MATERIAL SAFETY DATA SHEET

TF21010 SERIES DATE OF PREPARATION 01 00May 21, 2014

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER

TF21010 SERIES

PRODUCT NAME

TRI-FLOW® Industrial Lubricant, TF21010,TF22025,TF26020,TF29200

MANUFACTURER'S NAME

Tri-Flow Industrial Group Cleveland, OH 44115

Telephone Numbers and Websites

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Product Information	www.triflowlubricants.com	
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
30	64742-47-8	Aliphatic Solvent		
		ACGIH TLV	Not Available	0.00787 mm
		OSHA PEL	Not Available	
3	64741-97-5	Naphthenic Oil		
		ACGIH TLV	5 mg/m3 as Mist	
		OSHA PEL	Not Available	
49	64742-52-5	Heavy Naphthenic Petroleum Oil		
		ACGIH TLV	5 mg/m3 as Mist	
		OSHA PEL	5 mg/m3 as Mist	
4	64742-65-0	Heavy Paraffinic Oil		
		ACGIH TLV	5 mg/m3 as Mist	
		OSHA PEL	5 mg/m3 as Mist	
3	628-63-7	Amyl Acetate		
		ACGIH TLV	100 PPM	4 mm
		OSHA PEL	100 PPM	

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.

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.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

HIVIS Codes		
Health	2	
Flammability	2	
Reactivity	0	

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 POINT181 °F PMCC
181 °F PMCC
181 °F PMCC
181 °F PMCC
181 °F PMCC
182 SIFICATION
183 °F PMCC
184 SIFICATION
185 °F PMCC
185 SIFICATION
185 °F PMCC
185 SIFICATION
186 SIFICATION
1

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 IIIA

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

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.

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 7.33 lb/gal 878 g/l

SPECIFIC GRAVITY 0.88

BOILING POINT 288 - 460 °F

MELTING POINT Not Available

VOLATILE VOLUME 36% EVAPORATION RATE Slower than

ether

VAPOR DENSITY Heavier than air **SOLUBILITY IN WATER** Not Available

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

2.40 lb/gal 288 g/l Less Water and Federally Exempt Solvents

142 - 237 °C

2.40 lb/gal 288 g/l 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.

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

TOXICOLOGY DATA

CAS No.	Ingredient Name	_		_	_
64742-47-8	Aliphatic Solvent				
	•	LC50 RAT	4HR	Not Available	
		LD50 RAT		Not Available	
64741-97-5	Naphthenic Oil				
	•	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	
64742-65-0	Heavy Paraffinic Oil				
	•	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 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/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

Not Regulated for Transportation.

Bulk Containers may be Shipped as:

NA1993, COMBUSTIBLE LIQUID, N.O.S. (AMYL ACETATES), PG III, (ERG#128)

Canada (TDG)

Not Regulated for Transportation.

IMO

Not Regulated for Transportation.

IATA/ICAO

Not Regulated for Transportation.

SECTION 15 — REGULATORY INFORMATION

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No.	CHEMICAL/COMPOUND	% by WT	% Element
	Barium Compound	3	0.07

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.