

Material Safety Data Sheet



Revision Number: 001.1

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name: MOLYDAG210
Product type: Lubricant
IDH number: 1224744
Region: United States
Company address: Henkel Corporation
32100 Stephenson Highway
Madison Heights, MI 48071
Contact information:
Telephone: 248.583.9300
For Chemical Emergency: Call CHEMTREC at 800.424.9300
Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state:	Liquid	HEALTH:	2
Color:	Green	FLAMMABILITY:	3
Odor:	Alcoholic	PHYSICAL HAZARD:	0
		Personal Protection:	See MSDS Section 8

DANGER: FLAMMABLE!
CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
HARMFUL IF SWALLOWED, ABSORBED THROUGH SKIN OR INHALED.
MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS.

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects

Inhalation: This product is irritating to the respiratory system. Excessive inhalation of this material causes headache, dizziness, nausea and incoordination.

Skin contact: Prolonged or repeated skin contact may result in redness, burning sensation or dermatitis. A component in this product may be absorbed through the skin in harmful amounts.

Eye contact: This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.

Ingestion: Small amounts of this product, if aspirated into the lungs, may cause mild to severe pulmonary injury. This product is harmful or fatal if swallowed. Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause dizziness, incoordination, headache, nausea, and vomiting.

Existing conditions aggravated by exposure: Eye, skin, and respiratory disorders.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
2-Propanol	67-63-0	60 - 100
1,2,4-Trimethylbenzene	95-63-6	5 - 10
Hydrocarbon C8-10 arom. <0.1% benzene	64742-95-6	5 - 10
Urea	57-13-6	5 - 10
Ethylcellulose	9004-57-3	5 - 10
Mesitylene	108-67-8	1 - 5
Xylenes	1330-20-7	0.1 - 1

4. FIRST AID MEASURES

Inhalation:	If inhaled, immediately remove the affected person to fresh air. If symptoms develop and persist, get medical attention.
Skin contact:	Immediately wash skin thoroughly with soap and water. If symptoms develop and persist, get medical attention.
Eye contact:	Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Seek medical attention at once.
Ingestion:	Get immediate medical attention. Do not induce vomiting. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions.
Notes to physician:	Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

Flash point:	11.6 °C (52.88 °F) Tagliabue closed cup
Autoignition temperature:	Not applicable
Flammable/Explosive limits - lower:	2 %
Flammable/Explosive limits - upper:	12 %
Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Wear full protective clothing. Wear self-contained breathing apparatus.
Unusual fire or explosion hazards:	DANGEROUS when exposed to heat or flame. This material can be ignited by flame or spark under all normal atmospheric conditions. Vapors are heavier than air and may travel to ignition sources and flash back.
Hazardous combustion products:	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.	
Environmental precautions:	Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up. Remove all sources of ignition. Do not allow product to enter sewer or waterways.
Clean-up methods:	Absorb spill with inert material. Shovel material into appropriate container for disposal. Dispose of according to Federal, State and local governmental regulations.

7. HANDLING AND STORAGE

Handling:	Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Avoid breathing vapors or mists of this product. Use only with adequate ventilation. Do not take internally. For industrial use only.
Storage:	For safe storage, store between 5.0 °C (41°F) and 30.0 °C (86°F) Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Outside temperature limits, the properties of the product will change. Store in original container until ready to use. Keep out of reach of children and away from food and drink. Protect from direct sunlight.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
2-Propanol	200 ppm TWA 400 ppm STEL	400 ppm (980 mg/m3) TWA	None	None
1,2,4-Trimethylbenzene	25 ppm TWA	None	None	None
Hydrocarbon C8-10 arom. <0.1% benzene	None	None	None	50 ppm
Urea	None	None	10 mg/m3 TWA Total particulate.	None
Ethylcellulose	None	None	None	None
Mesitylene	25 ppm TWA	None	None	None
Xylenes	100 ppm TWA 150 ppm STEL	100 ppm (435 mg/m3) TWA	None	None

Engineering controls:	Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.
Respiratory protection:	If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.
Eye/face protection:	Wear safety glasses; chemical goggles (if splashing is possible).
Skin protection:	Wear impervious gloves for prolonged contact. Gloves should be tested to determine suitability for prolonged contact. Use of impervious apron and boots are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Green
Odor:	Alcoholic
Odor threshold:	Not available
pH:	Not applicable
Vapor pressure:	33 mm hg
Boiling point/range:	82 °C (179.6 °F)
Melting point/ range:	-88.8 °C (-127.8 °F)
Specific gravity:	0.91
Vapor density:	2.07
Flash point:	11.6 °C (52.88 °F) Tagliabue closed cup
Flammable/Explosive limits - lower:	2 %
Flammable/Explosive limits - upper:	12 %
Autoignition temperature:	Not applicable
Evaporation rate:	Not applicable
Solubility in water:	Soluble
Partition coefficient (n-octanol/water):	Not available
VOC content:	710 g/l

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Thermal decomposition can lead to release of irritating gases and vapors. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Incompatible materials:	Reacts with air to form peroxides.
Conditions to avoid:	Avoid strong oxidizing agents. Avoid excessive heat and ignition sources.

11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
2-Propanol	No	No	No
1,2,4-Trimethylbenzene	No	No	No
Hydrocarbon C8-10 arom. <0.1% benzene	No	No	No
Urea	No	No	No
Ethylcellulose	No	No	No
Mesitylene	No	No	No
Xylenes	No	No	No

Hazardous components	Health Effects/Target Organs
2-Propanol	Allergen, Blood, Brain, Central nervous system, Irritant, Kidney, Liver, Spleen
1,2,4-Trimethylbenzene	Central nervous system, Irritant, Respiratory
Hydrocarbon C8-10 arom. <0.1% benzene	Irritant
Urea	Central nervous system, Irritant, Metabolic
Ethylcellulose	Irritant
Mesitylene	Central nervous system, Irritant, Respiratory
Xylenes	Cardiac, Central nervous system, Irritant, Kidney, Liver

12. ECOLOGICAL INFORMATION

Ecological information: Not available

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

Hazardous waste number: If discarded, this product is considered a RCRA ignitable waste, D001.

14. TRANSPORT INFORMATION

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Isopropyl alcohol solution
Hazard class or division: 3
Identification number: UN 1219
Packing group: II
DOT Reportable quantity: Xylene (mixed)

International Air Transportation (ICAO/IATA)

Proper shipping name: Isopropyl alcohol solution
Hazard class or division: 3
Identification number: UN 1219
Packing group: II

Water Transportation (IMO/IMDG)

Proper shipping name: ISOPROPYL ALCOHOL solution
Hazard class or division: 3
Identification number: UN 1219
Packing group: II

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12(b) Export Notification: None above reporting de minimus
CERCLA/SARA Section 302 EHS: None above reporting de minimus
CERCLA/SARA Section 311/312: Immediate Health, Fire
CERCLA/SARA 313: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). 1,2,4-Trimethylbenzene (CAS# 95-63-6).
CERCLA Reportable quantity: 2-Propanol (CAS# 67-63-0) 100 lbs. (45.4 kg)
Xylenes (CAS# 1330-20-7) 100 lbs. (45.4 kg)
California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Canada Regulatory Information

CEPA DSL/NDL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
WHMIS hazard class: B.2, D.2.B

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

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