

Liqui Moly GmbH

Chemwatch: 74-2070

Version No: 3.1.1.1 Safety Data Sheet according to WHMIS 2015 requirements

SECTION 1 IDENTIFICATION

Product Identifier

Product name	20224 PRO-LINE AUTOMATIC TRANSMISSION CLEANER 1L	
Synonyms	Not Available	
Other means of identification	Not Available	
Recommended use of the chemical and restrictions on use		
Relevant identified uses	Use according to manufacturer's directions.	

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Registered company name	Liqui Moly GmbH
Address	Jerg-Wieland-Strasse 4 Ulm D-89081 Germany
Telephone	+49 731 1420 0
Fax	+49 731 1420 82
Website	http://www.liqui-moly.com/
Email	Not Available

Emergency phone number

Association / Organisation	INFOTRAC	
Emergency telephone numbers	+1800 535 5053 (US, Canada & Mexico)	
Other emergency telephone numbers	+1 352 323 3500 (International)	

SECTION 2 HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

NFPA 704 diamond



Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

CANADIAN WHMIS SYMBOLS

Classification	Eye Irritation Category 2B
Label elements	
Hazard pictogram(s)	Not Applicable
SIGNAL WORD	WARNING
Hazard statement(s)	
H320	Causes eye irritation.

Physical and Health hazard(s) not otherwise classified

Not Applicable

Precautionary statement(s) Prevention

P264

Wash all exposed external body areas thoroughly after handling.



Issue Date: 01/11/2019 Print Date: 01/04/2020 S.GHS.CAN.EN

Precautionary statement(s) Response

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
64742-55-8.	1-10	paraffinic distillate, light, hydrotreated (severe)

SECTION 4 FIRST-AID MEASURES

Description of first aid measures

Eye Contact	 If this product comes in contact with eyes: Wash out immediately with water. If irritation continues, seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs: ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation.
Inhalation	 If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	 Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIRE-FIGHTING MEASURES

Extinguishing media

- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.		
Special protective equipment and precautions for fire-fighters			
Fire Fighting	 Use water delivered as a fine spray to control fire and cool adjacent area. Do not approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. 		
Fire/Explosion Hazard	 Non combustible. Not considered a significant fire risk, however containers may burn. 		

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	 Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite.
Major Spills	 Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Control personal contact with the substance, by using protective equipment. Prevent spillage from entering drains, severe or water courses.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling	
Safe handling	 Electrostatic discharge may be generated during pumping - this may result in fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<=1 m/sec until fill pipe submerged to twice its diameter, then <= 7 m/sec). Avoid splash filling. Limit all unnecessary personal contact. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with incompatible materials.
Other information	 Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers.
Conditions for safe storage, in	cluding any incompatibilities
Suitable container	 Polyethylene or polypropylene container. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

None known

Avoid contamination of water, foodstuffs, feed or seed.

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

Storage incompatibility

INGREDIENT DATA						
Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances	paraffinic distillate, light, hydrotreated (severe)	Oil mist, mineral	5 mg/m3	10 mg/m3	Not Available	Not Available
Canada - Nova Scotia Occupational Exposure Limits	paraffinic distillate, light, hydrotreated (severe)	Oil mist - mineral	5 mg/m3	10 mg/m3	Not Available	TLV Basis: lung. As sampled by method that does not collect vapor.
Canada - Alberta Occupational Exposure Limits	paraffinic distillate, light, hydrotreated (severe)	Oil mist, mineral	5 mg/m3	10 mg/m3	Not Available	Not Available
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	paraffinic distillate, light, hydrotreated (severe)	Oil mist, mineral	5 mg/m3	10 mg/m3	Not Available	Not Available
Canada - Manitoba Occupational Exposure Limits	paraffinic distillate, light, hydrotreated (severe)	Not Available	5 mg/m3	Not Available	Not Available	TLV® Basis: URT irr
Canada - Quebec Permissible Exposure Values for Airborne Contaminants (English)	paraffinic distillate, light, hydrotreated (severe)	Mineral oil (mist)	5 mg/m3	10 mg/m3	Not Available	Not Available
Canada - Northwest Territories Occupational Exposure Limits (English)	paraffinic distillate, light, hydrotreated (severe)	Oil mist, mineral	5 mg/m3	10 mg/m3	Not Available	Not Available
Canada - British Columbia Occupational Exposure Limits	paraffinic distillate, light, hydrotreated (severe)	Oil mist - mineral, severely refined	1 mg/m3	Not Available	Not Available	Not Available
Canada - Prince Edward Island Occupational Exposure Limits	paraffinic distillate, light, hydrotreated (severe)	Mineral oil, excluding metal working fluids - Pure, highly and severely refined	5 mg/m3	Not Available	Not Available	TLV® Basis: URT irr

EMERGENCY LIMITS

Ingredient	Material name	Material name			TEEL-3
paraffinic distillate, light, hydrotreated (severe)		Mineral oil, heavy or light; (paraffin oil; Deobase, deodorized; heavy paraffinic; heavy naphthenic); distillates; includes 64741-53-3, 64741-88-4, 8042-47-5, 8012-95-1; 64742-54-7		1,500 mg/m3	8,900 mg/m3
Ingredient	Original IDLH	Revised IDLH			
paraffinic distillate, light, hydrotreated (severe)	2,500 mg/m3	Not Available			

Exposure controls

	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.
Appropriate engineering	The basic types of engineering controls are:
controls	Process controls which involve changing the way a job activity or process is done to reduce the risk.
	Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically
	"adds" and "removes" air in the work environment.

Personal protection	
Eye and face protection	 Safety glasses with side shields Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience.
Skin protection	See Hand protection below
Hands/feet protection	Wear general protective gloves, eg. light weight rubber gloves. The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and.has to be observed when making a final choice. Personal hygiene is a key element of effective hand care.
Body protection	See Other protection below
Other protection	No special equipment needed when handling small quantities. OTHERWISE: • Overalls. • Barrier cream. • Eyewash unit.

Respiratory protection

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	A-AUS P2	-	A-PAPR-AUS / Class 1 P2
up to 50 x ES	-	A-AUS / Class 1 P2	-
up to 100 x ES	-	A-2 P2	A-PAPR-2 P2 ^

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance Liquid with characteristic odour; not miscible with water.

	1		1
Physical state	Liquid	Relative density (Water = 1)	0.885
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	58
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Product is considered stable and hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7

Incompatible materials See section 7 Hazardous decomposition See section 5 products SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled		ects or irritation of the respiratory tract (as classified by EC Directives using animal tat exposure be kept to a minimum and that suitable control measures be used in an		
Ingestion	The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.			
Skin Contact	The liquid may be able to be mixed with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives.			
Eye		Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).		
Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.			
20224 PRO-LINE AUTOMATIC	TOXICITY	IRRITATION		
FRANSMISSION CLEANER 1L	Not Available	Not Available		
	тохісіту	IRRITATION		
paraffinic distillate, light,	Dermal (rabbit) LD50: >2000 mg/kg ^[2]	Eye: no adverse effect observed (not irritating) ^[1]		
hydrotreated (severe)	Inhalation (rat) LC50: 3.9 mg/l/4H ^[2]	Skin: no adverse effect observed (not irritating) ^[1]		
	Oral (rat) LD50: >5000 mg/kg ^[2]			
Legend:	 Value obtained from Europe ECHA Registered Substa specified data extracted from RTECS - Register of Toxic 	nces - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise Effect of chemical Substances		

	-		
PARAFFINIC DISTILLATE, LIGHT, HYDROTREATED (SEVERE)	No significant acute toxicological data identified in litera The materials included in the Lubricating Base Oils cate The potential toxicity of a specific distillate base oil is in The adverse effects of these materials are ass The levels of the undesirable components are Distillate base oils receiving the same degree of The potential toxicity of residual base oils is in The reproductive and developmental toxicity of Unrefined & mildly refined distillate base oils contain th molecules and have shown the highest potential cancer are produced from unrefined and mildly refined oils by r refined base oils, the highly and severely refined distilla low mammalian toxicity. Testing of residual oils for muta belief that these materials lack biologically active comp Toxicity testing has consistently shown that lubricating the For highly and severely refined distillate base oils. In animal studies, the acute, oral, semilethal dose is >5 semilethal concentration for inhalation is 2.18 to >4 mg/l skin and eye irritation. Testing for sensitisation has been The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limite * Q8 MSDS	egory are related from both process ar versely related to the severity or exter ociated with undesirable components, inversely related to the degree of proc or extent of processing will have simila dependent of the degree of processing f the distillate base oils is inversely rela- te highest levels of undesirable compor- r-causing and mutation-causing activit removing or transforming undesirable to the base oils have a smaller range of h attion-causing and cancer-causing pote onents or the components are largely base oils have low acute toxicities. g/kg body weight and the semilethal d L. The materials have varied from "non n negative.	and of processing the oil has undergone, since: and sessing; ar toxicities; g the oil receives. ated to the degree of processing. onents, have the largest variation of hydrocarbon ies. Highly and severely refined distillate base oils components. In comparison to unrefined and mildly ydrocarbon molecules and have demonstrated very initial has shown negative results, supporting the non-bioavailable due to their molecular size.
Acute Toxicity	×	Carcinogenicity	×
Skin Irritation/Corrosion	×	Reproductivity	×
Serious Eye Damage/Irritation	✓	STOT - Single Exposure	×
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×
		Legend: 🗙 – Data either not	t available or does not fill the criteria for classification

Data available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
20224 PRO-LINE AUTOMATIC TRANSMISSION CLEANER 1L	Not Available	Not Available	Not Available	Not Available	Not Available
paraffinic distillate, light,	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
hydrotreated (severe)	LC50	96	Fish	>100mg/L	2

	EC50	48	Crustacea	>10-mg/L	2
	NOEC	504	Crustacea	>1mg/L	1
Legend:	Extracted from	1. IUCLID Toxicity Data 2.	Europe ECHA Registered Substances - Ecotoxicological Inform	ation - Aquatic Toxicity 3.	. EPIWIN Suite
	V3.12 (QSAR) -	- Aquatic Toxicity Data (Es	timated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5.	ECETOC Aquatic Hazard	d Assessment
	Data 6. NITE (J	lapan) - Bioconcentration [Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data		

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
	No Data available for all ingredients	No Data available for all ingredients
Bioaccumulative potential		
Ingredient	Bioaccumulation	

Mobility in soil

wobinty in son	
Ingredient	Mobility
	No Data available for all ingredients

SECTION 13 DISPOSAL CONSIDERATIONS

Product / Packaging disposal	 DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal. In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Where in doubt contact the responsible authority. Recycle wherever possible. Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment of disposal facility can be identified. Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or incineration in a licensed apparatus (after admixture with suitable combustible material). Decontaminate empty containers.
------------------------------	--

SECTION 14 TRANSPORT INFORMATION

Labels Required				
Marine Pollutant	NO			

Land transport (TDG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

No Data available for all ingredients

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

PARAFFINIC DISTILLATE, LIGHT, HYDROTREATED (SEVERE) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Not Applicable

National Inventory Status

National Inventory	Status
Australia - AICS	Yes
Canada - DSL	Yes
Canada - NDSL	No (paraffinic distillate, light, hydrotreated (severe))
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	Yes
Korea - KECI	Yes
New Zealand - NZIoC	Yes

Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	No (paraffinic distillate, light, hydrotreated (severe))
Vietnam - NCI	Yes
Russia - ARIPS	Yes
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Revision Date	01/11/2019
Initial Date	20/01/2017

SDS Version Summary

Version	Issue Date	Sections Updated
3.1.1.1	01/11/2019	One-off system update. NOTE: This may or may not change the GHS classification

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average PC-STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit_\circ IDLH: Immediately Dangerous to Life or Health Concentrations OSF: Odour Safety Factor NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index This document is copyright.

Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH.

TEL (+61 3) 9572 4700.