

**Section 1 – PRODUCT AND COMPANY INFORMATION**

<b>Manufacturer</b>	IMS Company	Emergency Phone	800-424-9300
	10373 Stafford Road	Office Phone	440-543-1615
	Chagrin Falls, OH 44023-5296	Prepared by	Product Safety Advisor
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<b>Item Number</b>		<b>Container</b>	<b>Former Item Number</b>
127364	Die Maker's LUBRICANT-L with TEFLON™	11 oz spray aerosol	Similar to 112220; -toluene, +lithium.

**Product use** Designed as a hand held, very portable, aerosol can spray, to achieve easier movement of parts of molds, accessory equipment, auxiliary equipment, of most types such as injection, compression, composite, etc. and mold materials such as ferrous, non-ferrous, and composite molds. Ideal for slides, stripper plates, cams, guide pins, heat resistant, minimizes galling, long lasting.

**Hazardous Material Information System**

<b>Health</b>	<b>1*</b>	<b>Flammability</b>	<b>4</b>	<b>Reactivity</b>	<b>0</b>	<b>Protection</b>	<b>X</b>
0	Normal use Material	0	Will Not Burn	0	Stable	X = Consult the	
1	Slight Hazard (temporary)	1	Possible to Burn	1	Unstable if Heated	MSDS and	
2	Health Affected (lengthy)	2	Burns if Heated	2	Violent Chemical Change	your supervisor	
3	Extreme Danger	3	Easily Burns	3	Shock and Heat Sensitive	for your special	
4	Severe or Fatal	4	Very Easily Burns	4	May Explode	workplace need	
* Chronic (Accumulates)							

NOTE The HMIS may not be enough hazard information for this chemical in all workplaces. The HMIS system requires employee training about the system and about information in this MSDS.

**Section 2 – INGREDIENTS INFORMATION**

Chemical/Common Name	CAS-Number	%	PEL-OSHA	TLV-ACGIH
1 Liquefied Petroleum Gas	68476-85-7	20 to 40	1000 ppm	1000 ppm
2 Aliphatic Petroleum Distillates <sup>(4)</sup>	64742-89-8	20 to 40	400 ppm	NE
3 Mineral Oils	64741-88-4	20 to 40	5 mg/M <sup>3(3)</sup>	5 mg/M <sup>3(3)</sup>
4 Lithium Complex	68815-49-6	0.1 to 10	<sup>(1)</sup>	<sup>(1)</sup>
5 Calcium Carbonate	471-34-1	0.1 to 10	<sup>(1)</sup>	<sup>(1)</sup>
6 Zinc Compounds <sup>(2)</sup>	1314-13-2	0.1 to 10	5 mg/M <sup>3(5)</sup>	5 mg/M <sup>3(5)</sup>
7 Sulfur-Phosphorus blend	Proprietary	0.1 to 10	1 mg/M <sup>3</sup>	<sup>(1)</sup>
8 Tetrafluoroethylene	9002-84-0	0.1 to 10	<sup>(1)</sup>	<sup>(1)</sup>

- <sup>(1)</sup> None Established
- <sup>(2)</sup> Materials subject to SARA Title III Sec. 313 reporting requirements.
- <sup>(3)</sup> As oil mist.
- <sup>(4)</sup> WARNING This product contains chemicals known to the State of California to cause cancer, birth defect and other reproductive harm.
- <sup>(5)</sup> As fume, respirable dust, or total dust.

**Section 3 – HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW** Product is an compressed gas spray can with lithium, calcium, zinc, compounds as well as petrochemical products. May cause chemical and mechanical eye, skin, and respiratory tract irritation. For large spills, wear appropriate personal protective equipment. Dike to prevent spread. Collect released product by adsorption.

**CAUTION** Slippery; can cause falls if walked on. Inhalation of mist or fumes, evolved upon heating of the release agent, most likely to be irritating to respiratory tract. The solvents and propellant evaporate quickly leaving the slippery residue. To use safely, prevent overspray and prepare to control and prevent spills.

**HEALTH EFFECTS** (Acute and Chronic)

**Nose** FATAL OR HARMFUL IF INHALED for the product as a whole. Nasal and respiratory irritation. Overexposure can cause Central Nervous System (CNS) depression including dizziness, fatigue, nausea, headache, confusion, incoordination, possible unconsciousness and even death with gross overexposure.

**Mouth** FATAL OR HARMFUL IF SWALLOWED for the product as a whole. Irritation (gastrointestinal), nausea, vomiting. Aspiration of the material into the lungs during vomiting may cause chemical pneumonitis, which can be fatal. Because of the aerosol nature of the product, ingestion is unlikely. Small amounts of the release should not injure and large amounts could cause digestive discomfort.

**Eyes** Irritation. Symptoms may be burning, tearing, redness, or swelling.

**Skin** Irritation, defatting. Symptoms may be burning, drying, redness, cracking, dermatitis. NOTE Direct contact with spray can result in frostbite.

**Chronic** The product is not known to be a carcinogen or suspected carcinogen.

**ROUTE OF ENTRY** Inhalation, eyes, skin.

**TARGET ORGANS, MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE** Not fully determined however, exposure may aggravate diseases of the central nervous system, or pulmonary diseases. If a person has one or more of these problems, consult medical personnel to determine what steps should be taken.

**HEALTH EFFECTS** - (Acute and Chronic)

**Special Notice** Product can contaminate tobacco and foods or other products for inhalation or ingestion, causing flu-like symptoms to the consumer. Intentional misuse by deliberately concentrating and inhaling the contents of the product will be harmful or fatal.

**Chronic** No chronic symptoms identified.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE** Not fully known, however, diseases of the CNS, liver, kidney may be aggravated by exposure. Dermatitis may be aggravated by contact.

### Section 4 – FIRST AID MEASURES

**NOTE** If an irritation persists, get medical help.

**Breathing** Remove to fresh air. Keep person warm and quiet. Apply artificial respiration if breathing has stopped. If breathing is difficult, give oxygen. **\*\* Get Medical Help at once \*\***

**Eating** Not expected to be a route of entry. However, if ingested, **\*\* Get Medical Help at once \*\*** Aspiration into lungs can cause chemical pneumonia. **\*\* Induce vomiting ONLY IF advised by physician \*\*** May act as a laxative. Small amounts should be rinsed out until taste of product is gone.

**Eye Contact** Flush thoroughly with water for at least 15 minutes, consult a physician.

**Skin Contact** Do not apply directly to skin! Remove contaminated clothing and shoes. If accidentally discharged onto skin, wash with soap and water. Launder contaminated clothes before re-use.

### Section 5 – FIRE FIGHTING MEASURES

Flash Point (TCC) ..... < 0° F\* (-17° C)                      Flammable Limits.....LEL = 0.7 %                      UEL = 10 %  
Autoignition temperature.....ND

The Flammable Limits are based on the minimum and maximum LEL/UEL of ingredients.

EXTREMELY FLAMMABLE LIQUID AND VAPOR                      VAPOR MAY CAUSE FLASH FIRE

**Extinguishing Media** Carbon Dioxide, Foam, Dry Chemical, Water Fog. Using water to cool exposed containers may be useful.

**Special Fire Fighting Procedures** At elevated temperatures (over 120° F (49° C)) pressurized containers may vent or rupture. Use equipment or shielding to protect personnel against bursting or venting containers. Cooling with water streams may be helpful.

**Unusual Fire and Explosion Hazards** Vapors can be ignited by ignition source. Firefighters should wear self-contained, positive-pressure breathing apparatus, due to thermal decomposition products, and should avoid skin contact. See decomposition products. Static-electric sparks have been known to ignite accumulated vapors of flammable propellant mixtures. Use caution where static-electric sparks can occur. Ensure enough ventilation to avoid vapor accumulation, especially when spraying where there is an enclosure that would otherwise let vapors accumulate. Vapors are heavier than air, and might collect below the spray area, or might travel long distances along the floor and be ignited elsewhere. Sealed containers may rupture when heated in a fire condition. Decomposition vapors are much heavier than air.

**Sensitivity to mechanical impact** None

**Sensitivity to static discharge (ESD)** As with all spray procedures, potential to being a source of ESD. As with all flammable liquids and especially mists, potential to being ignited by ESD.

### Section 6 – ACCIDENTAL RELEASE MEASURES

**Steps to be Taken in Case Material is Released or Spilled** Remove sources of ignition. Ventilate area to reduce concentration of the components below their exposure limits. Dike with earth, sand, clay, or other non-reactive material or other inert material. Use personal protective equipment consistent with the situation. It is slippery on walkways; use a light solvent to clean area, to remove trace residues, but do not let contaminated liquid get to drains, sewers, public water source, or rainfall. Pick up the spill on absorbent material; store in closed, airtight containers for proper disposal. Avoid contamination of ground and surface waters. If spill occurs indoors, turn off air conditioning and/or heating system, to prevent vapors from contaminating entire building.

### Section 7 – HANDLING AND STORAGE

**Precautions to be Taken in Storage** Store in tightly closed, original container. Product is a slip hazard on walkways. Use good housekeeping and engineering practices to prevent spills. Store in cool, dry area, out of direct sunlight. Do not puncture, burn, or heat above 120° F(49° C) either full or empty containers.

**Handling** Thoroughly wash after handling, and before eating, drinking, or using tobacco products.

**Maintenance Precautions** Do not remove or deface label. Keep container closed.

**Other Precautions** Decomposition vapor is heavier than air and can collect in low areas. Product can cause slippery surfaces. Clean up spills promptly. Monitor floors for accumulation in overspray area; clean as needed. Read and follow directions and cautions on the container label, and any accompanying literature.

### Section 8 – EXPOSURE CONTROLS – PERSONAL PROTECTION

**GENERAL** Polymeric coated apron or other body covering is recommended where there is a possibility of regular work clothing becoming contaminated with the product. All soiled or dirty clothing and personal protective equipment should be thoroughly cleaned before reuse.

**Ventilation** Usually local exhaust is not required. General room ventilation may be adequate to maintain components below TLV/PEL, if handled at ambient temperatures, or in covered equipment. Local exhaust ventilation or other engineering controls may be required, if ambient temperatures are exceeded, or if used in operations that may produce mist, aerosol, or vapor.

Also maintain enough ventilation to prevent fire/flash hazard from local accumulation of vapors, especially near sources of high heat, electric arcs or static-electric sparks. NOTE vapors are heavier than air and could collect below the area where the product is sprayed, or could travel long distances along floor and be ignited elsewhere.

**Respiratory Protection** Generally not required if adequate ventilation is provided. If exposures exceed limits by less than a factor of ten, use a NIOSH approved, ½ mask facepiece respirator for particulate matter. If exposures exceed 10 times the recommended limits, consult a professional industrial hygienist or your respiratory protective equipment supplier for selection of the proper equipment. Above 1000 ppm; an approved self-contained breathing apparatus or air line respirator with full face-piece is required.

**Protective Gloves** Polymeric materials, neoprene, etc. are materials for personal protective equipment, gloves and clothing, where prolonged or repeated contact with the spray mist or deposited product is likely.

**Other Protective Equipment** If eye contact with the spray is possible, eye protection is recommended. Chemical Monogoggles or safety glasses with side shields, and a face shield will provide protection in most situations.

**Other Engineering Controls** Eye bath and safety shower station should be available. To determine exposure levels, monitoring should be performed.

**Work Practices** Do not use in confined or closed space. Ventilation should maintain the concentration of the product below its exposure limits. We consider it good practice to maintain exposure to the mist from any aerosol, below the OSHA Oil Mist exposure limit of 5 mg/m<sup>3</sup> TWA. Avoid long-term or repeated contact. Stained clothing should be removed and laundered before re-use. Sudden release of hot vapor or mist from process equipment operating at elevated temperature and pressure, or sudden ingress of air into hot equipment under vacuum, may result in decomposition without obvious source of heat. Any use of this product in elevated-temperature processes must be thoroughly evaluated to establish and maintain safe operating conditions.

**Hygienic Practices** As with using any chemical product, avoid contact with skin and avoid breathing vapors, do not eat, drink, or smoke in work area; wash hands prior to eating, drinking or using restroom after handling or using. Any chemical product can contaminate tobacco, causing illness (from inhaling components heated in tobacco smoke or ingested from handling tobacco and/or food products). This product has metals that when heated can cause metal fume fever - symptoms similar to flu.

### Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point.....	N/A	Specific Gravity (Water=1).....	< 1
Vapor Pressure at 77° F (25° C).....	40 ± 10	Percent Volatile by Volume (%).....	> 70
Vapor Density (Air=1).....	> 1	Evaporation Rate (ether=1).....	NIL
VOC.....	ND	Pour point.....	ND
Solubility in Water.....	NIL	pH.....	ND
Melting point.....	ND	Odor threshold.....	ND
Viscosity of residue	Paste		

**Appearance and Odor Information** Tan to yellow mist with the odor of aromatic solvent as dispensed from the aerosol package.

CONTENTS UNDER PRESSURE

DO NOT PUNCTURE OR BURN CONTAINER

### Section 10 – STABILITY AND REACTIVITY

**Incompatibility (reactivity, materials to avoid)** Strong oxidizers, strong caustics, strong alkalis.

**Product Chemically Stable?** Yes

**Conditions to keep Stability** Prevent contact with open flame, electric arcs, or other hot surfaces that can cause thermal decomposition. Avoid temperatures high enough to rupture container. Do not spray into flame or onto red-hot surfaces, which could ignite spray.

**Decomposition Products** Not fully determined; however, oxides of carbon, zinc, lithium, calcium, sulfur, and various incompletely burned hydrocarbon products would be expected.

**Will Hazardous Polymerization Occur?** Product is stable. Hazardous polymerization will not occur.

**Section 11 – TOXICOLOGICAL INFORMATION**

**LD<sub>50</sub>, LC<sub>50</sub>** NA  
**Reproductive Toxicity** NA  
**Irritancy, sensitivity** ND

**Section 12 – ECOLOGICAL INFORMATION**

COMPONENT # COMMENTS  
 1-8 .....ND

**Section 13 – DISPOSAL CONSIDERATIONS**

**Waste Disposal Methods** Observe proper safety and handling. Do not allow empty containers to be used for any purpose except to store and ship product. Recovered paste may be re-used if compatible with users processes. Contaminated material may be disposed of in a permitted waste management facility suitable for the ingredients and contaminations. Do not puncture or burn containers. Reclamation/recycling is encouraged where possible. Where reclamation is not practical, this product may be incinerated where permitted by Federal, State, County/Provincial, and Local regulations. Never dispose by means of public trash, sewers, or drainage. Give leaking containers to a disposal service equipped to handle such containers. Observe all warnings and precautions listed for the product.

**Section 14 – TRANSPORT INFORMATION**

**Ground (US DOT)....** Consumer Commodity OR Aerosols (Limited Quantity)  
**Class** ORM-D 2.1  
**ERG** 126 126

**Air (IATA).....** Consumer commodity  
**Class** 9 (Label Diamond required)  
**UN/ID No.** ID 8000  
**Packing** 1900  
**Authorization** Limited Quantity

**Vessel.....** Aerosols (Limited Quantity)  
**Class** 2.1  
**UN No** 1950  
**EmS No.** 2-13  
**ERG** 126

**Section 15 – REGULATORY INFORMATION**

CFC, HCFC, HFC, ODS	N
EPA - CAA, CWA	N
EU risk phrase #'s	N
FDA-21 CFR 174.5 (2) (d)	N
IDLH	N
OSHA listed	Y
PROP 65 listed	Y
RCRA listed	Y
SARA 313 list	Y
TSCA listed	Y
USDA	H-2

This product has been classified in accordance with hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**Section 16 – OTHER INFORMATION**

**CAUTION Intentional misuse of this chemical product, as with any industrial chemical in contact with the body, can be harmful or fatal. This includes such things as deliberately breathing, placing in mouth, swallowing, placing on skin, or any other body contact, or repeated, or continuous contact.**

IMS provides this information in good faith, but makes no representation as to its comprehensiveness or its accuracy. This document is offered as a guide to a trained person, for appropriate precautionary handling. Persons using the product and receiving the information must exercise independent judgment in determining the appropriateness of the use and the safety information for their particular purpose. IMS MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THIS INFORMATION OR TO THE PRODUCT. ACCORDINGLY, IMS WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE ON THIS INFORMATION.

ACGIH	American Conference of Governmental Hygienists	NA	Not Applicable, Not Available
AKA	Also Known As, Synonym	ND	Not Determined
CAS	Chemical Abstract Service	NIL	Not measurable, significant, noticeable, or an affect
GRAS	Generally Recognized As Safe by FDA rule or listing	NTP	National Toxicology Program

H-1, -2    USDA, plant process chemicals that do not touch food stuff  
IARC       International Agency for Research of Cancer  
IDLH       Immediately Dangerous to Life or Health, exposure rate/volume  
mg/m<sup>3</sup>     milligrams per Cubic Meter  
N           No, None, Not listed, Not Known

OSHA       Occupational Safety and Health Administration  
ppm        parts per million  
USDA       U S Department of Agriculture  
Y            Yes, Does Exists, Is Listed,