


1. PRODUCT & COMPANY IDENTIFICATION

1.1	Product Name:	HORNADY® ONE SHOT® GUN CLEANER & DRY LUBE (AEROSOL)
1.2	Chemical Name:	See Section 3 Composition & Ingredient Information
1.3	Item Number	#9990. #99901
1.4	Trade Names:	Hornady® One Shot® Gun Cleaner & Dry Lube with DynaGlide® Plus (Aerosol)
1.5	Product Use:	Dry Film Lubricant and Metal Cleaner/Conditioner
1.6	Distributor's Name:	Hornady Manufacturing Company
1.7	Distributor's Address:	P.O. Box 1848, Grand Island, NE 68802 USA
1.8	Emergency Phone:	CHEMTREC +1 (800) 424-9300 / +1 (703) 527-3887 (CCN10740)
1.9	Business Phone / Fax:	+1 (308) 382-1390 / +1 (308) 382-5761

2. HAZARDS IDENTIFICATION

2.1	Hazard Identification:	This product is classified as a HAZARDOUS SUBSTANCE and as DANGEROUS GOODS. DANGER! EXTREMELY FLAMMABLE AEROSOL. PRESSURIZED CONTAINER MAY BURST IF HEATED. HIGHLY FLAMMABLE LIQUID AND VAPOR. MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. CAUSES SKIN IRRITATION. CAUSES SERIOUS EYE IRRITATION. MAY CAUSE DROWSINESS OR DIZZINESS. TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS. Classification: Aerosol 1, Flam. Liq. 2, Asp. Tox. 1, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, Chronic Aq. Tox. 2	
2.2	Label Elements:	<p><u>Hazard Statements (H):</u> H222 – Extremely flammable aerosol. H229 – Pressurized container may burst if heated. H225 – Highly flammable liquid and vapor. H304 – May be fatal if swallowed and enters airways. H315 – Causes skin irritation. H319 – Causes serious eye irritation. H336 – May cause drowsiness or dizziness. H411 – Toxic to aquatic life with long lasting effects.</p> <p><u>Precautionary Statements (P):</u> P210 – Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 – Keep container tightly closed. P240 – Ground and bond container and receiving equipment. P241 – Use explosion-proof electrical/ ventilating/ lighting equipment. P242 – Use non-sparking tools. P243 - Take action to prevent static discharges. P251 – Do not pierce or burn, even after use. P261 – Avoid breathing mist/vapor/spray. P264 – Wash thoroughly after handling. 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. P301+P310 – IF SWALLOWED: Immediately call a POISON CENTER/doctor. P331 – Do not induce vomiting. P303+P361+P353 – IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P321 – Specific treatment see section 4 of this SDS. P332+P313 – If skin irritation occurs: Get medical advice/attention. P304 – IF INHALED: Remove person to fresh and keep 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. P337+313 – If eye irritation persists: Get medical advice or attention. P362+P364 – Take off contaminated clothing and wash it before reuse. P370+P378 – In case of fire: use Alcohol Resistant-Foam, CO₂, or Water Jet to extinguish. P391 – Collect spillage. P403+P233+P235 – Store in a well-ventilated place. Keep container tightly closed. Keep cool. P405 – Store locked up. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. P501 – Dispose of contents/container to licenses treatment, storage and disposal facility (TSDF).</p>	
2.3	Other Warnings:	Read label before use. In the event of an exposure or medical inquiry involving this product, please contact a physician or local poison control center, who may seek advice from the U.S. manufacturer, and show them this SDS. KEEP OUT OF REACH OF CHILDREN.	

3. COMPOSITION & INGREDIENT INFORMATION


CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	EXPOSURE LIMITS IN AIR (mg/m ³)									OTHER
					ACGIH		NOHSC			OSHA				
					ppm		ppm			ppm				
					TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH		
HEXANE	110-54-3	MN9275000	203-777-6	≤ 65	50	1000	20	72	NF	500	NA	1100		
													Flam. Liq. 2; Asp. Tox.1; Skin Irrit. 2; STOT SE3; Repr. 2; STOT RE2; Chronic Aq. Tox. 2; H225, H304, H315, H336, H361, H373, H411	
PROPRIETARY MIXTURE	NA	NA	NA	≤ 20	NA	NA	NF	NF	NF	NA	NA	NA		
PETROLEUM GASES, LIQUEFIED, SWEETENED*	68476-86-8		270-705-8	≤ 15	NA	NA	NF	NF	NF	NA	NA	NA		
													Flam. Gas 1; Liq. Gas; H220, H280	

* < 0.1% w/w 1,3 butadiene

4. FIRST AID MEASURES

4.1	First Aid:	<p>Ingestion: If ingested, do not induce vomiting. Never give water or milk to an unconscious person. Contact the nearest Poison Control Center or local emergency number. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed.</p> <p>Eyes: Splashes are not likely; however, if product gets in the eyes, flush with copious amounts of lukewarm water for at least 15 minutes. If irritation persists, contact a physician immediately.</p> <p>Skin: If irritation occurs and product is on the skin, rinse thoroughly with lukewarm water, followed by a thorough washing of the affected area with soap and water. If irritation, redness or swelling persists, contact a physician immediately.</p> <p>Inhalation: Remove victim to fresh air at once. If breathing is difficult, provide supplemental oxygen. If breathing has stopped, provide artificial respiration. Seek immediate medical attention. Provide supportive treatment, keeping victim warm and quiet.</p>													
4.2	Effects of Exposure:	<p>Ingestion: If product is swallowed, may cause nausea, temporary gastrointestinal irritation. Vomiting and/or diarrhea.</p> <p>Eyes: Moderately irritating to the eyes. Symptoms of overexposure may include redness, itching, irritation and watering.</p> <p>Skin: May be irritating to skin. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) in some sensitive individuals.</p> <p>Inhalation: None expected.</p>													
4.3	Symptoms of Overexposure:	<p>Eyes: Redness, burning, irritation, and swelling around eyes.</p> <p>Skin: Redness, burning, itching, rash, and scaling of the skin (dermatitis).</p> <p>Ingestion: Nausea, vomiting, severe abdominal pain.</p> <p>Inhalation: Coughing, wheezing, swelling of throat, irritation in mucous membranes, difficulty breathing.</p>													
4.4	Acute Health Effects:	Moderate irritation to eyes and skin near affected areas. Additionally, high concentrations of vapors can cause drowsiness, dizziness, headaches and nausea.													
4.5	Chronic Health Effects:	The material may accentuate any pre-existing dermatitis condition.													
4.6	Target Organs:	Eyes, Skin, Respiratory System													
4.7	Medical Conditions Aggravated by Exposure:	Persons with pre-existing skin disorders, eye problems, or impaired kidney function may be more susceptible to the effects of the substance.	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="background-color: #0000FF; color: white;">HEALTH</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="background-color: #FF0000; color: white;">FLAMMABILITY</td> <td style="text-align: center;">4</td> </tr> <tr> <td style="background-color: #FFA500; color: white;">PHYSICAL HAZARDS</td> <td style="text-align: center;">0</td> </tr> <tr> <td colspan="2" style="background-color: #000000; color: white;">PROTECTIVE EQUIPMENT</td> </tr> <tr> <td style="background-color: #000000; color: white;">EYES</td> <td style="background-color: #000000; color: white;">SKIN</td> </tr> <tr> <td style="background-color: #000000; color: white;">LUNGS</td> <td style="background-color: #000000; color: white;">G</td> </tr> </table>	HEALTH	2	FLAMMABILITY	4	PHYSICAL HAZARDS	0	PROTECTIVE EQUIPMENT		EYES	SKIN	LUNGS	G
HEALTH	2														
FLAMMABILITY	4														
PHYSICAL HAZARDS	0														
PROTECTIVE EQUIPMENT															
EYES	SKIN														
LUNGS	G														

5. FIREFIGHTING MEASURES

5.1	Fire & Explosion Hazards:	<p>DANGER! EXTREMELY FLAMMABLE AEROSOL. HIGHLY FLAMMABLE LIQUID AND VAPOR. Level 3 Aerosol (NFPA 30B). Emits toxic fumes under fire conditions. Burning may produce hazardous products of combustion including fumes, smoke carbon dioxide and/or carbon monoxide. Aerosols may burst at temperatures above 120 °F. Cool uninvolved containers to prevent possible bursting. Aerosols may be projectile hazards when bursting. If aerosols are bursting, stay clear until bursting is complete. Do not use in presence of open flames or sparks. Do not place in hot water or near radiators, stoves or other sources of heat. Exposure to heat or sunlight may cause cans to burst and propel contents. Water from fog nozzles may be helpful in cooling un-ruptured containers to prevent build-up.</p>	
5.2	Extinguishing Methods:	Water Fog, Foam, Dry Chemical, CO ₂	
5.3	Firefighting Procedures:	As in any fire, wear MSHA/NIOSH approved self-contained breathing apparatus (pressure-demand) and full protective gear. Keep containers cool until well after the fire is out. Use water spray to cool fire-exposed surfaces and to protect personal. Fight fire upwind. Avoid spraying water directly into storage containers because of danger of boil over. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply, or any natural waterway. Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies.	



6. ACCIDENTAL RELEASE MEASURES

6.1	Spills:	<p>Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective Equipment.</p> <p>For <u>small spills</u> (e.g., < 1 gallon (3.8 L)) wear appropriate personal protective equipment (e.g., goggles, gloves). Maximize ventilation (open doors and windows) and secure all sources of ignition. Remove spilled material with absorbent material and place into appropriate closed container(s) for disposal. Dispose of properly in accordance with local, state and federal regulations. Wash all affected areas and outside of container with plenty of warm water and soap. Remove any contaminated clothing and wash thoroughly before reuse.</p> <p>For <u>large spills</u> (e.g., ≥ 1 gallon (3.8 L)), deny entry to all unprotected individuals. Dike and contain spill with inert material (e.g., sand or earth). Use ONLY non-sparking tools for recovery and cleanup. Transfer liquid to containers for recovery or disposal and solid diking material to separate containers for proper disposal. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water.</p>
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7. HANDLING & STORAGE INFORMATION

7.1	Work & Hygiene Practices:	Do not eat, drink or smoke when handling this product. Handle as to avoid puncturing container(s). When used as intended, no additional protective equipment is necessary. Use chemical goggles if eye contact is possible. Wash unintentional residues with soap and warm water. Clean all spill promptly.
7.2	Storage & Handling:	Use and store in a cool, dry, well-ventilated location (e.g., local exhaust ventilation, fans) away from heat and direct sunlight. Avoid temperatures above 120 °F. Keep away from incompatible substances. Protect containers from physical damage. Do not store in unmarked containers or storage devices. Recommended maximum shelf life: 36 months.
7.3	Special Precautions:	Empty containers may contain product residue. Do not pressurize, cut, heat or weld empty containers. Keep container tightly closed when not in use. Do not store at temperatures above 120 °F (49 °C). Store away from strong oxidizers.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1	Exposure Limits: ppm (mg/m ³)	CHEMICAL NAME(S)	ACGIH		NOHSC			OSHA			OTHER
			TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH	
		HEXANE	50	1000	20	72	NF	500	NA	1100	
8.2	Ventilation & Engineering Controls:	General mechanical (e.g., fans) or natural ventilation is sufficient when this product is in use. Use local or general exhaust ventilation to effectively remove and prevent buildup of vapors or mist generated from the handling of this product. Ensure that an eyewash station, sink or washbasin is available in case of exposure to eyes.									
8.3	Respiratory Protection:	No special respiratory protection is required under typical circumstances of use or handling. If necessary, use only respiratory protection authorized per U.S. OSHA's requirement in 29 CFR §1910.134, or applicable U.S. state regulations, or the appropriate standards of Canada, its provinces, E.C. member states, or Australia.									
8.4	Eye Protection:	Safety glasses equipped with side shields should be adequate protection under most conditions of use. Wear goggles and/or face shield if splashing or spraying is anticipated. Wear goggles and face shield if material is heated above 125 °F (51 °C). Have suitable eye wash water available.									
8.5	Hand Protection:	Use gloves constructed of chemical resistant materials such as neoprene or heavy nitrile rubber if frequent or prolonged contact is expected. Use heat-protective gloves when handling product at elevated temperatures.									
8.6	Body Protection:	Avoid prolonged and/or repeated skin contact. Use clean and impervious protective clothing (e.g., neoprene or Tyvek®) if splashing or spraying conditions are present. Protective clothing should include long-sleeves, apron, boots and additional facial protection. Remove oil contaminated clothing. Launder oil contaminated clothing before reusing. Contaminated leather goods should be removed promptly and discarded.									

9. PHYSICAL & CHEMICAL PROPERTIES

9.1	Appearance:	Aerosol. Pale yellow liquid.
9.2	Odor:	Characteristic odor
9.3	Odor Threshold:	NA
9.4	pH:	NA
9.5	Melting Point/Freezing Point:	- 20 °C (n-Hexane)
9.6	Initial Boiling Point/Boiling Range:	69 °C (155 °F) @ 760 mm Hg
9.7	Flashpoint:	- 22 °C (-7.6 °F), n-Hexane
9.8	Upper/Lower Flammability Limits:	UEL 1.25 / LEL 7.0
9.9	Vapor Pressure:	160 mbar @ 20 °C (n-Hexane)
9.10	Vapor Density:	NA
9.11	Relative Density:	0.675 – 0.696
9.12	Solubility:	negligible
9.13	Partition Coefficient (log P _{ow}):	NA
9.14	Autoignition Temperature:	223 °C (433.4 °F), n-Hexane
9.15	Decomposition Temperature:	NA
9.16	Viscosity:	0.31 mPa @ 20 °C (n-Hexane)
9.17	Other Information:	Vapor Density (n-Hexane): 2.97 (air = 1.0); VOC Content: 120 g/L

10. STABILITY & REACTIVITY

10.1	Stability:	Relatively stable under ambient conditions when stored properly.
10.2	Hazardous Decomposition Products:	Carbon dioxide, carbon monoxide, low molecular weight hydrocarbons and other organic compounds.
10.3	Hazardous Polymerization:	Will not occur.
10.4	Conditions to Avoid:	Exposure to excessive heat or open flames, hot surfaces, sparks open flames and other ignition sources. No smoking. Avoid storage in open container, long exposure to intense sunlight, and incompatible materials.
10.5	Incompatible Substances:	Strong oxidizing agents, fluorine, liquid chlorine, dinitrogen tetroxide, magnesium perchlorate, strong acids, alkalis.

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards	SDS Revision: 2.0	SDS Revision Date: 2/28/2018
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11. TOXICOLOGICAL INFORMATION

11.1	Routes of Entry:	Inhalation: YES	Absorption: YES	Ingestion: YES
11.2	Toxicity Data:	<p>This product has NOT been tested on animals to obtain toxicology data. Toxicology data, found in scientific literature, is available for some of the components of the product.</p> <p>n-Hexane: Draize test, rabbit, eye: 10 mg Mild; Inhalation, mouse: LC₅₀ = 150,000 mg/m³/2H; Inhalation, rat: LC₅₀ = 48,000 ppm/4H; Inhalation, rat: LC₅₀ = 627,000 mg/m³/3M; Oral, rat: LD₅₀ = 25 gm/kg. Tumorigenic effects have been reported in experimental animals.</p>		
11.3	Acute Toxicity:	Moderate irritation to eyes and skin near affected areas.		
11.4	Chronic Toxicity:	This material may aggravate any pre-existing skin condition (e.g., dermatitis).		
11.5	Suspected Carcinogen:	NA		
11.6	Reproductive Toxicity:	<p>WARNING: This product can expose you to chemicals including Hexane, which is known to the State of California to cause reproductive harm. For more information, go to www.P65Warnings.ca.gov.</p>		
	Mutagenicity:	This product is not reported to produce mutagenic effects in humans.		
	Embryotoxicity:	This product is not reported to produce embryotoxic effects in humans.		
	Teratogenicity:	This product is not reported to cause teratogenic effects in humans.		
	Reproductive Toxicity:	<p>WARNING: This product can expose you to chemicals including Hexane, which is known to the State of California to cause reproductive harm. For more information, go to www.P65Warnings.ca.gov.</p>		
11.7	Irritancy of Product:	The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) upon prolonged or repeated exposure.		
11.8	Biological Exposure Indices:	NE		
11.9	Physician Recommendations:	Treat symptomatically.		

12. ECOLOGICAL INFORMATION










12.1	Environmental Stability:	Estimated BCF values = 2.24 and 2.89. These values suggest that hexane will show low bioconcentration in aquatic organisms. Estimated K _{oc} value = 4.11. Expected to exist entirely in the vapor phase in ambient air, expected half life 2.8 days. Expected to biodegrade but not bioconcentrate.
12.2	Effects on Plants & Animals:	This product will show slight soil mobility and is expected to rapidly volatilize from moist surface soils. Volatilization and adsorption are expected to be the most important fate processes.
12.3	Effects on Aquatic Life:	Photolysis or hydrolysis are not expected to be important. WGK (Germany): 1

13. DISPOSAL CONSIDERATIONS



13.1	Waste Disposal:	Review current local, state and federal laws, codes, statutes and regulations to determine current status and appropriate disposal method for the ingredients listed in Section 2. Any disposal practice must be in compliance with local, state, and federal laws and regulations. Contact the appropriate agency for specific information. Treatment, transport, storage and disposal of hazardous waste must be provided by a licensed facility or waste hauler.
13.2	Special Considerations:	U.S. EPA Hazardous Waste: D001 (Characteristic – Ignitability). If the material is unsuitable for recycling or reclamation, enclosed-controlled incineration is recommended unless otherwise prohibited by local ordinance.

14. TRANSPORTATION INFORMATION




The basic description (ID Number, proper shipping name, hazard class & division, packing group) is shown for each mode of transportation. Additional descriptive information may be required by 49 CFR, IATA/ICAO, IMDG and the CTDGR.

14.1	49 CFR (GND):	UN1950, AEROSOLS, 2.1 (LTD QTY, IP VOL ≤ 1.0 L); or CONSUMER COMMODITY, ORM-D (IP VOL ≤ 1.0 L) – until 12/31/20	
14.2	IATA (AIR):	UN1950, AEROSOLS, FLAMMABLE, 2.1 (LTD QTY, IP VOL ≤ 1.0 L); or CONSUMER COMMODITY, 9, ID8000 (IP VOL ≤ 0.5 L)	  or 
14.3	IMDG (OCN):	UN1950, AEROSOLS, 2.1 (LTD QTY, IP VOL ≤ 1.0 L)	
14.4	TDGR (Canadian GND):	UN1950, AEROSOLS, 2.1 (LTD QTY, IP VOL ≤ 1.0 L)	
14.5	ADR/RID (EU):	UN1950, AEROSOLS, 2.1 (LTD QTY, IP VOL ≤ 1.0 L)	
14.6	SCT (MEXICO):	UN1950, AEROSOLS, 2.1 (CANT. LTDA., IP VOL ≤ 1.0 L)	
14.7	ADGR (AUS):	UN1950, AEROSOLS, 2.1 (LTD QTY, IP VOL ≤ 1.0 L)	

15. REGULATORY INFORMATION

15.1	SARA Reporting Requirements:	This product contains <u>Hexane</u> , a substance subject to SARA Title III, Section 313 reporting requirements.
15.2	SARA TPQ:	There are no specific Threshold Planning Quantities for the components of this product.
15.3	TSCA Inventory Status:	The components of this product are listed on the TSCA Inventory.
15.4	CERCLA Reportable Quantity:	<u>Hexane</u> : 2,270 kg (5,000 lbs)
15.5	Other Federal Requirements:	This material does not contain any hazardous air pollutants. None of the components in this product are listed as priority pollutants under the CWA. None of the components in this product are listed as toxic pollutants under the CWA.
15.6	Other Canadian Regulations:	This product has been classified according to the hazard criteria of the CPR and the SDS contains all of the information required by the CPR. The components of this product are listed on the DSL/NDSL. None of the components of this product are listed on the Priorities Substances List. WHMIS B5, D2B (Flammable Aerosol, Other Toxic Effects) 
15.7	State Regulatory Information:	<u>Hexane</u> is found on the following state criteria list: Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Minnesota Hazardous Substances List (MN), Pennsylvania Right to Know (PA) and Washington Permissible Exposures List (WA). No other ingredients in this product, present in a concentration of 1.0% or greater, are listed on any of the following state criteria lists: California Proposition 65 (CA65), Delaware Air Quality Management List (DE), Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Michigan Critical Substances List (MI), Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), New York Hazardous Substances List (NY), Pennsylvania Right-to-Know List (PA), Washington Permissible Exposures List (WA), Wisconsin Hazardous Substances List (WI).
15.8	Other Requirements:	 WARNING: This product can expose you to chemicals including Hexane, which is known to the State of California to cause reproductive harm. For more information, go to www.P65Warnings.ca.gov .

16. OTHER INFORMATION

16.1	Other Information:	<p>DANGER! EXTREMELY FLAMMABLE AEROSOL. PRESSURIZED CONTAINER; MAY BURST IF HEATED. HIGHLY FLAMMABLE LIQUID AND VAPOR. MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. CAUSES SKIN IRRITATION. CAUSES SERIOUS EYE IRRITATION. MAY CAUSE DROWSINESS OR DIZZINESS. TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Use non-sparking tools. Take action to prevent static discharges. Avoid breathing mist/vapor/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do not induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Specific treatments see section 4 of this SDS. If skin irritation occurs: Get medical advice/attention. IF INHALED: Remove person to fresh and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. In case of fire: use Alcohol Resistant-Foam, CO₂, or Water Jet to extinguish. Collect spillage. Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up.</p> <p>KEEP OUT OF REACH OF CHILDREN.</p> <p> WARNING: This product can expose you to chemicals including Hexane, which is known to the State of California to cause reproductive harm. For more information, go to www.P65Warnings.ca.gov.</p>	
16.2	Terms & Definitions:	See last page of this Safety Data Sheet.	
16.3	Disclaimer:	This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR §1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of ShipMate's & Hornady Manufacturing Company's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness is not guaranteed and no warranties of any type, either expressed or implied, are provided. The information contained herein relates only to the specific product(s). If this product(s) is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.	
16.4	Prepared for:	<p>Hornady Manufacturing Company P.O. Box 1848 Grand Island, NE 68802 USA Tel: +1 (308) 382-1390 Fax: +1 (308) 382-5761 E-mail: tech@hornady.com http://www.hornady.com</p>	 <p>Hornady Accurate. Deadly. Dependable.</p>
16.5	Prepared by:	<p>ShipMate, Inc. P.O. Box 787 Sisters, Oregon 97759-0787 USA Tel: +1 (310) 370-3600 Fax: +1 (310) 370-5700 http://www.shipmate.com</p>	 <p>ShipMate Dangerous Goods Training & Consulting</p>

DEFINITION OF TERMS

A large number of abbreviations and acronyms appear on a SDS. Some of these that are commonly used include the following:

GENERAL INFORMATION:

CAS No.	Chemical Abstract Service Number
RTECS No.	Registry of Toxic Effects of Chemical Substances Number
EINECS No.	European Inventory of Existing Commercial Chemical Substances Number

EXPOSURE LIMITS IN AIR:

ACGIH	American Conference on Governmental Industrial Hygienists
IDLH	Immediately Dangerous to Life and Health
NOHSC	National Occupational Health and Safety Commission (Australia)
OSHA	U.S. Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weighted Average

FIRST AID MEASURES:

CPR	Cardiopulmonary resuscitation - method in which a person whose heart has stopped receives manual chest compressions and breathing to circulate blood and provide oxygen to the body.
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HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS



















HEALTH, FLAMMABILITY & REACTIVITY RATINGS:













0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard

HEALTH
FLAMMABILITY
PHYSICAL HAZARDS
PERSONAL PROTECTION

PERSONAL PROTECTION RATINGS:

A	
B	 
C	  
D	  
E	  
F	   

G	  
H	   
I	  
J	   
K	   
X	Consult your supervisor or SOPs for special handling directions.

			
Safety Glasses	Splash Goggles	Face Shield & Protective Eyewear	Gloves
			
Boots	Protective Apron	Protective Clothing & Full Suit	Dust Respirator
			
Full Face Respirator	Dust & Vapor Half-Mask Respirator	Full Face Respirator	Airline Hood/Mask or SCBA

OTHER STANDARD ABBREVIATIONS:

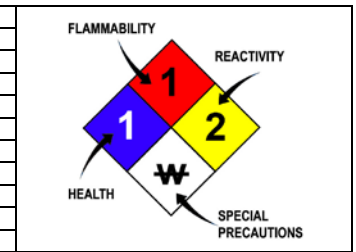
Carc	Carcinogenic
Irrit	Irritant
NA	Not Available
NR	No Results
ND	Not Determined
NE	Not Established
NF	Not Found
SCBA	Self-Contained Breathing Apparatus
Sens	Sensitization
STOT RE	Specific Target Organ Toxicity – Repeat Exposure
STOT SE	Specific Target Organ Toxicity – Single Exposure

NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

FLAMMABILITY LIMITS IN AIR:	
Autoignition Temperature	Minimum temperature required to initiate combustion in air with no other source of ignition
LEL	Lower Explosive Limit - lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source
UEL	Upper Explosive Limit - highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source

HAZARD RATINGS:

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard
ACD	Acidic
ALK	Alkaline
COR	Corrosive
W	Use No Water
OX	Oxidizer
TREFOIL	Radioactive











TOXICOLOGICAL INFORMATION:

LD₅₀	Lethal Dose (solids & liquids) which kills 50% of the exposed animals
LC₅₀	Lethal concentration (gases) which kills 50% of the exposed animal
ppm	Concentration expressed in parts of material per million parts
TD₁₀	Lowest dose to cause a symptom
TCLo	Lowest concentration to cause a symptom
TD₁₀, LD₁₀, & LD₀ or TC, TC₀, LC₁₀, & LC₀	Lowest dose (or concentration) to cause lethal or toxic effects
IARC	International Agency for Research on Cancer
NTP	National Toxicology Program
RTECS	Registry of Toxic Effects of Chemical Substances
BCF	Bioconcentration Factor
TL_m	Median threshold limit
log K_{OW} or log K_{OC}	Coefficient of Oil/Water Distribution










REGULATORY INFORMATION:

WHMIS	Canadian Workplace Hazardous Material Information System
DOT	U.S. Department of Transportation
TC	Transport Canada
EPA	U.S. Environmental Protection Agency
DSL	Canadian Domestic Substance List
NDSL	Canadian Non-Domestic Substance List
PSL	Canadian Priority Substances List
TSCA	U.S. Toxic Substance Control Act
EU	European Union (European Union Directive 67/548/EEC)
WGK	Wassergefährungsklassen (German Water Hazard Class)

WORKPLACE HAZARDOUS MATERIALS IDENTIFICATION (WHMIS) SYSTEM:

							
Class A	Class B	Class C	Class D1	Class D2	Class D3	Class E	Class F
Compressed	Flammable	Oxidizing	Toxic	Irritation	Infectious	Corrosive	Reactive

CLP/GHS (1272/2008/EC) PICTOGRAMS:

								
GHS01	GHS02	GHS03	GHS04	GHS05	GHS06	GHS07	GHS08	GHS09
Explosive	Flammable	Oxidizer	Pressurized	Corrosive	Toxic	Harmful Irritating	Health Hazard	Environment