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Version 1.04

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

<u>Product identifier</u> Product name	80-474 BATTERY TERMINAL PROTECTOR
Recommended use of the chemical and restrictions on use	-
Product code	F00499
<u>Product Type</u> Synonyms	Extremely Flammable Aerosol None
Supplier's details	
Recommended Use Uses advised against	Battery Terminal Protector. No information available
Manufactured For: Kimball Midwest 4800 Roberts Rd. Columbus, OH 43228 800-233-1294	
Emergency telephone number Chemical Emergency Phone Number	CHEMTREC : 1-800-424-9300
Company Emergency Phone Number	800-233-1294

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Reproductive Toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable Aerosols	Category 1
Gases under pressure	Compressed Gas

GHS Label elements, including precautionary statements

Emergency Overview

DANGER

Hazard Statements

Causes skin irritation.

Causes serious eye irritation.

Suspected of damaging fertility or the unborn child

May cause respiratory irritation. May cause drowsiness or dizziness.

May cause damage to organs (Eyes, Skin, Respiratory System, Central Nervous System, and Peripheral Nervous System)

through prolonged and repeated exposure.

May be fatal if swallowed and enters airways.

Extremely Flammable Aerosol

Contains gas under pressure; may explode if heated



Appearance Opaque

Physical state Aerosol

Odor Solvent

Precautionary Statements - Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves, protective clothing,eye protection,face protection. Do not breathe dust, fume, gas, mist, vapors, spray. Use only outdoors or in a well-ventilated area.

Keep away from heat, sparks, open flames, hot surfaces - No smoking.

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

Precautionary Statements - Response

If exposed or concerned: Get medical advice, attention.

Specific treatment (see first aid on this label).

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, attention

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice, attention.

Take off contaminated clothing and wash it before reuse.

IF INHALED : Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor, physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER, doctor, physician. Do NOT induce vomiting.

Precautionary Statements - Storage

Store locked up. Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight Do not expose to temperatures exceeding 122°F (50°C)

Precautionary Statements - Disposal

Dispose of contents, container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)

None

Other information

0% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS # 110-54-3, HEXANE, MAY BE SUBSTITUTED FOR CAS # 64742-49-0, COMMERCIAL HEXANES.

Chemical Name	CAS-No	Weight %*
HEXANE	110-54-3	50-60
PROPANE/ISOBUTANE/N-BUTANE	68476-86-8	20-30
NAPHTHENIC OIL, SEVERLY HYDROT	64742-52-5	10-20
HYDROTREATED HEAVY NAPHTHENIC	64742-48-9	1-10
CORROSION INHIBITOR	MIXTURE	1-10
PETROLEUM DISTILLATES	8052-41-3	1-10

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice	Avoid contact with eyes and skin. Avoid breathing vapors or spray mist.	
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention if irritation persists.	
Skin contact	Rinse immediately with plenty of water for 15 minutes and seek medical advice if skin irritation persists.	
Inhalation	Move to fresh air. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately.	
Ingestion	Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion.	
Most important symptoms/effects, acute and delayed		
Main Symptoms	Causes skin and serious eye irritation. Suspected of damaging fertility or the unborn child. May cause respiratory irritation. May cause drowsiness or dizziness. May cause damage to	

organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water fog. Dry chemical. Foam. Carbon dioxide (CO2). Cool containers / tanks with water spray.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition. Extremely Flammable / Flammable.

Explosion Data Sensitivity to Mechanical Impact none. Sensitivity to Static Discharge Yes.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use shielding to protect fire-fighters from bursting containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Use with adequate ventiliation to keep the exposure levels below the OELS. Follow safe handling advice and personal protective equipment recommendations.	
Environmental precautions		
Environmental precautions	Vapors can accumulate in low areas. Report spills as required by local and federal regulations. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system. Should not be released into the environment.	
Methods and materials for conta	inment and cleaning up	
Methods for Containment	Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains.	
Methods for cleaning up	Soak up with inert absorbent material. Contain liquid and collect with an inter, non-combustible material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly . After cleaning, flush away traces with water. Prevent product from entering drains. Take precautionary measures against static discharges.	
	7. HANDLING AND STORAGE	
Precautions for safe handling		
Advice on safe handling	Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Keep away from open flames, hot surfaces and sources of ignition. Contents under pressure. Do not puncture or incinerate cans. Handle in accordance with good industrial hygiene and safety practice. Take precautionary measures against static discharges.	
Conditions for safe storage, incl	uding any incompatibilities	
Technical measures/Storage conditions	Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces, and sources of ignition. Keep in properly labeled containers. Keep out	

3

of the reach of children. Store locked up.

Strong acids, alkalis, oxidizing agents.

Incompatible products

Aerosol Level

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

ACGIH TLV	OSHA PEL	NIOSH IDLH
TWA: 50 ppm	TWA: 500 ppm	IDLH: 1100 ppm
Skin - potential significant	TWA: 1800 mg/m ³	TWA: 50 ppm
contribution to overall exposure	(vacated) TWA: 50 ppm	TWA: 180 mg/m ³
by the cutaneous route	(vacated) TWA: 180 mg/m ³	
74-98-6: TWA: 1000 ppm	74-98-6:TWA: 1000 ppm	74-98-6:IDLH: 2100 ppm
106-97-8: STEL: 1000 ppm	TWA: 1800 mg/m ³	TWA: 1000 ppm
75-28-5: STEL: 1000 ppm	(vacated) TWA: 1000 ppm	TWA: 1800 mg/m ³
	(vacated) TWA: 1800 mg/m ³	106-97-8:TWA: 800 ppm
	106-97-8: (vacated) TWA: 800	TWA: 1900 mg/m ³
	ppm	75-28-5:TWA: 800 ppm
	(vacated) TWA: 1900 mg/m ³	TWA: 1900 mg/m ³
TW(A: 100 ppm	TM/A: 500 ppm	IDI I I: 20000 mg/m3
TWA: TOO ppm		IDLH: 20000 mg/m ³ Ceiling: 1800 mg/m ³ 15 min
		TWA: 350 mg/m ³
		TWA. 550 mg/m ^e
STEL: 150 ppm	, , , , , , , , , , , , , , , , , , ,	Not Established
		NOT ESTABIISHED
100 ppm	0	
	TWA: 50 ppm Skin - potential significant contribution to overall exposure by the cutaneous route 74-98-6: TWA: 1000 ppm 106-97-8: STEL: 1000 ppm	TWA: 50 ppmTWA: 500 ppmSkin - potential significant contribution to overall exposure by the cutaneous routeTWA: 1800 mg/m³ (vacated) TWA: 50 ppm (vacated) TWA: 50 ppm (vacated) TWA: 180 mg/m³74-98-6: TWA: 1000 ppm 106-97-8: STEL: 1000 ppm 75-28-5: STEL: 1000 ppm 75-28-5: STEL: 1000 ppm (vacated) TWA: 1800 mg/m³ 106-97-8: (vacated) TWA: 1900 mg/m³ (vacated) TWA: 1900 mg/m³ STEL: 100 ppmTWA: 100 ppmTWA: 500 ppm TWA: 2900 mg/m³ (vacated) TWA: 100 ppm

ACGIH: (American Conference of Governmental Industrial Hygienists) OSHA: (Occupational Safety & Health Administration) NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines	Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).
Exposure controls	
Engineering Measures	Ventilation systems. Use adequate ventilation to keep the exposure levels below the occupational exposure limits. Showers Eyewash stations Ventilation systems.
Individual protection measures, suc	h as personal protective equipment
Eye/Face Protection	Safety glasses with side-shields.
Skin and body protection	Chemical resistant apron. Protective gloves.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.
9	. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state Appearance Color	Aerosol Opaque Red	Odor Odor Threshold	Solvent
<u>Property</u> pH Molingfreezing point	<u>Values</u> No information available No information available	<u>Remarks • Methods</u>	
Melting/freezing point Boiling point/boiling range	NO INFORMATION AVAILABLE		
Flash Point	-97 °C / -142 °F	Based on propellant	
Evaporation rate	No information available		
Flammability (solid, gas)	No information available		
Flammability Limits in Air			
upper flammability limit			
lower flammability limit			
Vapor pressure Vapor density			
Specific Gravity	0.718		
Water solubility	No information available		
Partition coefficient: n-octanol/wat	er		
Autoignition temperature	No information available	Not applicable	
Decomposition temperature			
Viscosity	No information available		
Explosive properties			
Other information			

VOC Content(%)

73.57

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

Strong acids, alkalis, oxidizing agents.

Hazardous Decomposition Products

Carbon oxides , Hydrocarbons, Fumes.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	May cause respiratory irritation, May cause drowsiness or dizziness.
Eye contact	Causes serious eye irritation.
Skin contact	Causes skin irritation.

Component Information					
Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation		
HEXANE	= 25 g/kg (Rat)	= 3000 mg/kg (Rabbit)	= 48000 ppm (Rat) 4 h		
110-54-3					
NAPHTHENIC OIL, SEVERLY	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-		
HYDROT					
64742-52-5					
HYDROTREATED HEAVY NAPHTHENIC	> 6000 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	> 8500 mg/m³ (Rat)4 h		
64742-48-9					
Information on toxicological effe	cts				
		eye irritation. Suspected of dama	aing fortility or the unborn shild		
Symptoms			y irritation. May cause damage to		
		ugh prolonged or repeated expos			
	and enters airways.	agit prototiged of repeated expos	sure. May be latar il Swallowed		
	and enters all ways.				
Delayed and immediate effects a	s wall as chronic offacts fro	m short and long torm ovposu			
Delayed and minediale enects a		in short and long-term exposu			
Skin corrosion/irritation	Irritating to skin.				
Eye damage/irritation	Irritating to eyes.				
Sensitization	Not a known sensitizer.				
Germ cell mutagenicity	Not a germ cell mutagen.				
Carcinogenicity	There are no known carcinogenic chemicals in this product.				
IARC: (International Agency for I Group 3 - Not Classifiable as to Ca	Research on Cancer)	5			
	eproductive toxicity This product contains a chemical(s) which is a known or suspected reproductive hazard.				
Specific target organ systemic		tation. May cause drowsiness or			
toxicity (single exposure)					
Specific target organ systemic	May cause damage to tai	rget organs listed below through p	prolonged and repeated		
toxicity (repeated exposure)	exposure.	gg			
Chronic toxicity		berately concentrating and inhali	ng contents may be harmful or		
,		n abuse has been associated wit			
	potential cardiac arrest.				
Target Organ Effects	Eyes, Skin, Respiratory System, Central Nervous System, and Peripheral Nervous System.				
Neurological effects		iberately concentrating and inhali			
Neurological cheeks	fatal.	bolatoly concentrating and initial	ng contonto may be namiai or		
Aspiration hazard	May be fatal if swallowed and enters airways.				
Numerical measures of toxicity	- Product Information				
Unknown Acute Toxicity	0% of the mixture consis	ts of ingredient(s) of unknown to	cicity.		
The following values are calculate			-		
ATEmix (oral)	970 mg/kg				
ATEmix (dermal)	5819 mg/kg				
ATEmix (inhalation-vapor)	106667 mg/l				

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
HEXANE	-	2.1 - 2.98 mg/L LC50	-	-
110-54-3		Pimephales promelas 96h		
		flow-through		
PROPANE/ISOBUTANE/N-	-	-	-	-
BUTANE				
68476-86-8				
NAPHTHENIC OIL,	-	5000 mg/L LC50	-	1000 mg/L EC50 Daphnia
SEVERLY HYDROT		Oncorhynchus mykiss 96h		magna 48h

64742-52-5				
HYDROTREATED HEAVY	-	2200 mg/L LC50	-	-
NAPHTHENIC		Pimephales promelas 96h		
64742-48-9				

Persistence and degradability

Bioaccumulation

Chemical Name	log Pow
PROPANE/ISOBUTANE/N-BUTANE	2.8
68476-86-8	

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment	
Waste Disposal Methods	Dispose of in accordance with federal, state, and local regulations. This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Dispose of in accordance with federal, state, and local regulations. This material, as supplied, is a hazardous waste according to Federal regulations (40 CFR 261). Dispose of in accordance with federal, state, and local regulations.
Contaminated packaging	Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Ground	CONSUMER COMMODITY ORM-D or QUANTITY
ΙΑΤΑ	UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD.QTY.
IMDG	UN1950, AEROSOLS, 2.1, LTD.QTY

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
HEXANE	Х	X	Х	Х	Х	Х	Х	Х
PROPANE/ISOBUTA NE/N-BUTANE	Х	Х	Х	х	Х	Х	Х	Х
NAPHTHENIC OIL, SEVERLY HYDROT	Х	Х	Х	Not listed	Х	Х	Х	Х
HYDROTREATED HEAVY NAPHTHENIC	Х	Х	Х	Not listed	Х	Х	Х	Х
PETROLEUM DISTILLATES	Х	Х	Х	Х	Х	Х	Х	Х

Legend:

 TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

 EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

 ENCS - Japan Existing and New Chemical Substances

 CHINA - China Inventory of Existing Chemical Substances

 KECL - Korean Existing and Evaluated Chemical Substances

 PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does contain a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %*	SARA 313 - Threshold Values %
HEXANE - 110-54-3	110-54-3	50-60	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Star Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	Yes
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does contain substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
HEXANE	5000 lb		RQ 5000 lb final RQ
110-54-3			RQ 2270 kg final RQ

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:



This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Chemical Name	California Prop. 65
HEXANE - 110-54-3	Developmental, Reproductive (Male)50-60 %

U.S. State Right-to-Know Regulations

Chemical Name New Jersey Massachusetts Pennsylvania

HEXANE 110-54-3	Х	Х	Х
PETROLEUM DISTILLATES 8052-41-3	Х	Х	Х
ORGANOPHOSPATE ESTER,ZINC SALT 68649-42-3	X		Х
XYLENE 1330-20-7	Х	Х	Х

EPA Pesticide Registration Number Not applicable

<u>Canada</u>

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

16. OTHER INFORMATION					
NFPA_	Health Hazard 2	Flammability 4	Instability 0	Physical and chemical hazards -	
HMIS	Health Hazard 2*	Flammability 4	Physical Hazard 1	Personal protection B	
Chronic Hazard Star Leg	gend Chronic H	ealth Hazard/ Repeated or p	rolonged exposure may cause o	central nervous system damage	
Prepared By	Regulato	ry Affairs			
Issuing date	16-Dec-2	014			
Revision Date 29-Nov-2018					
Revision Note					

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet