CHEMICAL PRODUCT SAFETY DATA SHEET

Prepared in accordance with GB/T 16483 and GB/T 17519.

Product name: LPS® Tapmatic Dual Action Plus #1

Issue date: 08-17-2017
Revision date: 04-23-2021
Version #: 02
SDS No: -

SECTION 1 Chemical product and company identification

Chinese name of chemical	**NEEDED - CHINESE NAME OR TRADE NAME WITH CHINESE USER DESCRIPTOR.**	
English name of chemical	**LPS® Tapmatic Dual Action Plus #1**	
Part Number	40110, 40120, 40130	
Manufacturer/Supplier	ITW Pro Brands	
Address	4647 Hugh Howell Rd Tucker, GA 30084 United States	
Contact person	Not available.	
Telephone	1-800-241-8334 /	770-243-8800
e-mail	lpssds@itwprobrands.com	
Emergency telephone number	Chemtrec	1-800-424-9300

Recommended use and Limitations on use

Recommended use	A metal cutting fluid designed to simultaneously cool and lubricate to reduce friction and eliminate chip welding in tapping, drilling, reaming, and threading.
Issue date	08-17-2017
Revision date	04-23-2021
Supersedes date	08-17-2017

SECTION 2 Hazards identification

Emergency overview

Harmful if inhaled. May be harmful if swallowed. Causes damage to organs through prolonged or repeated exposure. May cause drowsiness and dizziness. May cause cancer. Causes eye irritation. Causes skin irritation. May cause irritation to the respiratory system. Suspected of causing genetic defects. Dangerous for the environment if discharged into watercourses.

GHS hazard categories

Physical hazards	Not classified.	
Health hazards	Acute toxicity, oral	Category 5
	Acute toxicity, inhalation	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2B
	Germ cell mutagenicity	Category 2
	Carcinogenicity	Category 1B
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 1 (central nervous system)
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 3

Label elements

Pictograms

Signal word

Danger

Hazard statement

H303	May be harmful if swallowed.
H315	Causes skin irritation.
H320	Causes eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H372	Causes damage to organs (central nervous system) through prolonged or repeated exposure.
H401	Toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe mist or vapor.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response

P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER/doctor if you feel unwell.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.

Storage

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Physical and chemical hazards The product is stable and non-reactive under normal conditions of use, storage and transport. No unusual fire or explosion hazards noted.

Health hazards Harmful if inhaled. May be harmful if swallowed. May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Causes skin irritation. Causes eye irritation.

Environmental hazards Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Supplemental information None.

SECTION 3 Composition/information on ingredients

Substance/mixture Mixture

Chemical name	Concentration (%)	CAS Number
1,1,2-三氯乙烯 1,1,2-trichloroethylene	80 - 90	79-01-6
烯烃 , polymd., chlorinated Alkenes, polymd., chlorinated	1 - 10	68410-99-1
油酸甲酯 Methyl Oleate	1 - 10	67762-26-9
乙酸苄酯 Benzyl Acetate	0.1 - 1	140-11-4
水杨酸甲酯 Methyl Salicylate	0.1 - 1	119-36-8

SECTION 4 First aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.

Most important symptoms and health effects May cause drowsiness and dizziness. Narcosis. Headache. Nausea, vomiting. Behavioral changes. Decrease in motor functions. Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. May cause respiratory irritation. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.

Personal protection for first-aid responders IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

Notes to physician Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

SECTION 5 Fire-fighting measures

Extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Extinguishing media to avoid Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards During fire, gases hazardous to health may be formed.

Special fire fighting procedures Move containers from fire area if you can do so without risk.

Protection of fire-fighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

General fire hazards No unusual fire or explosion hazards noted.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Wear appropriate personal protective equipment.

For emergency responders Keep unnecessary personnel away.

Environmental precautions Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Clean-up methods and materials and containment measures Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers.

Prevention of secondary hazards Not available.

SECTION 7 Handling and storage

Handling Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Storage Store locked up. Store in original tightly closed container. Store in a well-ventilated place.

SECTION 8 Exposure controls/personal protection

Exposure limits

China OELs. Occupational Exposure Limits for Hazardous Agents in the Workplace, Chemical Hazardous Agents (GBZ 2.1-2007)

Components	Type	Value
1,1,2-trichloroethylene (CAS 79-01-6)	PC-TWA	30 mg/m3

Biological limit values

China. Biological limit values for occupational exposure (WS/T 110 to 115, 239 to 243, and 264 to 267)

Components	Value	Determinant	Specimen	Sampling Time
1,1,2-trichloroethylene (CAS 79-01-6)	50 mg/l	Trichloroacetic acid	Urine	*
	0.3 mmol/l	Trichloroacetic acid	Urine	*

* - For sampling details, please see the source document.

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
1,1,2-trichloroethylene (CAS 79-01-6)	15 mg/l	Trichloroacetic acid	Urine	*
	0.5 mg/l	Trichloroethanol, without hydrolysis	Blood	*

* - For sampling details, please see the source document.

Monitoring methods Follow standard monitoring procedures.

Engineering measures Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

Personal protective equipment

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection Wear appropriate chemical resistant gloves.

Eye protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Hygiene measures Observe any medical surveillance requirements. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

SECTION 9 Physical and chemical properties

Appearance

Physical state Liquid.

Form Liquid.

Color Light brown.

Odor Sweet. Spice.

pH Not available.

Melting point/freezing point Not available.

Boiling point, initial boiling point, and boiling range 188.6 °F (87 °C)

Flash point None.

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure	7.7 kPa (58 mm Hg) [20°C]
Vapor density	4.5 [Air = 1]
Relative density	1.35
Density	Not available.
Solubility(ies)	
Solubility (water)	0.1 % w/w
Partition coefficient (n-octanol/water)	2.4
Auto-ignition temperature	788 °F (420 °C)
Decomposition temperature	Not available.
Evaporation rate	0.3 (ether (anhydrous) = 1)
Flammability (solid, gas)	Not applicable.
Other data	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Viscosity	< 3 mm²/s
Viscosity temperature	77 °F (25 °C)

SECTION 10 Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Aluminum. Zinc. Magnesium. Metals.
Hazardous decomposition products	Carbon oxides.

SECTION 11 Toxicological information

Acute toxicity Harmful if inhaled. May be harmful if swallowed.

Components	Species	Test Results
1,1,2-trichloroethylene (CAS 79-01-6)		
Acute		
Oral		
LD50	Rat	4900 mg/kg
Benzyl Acetate (CAS 140-11-4)		
Acute		
Dermal		
LD50	Rabbit	> 5 g/kg
Oral		
LD50	Rat	> 2000 mg/kg
Methyl Oleate (CAS 67762-26-9)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg
Methyl Salicylate (CAS 119-36-8)		
Acute		
Oral		
LD50	Rat	0.89 g/kg

Routes of exposure Inhalation. Ingestion. Skin contact. Eye contact.

Symptoms May cause drowsiness and dizziness. Narcosis. Headache. Nausea, vomiting. Behavioral changes. Decrease in motor functions. Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. May cause respiratory irritation. Skin irritation. May cause redness and pain.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitizer This product is not expected to cause skin sensitization.

Germ cell mutagenicity Suspected of causing genetic defects.

Carcinogenicity May cause cancer.

China OELs for hazardous agents in the workplace: Carcinogen Category

TRICHLOROETHYLENE (CAS 79-01-6)	Carcinogenic to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

1,1,2-trichloroethylene (CAS 79-01-6)	1 Carcinogenic to humans.
Benzyl Acetate (CAS 140-11-4)	3 Not classifiable as to carcinogenicity to humans.

Toxic to reproduction This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity following single exposure May cause respiratory irritation. May cause drowsiness and dizziness.

Specific target organ toxicity following repeated exposure Causes damage to organs (central nervous system) through prolonged or repeated exposure.

Aspiration hazard Not an aspiration hazard.

Chronic effects Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful.

SECTION 12 Ecological information

Ecotoxicological data

Components		Species	Test Results
1,1,2-trichloroethylene (CAS 79-01-6)			
Aquatic			
Acute			
Fish	LC50	Flagfish (Jordanella floridae)	3.1 mg/l, 96 hours
Benzyl Acetate (CAS 140-11-4)			
Aquatic			
Acute			
Fish	LC50	Medaka, high-eyes (Oryzias latipes)	3.48 - 4.6 mg/l, 96 hours

Ecotoxicity Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Persistence and degradability

Bioaccumulation

Bioaccumulative potential

Octanol/water partition coefficient log Kow

LPS® Tapmatic Dual Action Plus #1	2.4
1,1,2-trichloroethylene	2.61
Benzyl Acetate	1.96
Methyl Salicylate	2.55

Mobility in soil No data available for this product.

Other hazardous effects None known.

SECTION 13 Disposal considerations

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Local disposal regulations Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14 Transport information

CNDG

UN number	UN1710
UN proper shipping name	Trichloroethylene mixture (1,1,2-trichloroethylene)
Transport hazard class(es)	
Class	6.1
Subsidiary risk	-
Packing group	III
Environmentally hazardous	No
Special precautions for user	Not available.

IATA

UN number	UN1710
UN proper shipping name	Trichloroethylene (1,1,2-trichloroethylene)
Transport hazard class(es)	
Class	6.1
Subsidiary risk	-
Packing group	III
Environmental hazards	No.
Special precautions for user	Not available.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.

IMDG

UN number	UN1710
UN proper shipping name	Trichloroethylene mixture (1,1,2-trichloroethylene)
Transport hazard class(es)	
Class	6.1
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-A
Special precautions for user	Not available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

CNDG; IATA; IMDG

SECTION 15 Regulatory information

Law of the People's Republic of China on Prevention and Control of Occupational Diseases

Classification of occupational disease hazards

BENZYL ACETATE (CAS 140-11-4)
TRICHLOROETHYLENE (CAS 79-01-6)

Regulations on the Control over Safety of Dangerous Chemicals

Catalog of Hazardous Chemicals

TRICHLOROETHYLENE (CAS 79-01-6)

Provision on the Environmental Administration of New Chemical Substances

China Inventory of Existing Chemical Substances

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Other regulations

This safety data sheet conforms to the following laws, regulations and standards:
Regulations on the Control over Safety of Dangerous Chemicals
Regulations on Labor Protection in Workplaces Where Toxic Products Are Used
Measures for the Safe Use of Chemicals in Workplaces
Safety Data Sheet for Chemical Products - Content and Order of Sections (GB/T 16483-2008)
General Rules for Preparation of Precautionary Labels for Chemicals (GB15258-2009)
Packing Symbol of Dangerous Goods(GB190-2009)
Packing - Pictorial Marking for Handling of Goods (GB/T191-2009)

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Montreal Protocol

Not applicable.

Kyoto protocol

Not applicable.

Basel Convention

Not applicable.

SECTION 16 Other information

References

EPA: AQUIRE database
GB6944-2012: Classification and Code of Dangerous Goods.
GB12268-2012: List of Dangerous Goods.
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents

Disclaimer

ITW Pro Brands cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

Revision information

Physical & Chemical Properties: Multiple Properties