# **SAFETY DATA SHEET**

SC0204000

## Section 1. Identification

Product name	: LU™204 Dry Film Graphite Lubricant Aerosol
Product code	: SC0204000
Other means of identification	: Not available.
Product type	: Aerosol.
Relevant identified uses of t	the substance or mixture and uses advised against
Paint or paint related material.	
Manufacturer	: Sprayon Products Group 101 W. Prospect Avenue, Cleveland, Ohio 44115
Emergency telephone number of the company	<ul> <li>US / Canada: (216) 566-2917</li> <li>Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year</li> </ul>
Product Information Telephone Number	: US / Canada: (800) 247-3266 Mexico: Not Available
Regulatory Information Telephone Number	: US / Canada: (216) 566-2902 Mexico: Not Available
Transportation Emergency Telephone Number	: US / Canada: (800) 424-9300 Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

## Section 2. Hazards identification

OSHA/HCS status	<ul> <li>This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).</li> </ul>
Classification of the substance or mixture	<ul> <li>FLAMMABLE AEROSOLS - Category 1 GASES UNDER PRESSURE - Compressed gas SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1</li> </ul>
	Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 78.3% Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 79.5% Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 65%
GHS label elements	
Hazard pictograms	
Signal word	: Danger

## Section 2. Hazards identification

Hazard statements	<ul> <li>Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes serious eye irritation. Causes skin irritation. Suspected of damaging the unborn child. May be fatal if swallowed and enters airways. May cause respiratory irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure.</li> </ul>
Precautionary statements	
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Use only outdoors or in a well-ventilated area. Do not breathe dust or mist. Wash hands thoroughly after handling. Pressurized container: Do not pierce or burn, even after use.
Response	: Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. 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 attention.
Storage	<ul> <li>Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.</li> </ul>
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY. Please refer to the SDS for additional information. Keep out of reach of children. Keep upright in a cool, dry place. Do not discard empty can in trash compactor.
Hazards not otherwise classified	: None known.

## Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of identification	: Not available.

#### **CAS number/other identifiers**

Ingredient name	% by weight	CAS number
Heptane, Branched, Cyclic, Linear	≥10 - ≤25	426260-76-6
Propane	≥10 - ≤25	74-98-6
Butane	≥10 - ≤25	106-97-8
2-Propanol	≥10 - ≤25	67-63-0
Heptane	≥10 - ≤25	142-82-5
Toluene	≤2.2	108-88-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

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## Section 4. First aid measures

Description of necessa	ary first aid measures
Eye contact	<ul> <li>Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.</li> </ul>
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

#### Most important symptoms/effects, acute and delayed

Potential acute health	n effects
Eye contact	: Causes serious eye irritation.
Inhalation	<ul> <li>Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.</li> </ul>
Skin contact	: Causes skin irritation.
Ingestion	: Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.
Over-exposure signs	/symptoms
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations

## Section 4. First aid measures

Ingestion	: Adverse symptoms may include the following: nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations
Indication of immediate med	dical attention and special treatment needed, if necessary
Notes to physician	<ul> <li>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</li> </ul>
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

#### See toxicological information (Section 11)

Section 5. Fire-fighting measures			
Extinguishing media			
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.		
Unsuitable extinguishing media	: None known.		
Specific hazards arising from the chemical	: Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.		
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide		
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.		
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.		

## Section 6. Accidental release measures

Personal precautions, protect	ive equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

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## Section 6. Accidental release measures

Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
Methods and materials for c	ontainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

#### Precautions for safe handling

Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid breathing gas. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### Section 8. Exposure controls/personal protection

#### **Control parameters**

**Occupational exposure limits (OSHA United States)** 

Ingredient name	Exposure limits		
Heptane, Branched, Cyclic, Linear Propane	ACGIH TLV (United States, 3/2017). TWA: 400 ppm 8 hours. TWA: 1640 mg/m <sup>3</sup> 8 hours. STEL: 500 ppm 15 minutes. STEL: 2050 mg/m <sup>3</sup> 15 minutes. NIOSH REL (United States, 10/2016). TWA: 1000 ppm 10 hours. TWA: 1800 mg/m <sup>3</sup> 10 hours. OSHA PEL (United States, 6/2016).		
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	TWA: 1000 ppm 8 hours.
	TWA: 1800 mg/m <sup>3</sup> 8 hours.
	ACGIH TLV (United States, 3/2017). Oxygen
Puter a	Depletion [Asphyxiant].
Butane	NIOSH REL (United States, 10/2016).
	TWA: 800 ppm 10 hours.
	TWA: 1900 mg/m <sup>3</sup> 10 hours.
	ACGIH TLV (United States, 3/2017).
	STEL: 1000 ppm 15 minutes.
2-Propanol	ACGIH TLV (United States, 3/2017).
	TWA: 200 ppm 8 hours.
	STEL: 400 ppm 15 minutes.
	NIOSH REL (United States, 10/2016).
	TWA: 400 ppm 10 hours.
	TWA: 980 mg/m <sup>3</sup> 10 hours.
	STEL: 500 ppm 15 minutes.
	STEL: 1225 mg/m <sup>3</sup> 15 minutes.
	OSHA PEL (United States, 6/2016).
	TWA: 400 ppm 8 hours.
	TWA: 980 mg/m <sup>3</sup> 8 hours.
Heptane	ACGIH TLV (United States, 3/2017).
	TWA: 400 ppm 8 hours.
	TWA: 1640 mg/m <sup>3</sup> 8 hours.
	STEL: 500 ppm 15 minutes.
	STEL: 2050 mg/m <sup>3</sup> 15 minutes.
	NIOSH REL (United States, 10/2016).
	TWA: 85 ppm 10 hours.
	TWA: 350 mg/m <sup>3</sup> 10 hours.
	CEIL: 440 ppm 15 minutes.
	CEIL: 1800 mg/m <sup>3</sup> 15 minutes.
	OSHA PEL (United States, 6/2016).
	TWA: 500 ppm 8 hours.
	TWA: 2000 mg/m <sup>3</sup> 8 hours.
Toluene	OSHA PEL Z2 (United States, 2/2013).
	TWA: 200 ppm 8 hours.
	CEIL: 300 ppm
	AMP: 500 ppm 10 minutes.
	NIOSH REL (United States, 10/2016).
	TWA: 100 ppm 10 hours.
	TWA: 375 mg/m³ 10 hours.
	STEL: 150 ppm 15 minutes.
	STEL: 560 mg/m <sup>3</sup> 15 minutes.
	ACGIH TLV (United States, 3/2017).
	TWA: 20 ppm 8 hours.

#### Occupational exposure limits (Canada)

Ingredient name	Exposure limits			
Heptane, Branched, Cyclic, Linear	CA Alberta Provincial (Canada, 4/2009). 15 min OEL: 2050 mg/m <sup>3</sup> 15 minutes. 8 hrs OEL: 1640 mg/m <sup>3</sup> 8 hours. 8 hrs OEL: 400 ppm 8 hours. 15 min OEL: 500 ppm 15 minutes. CA Ontario Provincial (Canada, 7/2015). TWA: 400 ppm 8 hours. STEL: 500 ppm 15 minutes.			
Propane	CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 1000 ppm 8 hours. CA British Columbia Provincial (Canada, 6/2017). TWA: 1000 ppm 8 hours.			
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Butane			<ul> <li>CA Quebec Provincial (Canada, 1/2014). TWAEV: 1000 ppm 8 hours. TWAEV: 1800 mg/m<sup>3</sup> 8 hours.</li> <li>CA Ontario Provincial (Canada, 7/2015). TWA: 1000 ppm 8 hours.</li> <li>CA Saskatchewan Provincial (Canada, 7/2013).</li> <li>STEL: 1250 ppm 15 minutes.</li> <li>TWA: 1000 ppm 8 hours.</li> <li>CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 1000 ppm 8 hours.</li> <li>CA British Columbia Provincial (Canada, 6/2017).</li> <li>TWA: 600 ppm 8 hours.</li> <li>STEL: 750 ppm 15 minutes.</li> <li>TWA: 600 ppm 8 hours.</li> <li>STEL: 750 ppm 15 minutes.</li> <li>CA Quebec Provincial (Canada, 1/2014).</li> <li>TWAEV: 800 ppm 8 hours.</li> <li>TWAEV: 1900 mg/m<sup>3</sup> 8 hours.</li> </ul>
			CA Ontario Provincial (Canada, 7/2015). TWA: 800 ppm 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 1250 ppm 15 minutes. TWA: 1000 ppm 8 hours.
2-Propanol			<ul> <li>CA Alberta Provincial (Canada, 4/2009).</li> <li>15 min OEL: 984 mg/m<sup>3</sup> 15 minutes.</li> <li>8 hrs OEL: 200 ppm 8 hours.</li> <li>15 min OEL: 400 ppm 15 minutes.</li> <li>8 hrs OEL: 492 mg/m<sup>3</sup> 8 hours.</li> <li>CA British Columbia Provincial (Canada, 6/2017).</li> <li>TWA: 200 ppm 8 hours.</li> <li>STEL: 400 ppm 15 minutes.</li> <li>CA Ontario Provincial (Canada, 7/2015).</li> <li>TWA: 200 ppm 8 hours.</li> <li>STEL: 400 ppm 15 minutes.</li> <li>CA Quebec Provincial (Canada, 1/2014).</li> <li>TWAEV: 400 ppm 8 hours.</li> <li>STEV: 500 ppm 15 minutes.</li> <li>STEV: 1230 mg/m<sup>3</sup> 8 hours.</li> <li>STEV: 1230 mg/m<sup>3</sup> 15 minutes.</li> <li>CA Saskatchewan Provincial (Canada, 7/2013).</li> <li>STEL: 400 ppm 15 minutes.</li> <li>TWA: 200 ppm 8 hours.</li> </ul>
Heptane			CA Alberta Provincial (Canada, 4/2009). 15 min OEL: 2050 mg/m <sup>3</sup> 15 minutes. 8 hrs OEL: 1640 mg/m <sup>3</sup> 8 hours. 8 hrs OEL: 400 ppm 8 hours. 15 min OEL: 500 ppm 15 minutes. CA British Columbia Provincial (Canada, 6/2017). TWA: 400 ppm 8 hours. STEL: 500 ppm 15 minutes. CA Ontario Provincial (Canada, 7/2015). TWA: 400 ppm 8 hours. STEL: 500 ppm 15 minutes. CA Quebec Provincial (Canada, 1/2014). TWAEV: 400 ppm 8 hours. TWAEV: 1640 mg/m <sup>3</sup> 8 hours. STEV: 500 ppm 15 minutes.
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	STEV: 2050 mg/m <sup>3</sup> 15 minutes.
	CA Saskatchewan Provincial (Canada,
	7/2013).
	STEL: 500 ppm 15 minutes.
	TWA: 400 ppm 8 hours.
Toluene	CA Alberta Provincial (Canada, 4/2009).
	Absorbed through skin.
	8 hrs OEL: 50 ppm 8 hours.
	8 hrs OEL: 188 mg/m <sup>3</sup> 8 hours.
	CA British Columbia Provincial (Canada,
	6/2017).
	TWA: 20 ppm 8 hours.
	CA Ontario Provincial (Canada, 7/2015).
	TWA: 20 ppm 8 hours.
	CA Quebec Provincial (Canada, 1/2014).
	Absorbed through skin.
	TWAEV: 50 ppm 8 hours.
	TWAEV: 188 mg/m <sup>3</sup> 8 hours.
	CA Saskatchewan Provincial (Canada,
	7/2013). Absorbed through skin.
	STEL: 60 ppm 15 minutes.
	TWA: 50 ppm 8 hours.

#### **Occupational exposure limits (Mexico)**

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Ingredient name	Exposure limits
Heptane, Branched, Cyclic, Linear	ACGIH TLV (United States, 3/2017). TWA: 400 ppm 8 hours. TWA: 1640 mg/m <sup>3</sup> 8 hours. STEL: 500 ppm 15 minutes. STEL: 2050 mg/m <sup>3</sup> 15 minutes.
Propane	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 1000 ppm 8 hours.
Butane	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 1000 ppm 8 hours.
2-Propanol	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 200 ppm 8 hours. STEL: 400 ppm 15 minutes.
Heptane	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 400 ppm 8 hours.
Toluene	STEL: 500 ppm 15 minutes. <b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 20 ppm 8 hours.

Appropriate engineering controls	oth rec vap	er engin commenc por or du	eering controls to keep ded or statutory limits.	Use process enclosures, worker exposure to airborr The engineering controls al any lower explosive limits	ne contam Iso need t	iinants belo o keep gas	w any
Environmental exposure controls	the cas	y comply ses, fum	y with the requirements e scrubbers, filters or e	process equipment should of environmental protection ngineering modifications to ons to acceptable levels.	n legislatio	on. In some	е
Individual protection measur	res						
Hygiene measures	eat Apr Wa	ing, smo propriate ash conta	oking and using the lava techniques should be	noroughly after handling cha atory and at the end of the v used to remove potentially e reusing. Ensure that eye on location.	working pe contamina	eriod. ated clothin	g.
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Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	<ul> <li>Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.</li> </ul>

## Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	Liquid.	
Color	Not available.	
Odor	Not available.	
Odor threshold	Not available.	
рН	Not available.	
Melting point/freezing point	Not available.	
Boiling point/boiling range	Not available.	
Flash point	Closed cup: -29°C (-20.2°F) [Pensky-Martens Closed Cup]	
Evaporation rate	2 (butyl acetate = 1)	
Flammability (solid, gas)	Not available.	
Lower and upper explosive (flammable) limits	Lower: 1% Upper: 12.7%	
Vapor pressure	101.3 kPa (760 mm Hg) [at 20°C]	
Vapor density	1.55 [Air = 1]	
Relative density	0.62	
Solubility	Not available.	
Partition coefficient: n- octanol/water	Not available.	
Auto-ignition temperature	Not available.	
<b>Decomposition temperature</b>	Not available.	
Viscosity	Kinematic (40°C (104°F)): <0.205 cm²/s (<20.5 cSt)	
Molecular weight	Not applicable.	
Aerosol product		
Type of aerosol	Spray	
Heat of combustion	39.063 kJ/g	

## Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame).
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### Section 11. Toxicological information

#### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Butane	LC50 Inhalation Vapor	Rat	658000 mg/m <sup>3</sup>	4 hours
2-Propanol	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
Heptane	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LC50 Inhalation Vapor	Rat	103 g/m <sup>3</sup>	4 hours
Toluene	LC50 Inhalation Vapor	Rat	49 g/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	636 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
2-Propanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100	-
				milligrams	
	Eyes - Moderate irritant	Rabbit	-	10 milligrams	-
	Eyes - Severe irritant	Rabbit	-	100	-
				milligrams	
	Skin - Mild irritant	Rabbit	-	500	-
				milligrams	
Toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes	-
				100	
				milligrams	
	Eyes - Mild irritant	Rabbit	-	870	-
				Micrograms	
	Eyes - Severe irritant	Rabbit	-	24 hours 2	-
				milligrams	
	Skin - Mild irritant	Pig	-	24 hours 250	-
				microliters	
	Skin - Mild irritant	Rabbit	-	435	-
				milligrams	
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
				milligrams	
	Skin - Moderate irritant	Rabbit	-	500	-
				milligrams	

#### **Sensitization**

Not available.

#### **Mutagenicity**

Not available.

**Carcinogenicity** 

## Section 11. Toxicological information

#### Not available.

#### **Classification**

Product/ingredient name	OSHA	IARC	NTP
2-Propanol Toluene	-	3 3	-

#### Reproductive toxicity

Not available.

#### **Teratogenicity**

Not available.

#### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Heptane, Branched, Cyclic, Linear Propane	Category 3 Category 3	Not applicable. Not applicable.	Narcotic effects Respiratory tract irritation and Narcotic effects
Butane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
2-Propanol	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Heptane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Toluene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

#### Specific target organ toxicity (repeated exposure)

Name	•••	Route of exposure	Target organs
Propane Butane 2-Propanol Heptane Toluene	Category 2	Not determined Not determined Not determined	Not determined Not determined Not determined Not determined Not determined

#### **Aspiration hazard**

Name	Result
Heptane, Branched, Cyclic, Linear	ASPIRATION HAZARD - Category 1
Propane	ASPIRATION HAZARD - Category 1
Butane	ASPIRATION HAZARD - Category 1
Heptane	ASPIRATION HAZARD - Category 1
Toluene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure	ot available.	
Potential acute health effe		
Eye contact	auses serious eye irritation.	
Inhalation	an cause central nervous system (CNS) depression. May cause c izziness. May cause respiratory irritation.	trowsiness or
Skin contact	auses skin irritation.	

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SC0204000	LU™204 Dry Film G	raphite Lubricant	Aerosol		SHW-85-	-NA-GHS-US	

_		_
Inc	est	ion
IIIY	του	IUII

: Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Symptoms related to the ph	ysical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate ef	fects and also chronic effects from short and long term exposure
Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health e	i <u>fects</u>
Not available.	
General	: May cause damage to organs through prolonged or repeated exposure.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: Suspected of damaging the unborn child.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

#### Numerical measures of toxicity Acute toxicity estimates

Route	ATE value
Oral	3862.4 mg/kg

## Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
2-Propanol	Acute EC50 10100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1400000 µg/l Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 4200 mg/l Fresh water	Fish - Rasbora heteromorpha	96 hours
Heptane	Acute LC50 375000 µg/l Fresh water	Fish - Oreochromis mossambicus	96 hours
Toluene	Acute EC50 12500 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 µg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult	48 hours
	Acute EC50 6000 μg/l Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 5500 µg/l Fresh water	Fish - Oncorhynchus kisutch - Fry	96 hours
	Chronic NOEC 1000 µg/l Fresh water	Daphnia - Daphnia magna	21 days

#### Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
2-Propanol Toluene	-	-	Readily Readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
Heptane	-	552	high
Toluene		90	Iow

#### Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	

Other adverse effects

: No known significant effects or critical hazards.

### Section 13. Disposal considerations

Disposal methods	The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the
	requirements of environmental protection and waste disposal legislation and any
	regional local authority requirements. Dispose of surplus and non-recyclable products
	via a licensed waste disposal contractor. Waste should not be disposed of untreated to
	the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
	Waste packaging should be recycled. Incineration or landfill should only be considered
	when recycling is not feasible. This material and its container must be disposed of in a
	safe way. Empty containers or liners may retain some product residues. Do not
	puncture or incinerate container.

## Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ΙΑΤΑ	IMDG
UN number	UN1950	UN1950	UN1950	UN1950	UN1950
UN proper shipping name	AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS, flammable	AEROSOLS
Date of issue/Date of re SC0204000 LU™	vision : 10/4/20 204 Drv Film Graphite Lubri	· · · · · ·	issue : 10/1/201		on : 6.02 13/1 - <b>85-NA-GHS-US</b>

Transport	2.1	2.1	2.1	2.1	2.1
hazard class(es)	PLAMARIE GA				
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 13-2.17 (Class 2).	\$	-	<u>Emergency</u> <u>schedules</u> F-D, S U
	ERG No.	ERG No.	ERG No.		
	126	126	126		
Special precaution	cc	onsider container sizes. ode of transport (sea, ai	The presence of r, etc.), does not	a shipping descrip indicate that the p	roduct is packaged
	sı pr re ur	uitably for that mode of tr ior to shipment, and con sponsibility of the person nloading dangerous good ubstances and on all acti	npliance with the n offering the pro ds must be traine	applicable regulat duct for transport. d on all of the risk	ions is the sole People loading and s deriving from the
to Annex II of MAR	su pr re ur su su	ior to shipment, and con sponsibility of the perso nloading dangerous good	npliance with the n offering the pro ds must be traine	applicable regulat duct for transport. d on all of the risk	ions is the sole People loading and s deriving from the
to Annex II of MAR	su pr re ur su su <b>ccording</b> : Not <b>POL and</b>	ior to shipment, and con sponsibility of the perso lloading dangerous good lbstances and on all acti	npliance with the n offering the pro ds must be traine	applicable regulat duct for transport. d on all of the risk nergency situation	ions is the sole People loading and s deriving from the
Transport in bulk a to Annex II of MAR the IBC Code	su pr re ur su ccording : Not POL and Pro	ior to shipment, and con sponsibility of the perso loading dangerous good ibstances and on all acti t available.	npliance with the n offering the pro ds must be traine ions in case of er	applicable regulat duct for transport. ed on all of the risk mergency situation	ions is the sole People loading and s deriving from the

### Section 15. Regulatory information

#### SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

#### California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

#### International regulations

International lists	<ul> <li>Australia inventory (AICS): Not determined.</li> <li>China inventory (IECSC): Not determined.</li> <li>Japan inventory (ENCS): Not determined.</li> <li>Japan inventory (ISHL): Not determined.</li> <li>Korea inventory (KECI): Not determined.</li> <li>Malaysia Inventory (EHS Register): Not determined.</li> <li>New Zealand Inventory of Chemicals (NZIoC): Not determined.</li> <li>Philippines inventory (PICCS): Not determined.</li> <li>Taiwan Chemical Substances Inventory (TCSI): Not determined.</li> <li>Thailand inventory: Not determined.</li> </ul>
	Turkey inventory: Not determined. Vietnam inventory: Not determined.

## Section 16. Other information

Hazardous Material Information System (U.S.A.)



The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

Classification	Justification
FLAMMABLE AEROSOLS - Category 1	On basis of test data
GASES UNDER PRESSURE - Compressed gas	Calculation method
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
TOXIC TO REPRODUCTION (Unborn child) - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPEČIFÍC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1	Calculation method Calculation method

#### **History**

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Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

#### Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user is should not use the product for any purpose other than the purpose shown in the applicable section of this SDS

## Section 16. Other information

without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.