLPENTANES), 3, PG II, (ERG#128)

Canada (TDG)

UN1993, FLAMMABLE LIQUIDS, N.O.S. (HEXANES, METHYLPENTANES), CLASS 3, PG II, (ERG#128)

IMO

UN1993, FLAMMABLE LIQUIDS, N.O.S. (HEXANES, METHYLPENTANES), CLASS 3, PG II, (-26 C c.c.), EmS F-E, S-E, ADR (D/E)

SECTION 15 — REGULATORY INFORMATION

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
110-54-3	Hexane	35	
110-82-7	Cyclohexane	2	

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

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

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

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.