Safety Data Sheet

KastKote 29 RFU

Revision Date Sept 18, 2023

1. Product and Company Identification

Product Information	
Trade Name	KastKote 29 RFU
Product Description	Solvent-based graphite coating
Recommended Uses	Lubricant, protective coating
Company	Southwestern Graphite, Inc. (a division of Asbury Carbons Inc.) 2564 Highway 12 DeQuincy, LA 70633
Emergency Telephone	US: 1-800-255-3924; International: +01-813-248-0585; China: 400-120-0751; Brazil: 0-800-591-6042; India: 000-800-100-4086; Mexico: 01-800-099-0731 ChemTel contract number: MIS0001931 (collect calls accepted)
Information Phone	1-908-537-2155
Website	www.asbury.com

2. Hazards Identification

Classification

Physical Hazards
Flammable liquids – Category 3

Health Hazards
Aspiration hazard – Category 1
Specific target organ toxicant, single exposure - Category 3 (narcotic effects)

Labeling

Hazard Pictogram(s)

Signal Word

Danger

Hazard Statements

Physical: H226: Flammable liquid and vapor.

Health: H304: May be fatal if swallowed and enters airways.
H336: May cause drowsiness or dizziness.

Precautionary Statements

Prevention:
P210: Keep away from heat/sparks/open flames - no smoking.
P233: Keep container tightly closed.
P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical / ventilating / lighting / equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P261: Avoid breathing dust / fume / gas / mist / vapors / spray.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves / protective clothing / eye protection / face protection.

Response:
P303 + P361 + P353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water / shower.
P370+P378: In case of fire: Use appropriate media for extinction.
P301 + P310 +331: IF SWALLOWED: Immediately call a POISON

	CENTER or doctor/ physician. Do NOT induce vomiting. P304 + P340 +P312: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
Storage:	P403 + P233: Store in a well-ventilated place. Keep container tightly closed. P235: Keep cool. P405: Store locked up.
Disposal:	P501: Dispose of contents and container to appropriate waste site or reclaimer in accordance with local and national regulations.

3. Composition / Information on Ingredients

Components	CAS No.	Weight %	Hazard Code(s)
Naphtha (petroleum), hydrotreated heavy	64742-48-9	65-75%	H226, H304, H336
Graphite	7782-42-5	25-35%	--

4. First Aid Measures

Inhalation	Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.
Skin Contact	Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.
Eye contact	Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
Ingestion	If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3°C), shortness of breath, chest congestion or continued coughing or wheezing.
Symptoms and effects (acute and delayed)	If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever. Auditory system effects may include temporary hearing loss and/or ringing in the ears. Defatting dermatitis signs and symptoms may include a burning sensation and/or a dried/cracked appearance. Skin irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blisters.
Note to Physician	Potential for chemical pneumonitis.

5. Fire Fighting Measures

Suitable extinguishing media	Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable extinguishing media	Do not use water in a jet.
Special fire hazards	Flammable vapors may be present even at temperatures below the flash point. The vapor is heavier than air, spreads along the ground and distant ignition is possible. Will float and can be reignited on surface water.
Products of Combustion	Smoke, fume, incomplete combustion products, carbon dioxide (CO2), carbon monoxide (CO).
Advice for Fire Fighters	Use standard procedure for chemical fires. Keep adjacent containers cool by spraying with water.
Special protective equipment for firefighters	Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space.
NFP Rating	120

6. Accidental Release Measures

Personal precautions	Observe all relevant local and international regulations. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur. Local authorities should be advised if significant spillages cannot be contained. Avoid contact with skin, eyes and clothing. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Do not breathe fumes, vapor. Do not operate electrical equipment.
Environmental precautions	Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapor or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Monitor area with combustible gas indicator.
Methods for cleaning up	For small liquid spills (< 1 drum), transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. Ventilate contaminated area thoroughly. If contamination of site occurs remediation may require specialist advice.

7. Handling and Storage

Precautions for safe handling	Avoid inhaling vapor and/or mists. Avoid contact with skin, eyes and clothing. Extinguish any naked flames. Do not smoke. Remove ignition sources. Avoid sparks. Use local exhaust ventilation if there is risk of inhalation of vapors, mists or aerosols. Bulk storage tanks should be diked (bunded). When using do not eat or drink. The vapor is heavier than air, spreads along the ground and distant ignition is possible.
Product Transfer	Even with proper grounding and bonding, this material can still accumulate an electrostatic charge. If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable air-vapor mixtures can occur. Be aware of handling operations that may give rise to additional hazards that result from the accumulation of static charges. These include but are not limited to pumping (especially turbulent flow), mixing, filtering, splash filling, cleaning and filling of tanks and containers, sampling, switch loading, gauging, vacuum truck operations, and mechanical movements. These activities may lead to static discharge e.g. spark formation. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (≤ 1 m/s until fill pipe submerged to twice its diameter, then ≤ 7 m/s). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations.
Storage precautions	Bulk storage tanks should be diked (bunded). Locate tanks away from heat and other sources of ignition. Cleaning, inspection and maintenance of storage tanks is a specialist operation, which requires the implementation of strict procedures and precautions. Must be stored in a diked (bunded) well- ventilated area, away from sunlight, ignition sources and other sources of heat. Keep away from aerosols, flammables, oxidizing agents, corrosives and from other flammable products which are not harmful or toxic to man or to the environment. Electrostatic charges will be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment to reduce the risk. The vapors in the head space of the storage vessel may lie in the flammable/explosive range and hence may be flammable. Suitable packaging material: For containers, or container linings use mild steel, stainless steel. For container paints, use epoxy paint, zinc silicate paint. Unsuitable packaging material: Avoid prolonged contact with natural, butyl or nitrile rubbers.

Do not cut, drill, grind, weld or perform similar operations on or near containers.

8. Exposure Controls/ Personal Protection

Ingredients with control parameters / occupational exposure limits

Component	CAS No.	TWA	Control Reference
Naphtha (petroleum), hydrotreated heavy	64742-48-9	1200 mg/m^3	Manufacturer recommendation
Graphite	7782-42-5	2.0 mg/m^3	Respirable dust, ACGIH

Engineering controls	Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits. Local exhaust ventilation is recommended. Firewater monitors and deluge systems are recommended. Eye washes and showers for emergency use. Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.
Respiratory Protection	If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are unsuitable (e.g. airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. If air-filtering respirators are suitable for conditions of use, select a filter suitable for organic gases and vapors [Type A boiling point >65°C (149°F)]. Respirator selection, use and maintenance should be in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910.134.
Eye Protection	If material is handled such that it could be splashed into eyes, protective eyewear is recommended.
Skin Protection	Where hand contact may occur, gloves made from the following materials may provide suitable chemical protection. Longer term protection: Nitrile rubber gloves. Incidental contact/Splash protection: PVC, neoprene or nitrile rubber gloves. Contaminated gloves should be replaced. Wear chemical resistant gloves/gauntlets and boots. Where risk of splashing, also wear an apron. Wear antistatic and flame retardant clothing, if a local risk assessment deems it so.
Hygiene measures	Wash hands before eating, drinking, smoking and using the toilet. Launder contaminated clothing before re-use.

9. Physical and Chemical Properties

Appearance	Gray to black liquid	**Lower explosion limit**	0.6% (V)
Odor	Hydrocarbon	**Upper explosion limit**	6.0% (V)
pH	Not applicable	**Vapor pressure**	300 Pa (20 °C / 68 °F)
Freezing point	Not determined	**Vapor density**	4.8
Boiling point	149 - 213 °C / 300 - 415 °F	**Water solubility**	insoluble
Flash point	40 - 46 °C / 104 - 115 °F	**Partition coefficient: n-octanol/water**	log Pow: 5 - 6.7
Evaporation rate	0.16 (n-butyl acetate = 1)	**Autoignition temperature**	230 - 270 °C / 446 - 518 °F
Specific gravity	1.0 g/ml	**% volatile by weight**	65%

10. Stability and Reactivity

Chemical stability	Stable under normal conditions of use.
Possibility of hazardous reactions	Hazardous polymerization will not occur.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources.
Materials to avoid	Strong oxidizers
Hazardous decomposition products	Hazardous decomposition products are not expected to form during normal storage.

11. Toxicological Information

Acute oral toxicity	LD50 (rat): > 5000 mg/kg. Low toxicity.
Acute inhalation toxicity	LC50 (rat): LC50 greater than near-saturated vapor concentration. Low toxicity.
Acute dermal toxicity	LD50 (rabbit): > 5000 mg/kg. Low toxicity.
Skin corrosion/irritation	Causes mild skin irritation. Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis.
Eye damage/irritation	Not irritating to eye.
Respiratory or skin sensitization	Not expected to be a sensitizer.
Mutagenicity	Not mutagenic.
Carcinogenicity	Not expected to be carcinogenic. No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGIH, OSHA, or NTP.
Reproductive toxicity	Not expected to be a developmental toxicant. Not expected to impair fertility.
STOT - single exposure	May cause drowsiness and dizziness.
STOT - repeated exposure	Kidney: caused kidney effects in male rats which are not considered relevant to humans.
Aspiration toxicity	Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

12. Ecological Information

Aquatic toxicity	Expected to be not toxic at limit of water solubility.
Acute toxicity to fish	Expected to be not toxic at limit of water solubility.
Acute toxicity to aquatic invertebrates	Expected to be not toxic at limit of water solubility.
Acute toxicity to algae	Expected to be not toxic at limit of water solubility.
Chronic toxicity to fish	No data available
Chronic toxicity to aquatic invertebrates	No data available
Biodegradation	Petroleum naphtha expected to be readily biodegradable. Oxidizes rapidly by photo-chemical reactions in air.
Bioaccumulation	Has the potential to bioaccumulate.
Mobility	Floats on water. Adsorbs to soil and has low mobility.
Additional ecological info	Physical properties indicate that hydrocarbon gases will rapidly volatilize from the aquatic environment and that acute and chronic effects would not be observed in practice. Not expected to have ozone depletion potential.

13. Disposal Considerations

Material Disposal	Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses. Waste product should not be allowed to contaminate soil or water.
Regulatory Information	Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.
Packaging Disposal	Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums. Send to drum recycler or metal reclaimer. Comply with any local recovery or waste disposal regulations.

14. Transport Information

UN number	1268
Proper shipping name	Petroleum distillates, n.o.s.
Transport hazard class	3
Packing group	III

Marine pollutant?	Not classified as a marine pollutant

15. Regulatory Information

Listed / complies with the following chemical inventories:	DSL, IECSC, TSCA, EINECS, KECI, PICCS
SARA (311/312) Hazard Classifications	Fire. Chronic health.
SARA (313) Toxic Release Inventory:	This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.

The following ingredients are cited on the lists below:

Chemical Name	CAS Number	List Citations
Naphtha (petroleum), hydrotreated heavy	64742-48-9	17, 18
Graphite	7782-42-5	1, 12, 16, 17, 18

Regulatory lists searched:

1 = ACGIH ALL	6 = TSCA 5a2	11 = CA P65 REPRO	16 = MN RTK
2 = ACGIH A1	7 = TSCA 5e	12 = CA RTK	17 = NJ RTK
3 = ACGIH A2	8 = TSCA 6	13 = IL RTK	18 = PA RTK
4 = OSHA Z	9 = TSCA 12b	14 = LA RTK	19 = RI RTK
5 = TSCA 4	10 = CA P65 CARC	15 = MI 293	20 = MA RTK

16. Other Information

The information contained herein is accurate to the best of our knowledge. Asbury Carbons makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.

NFPA Classification	Health Hazard:	1
	Fire Hazard:	2
	Reactivity Hazard:	0