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Version 1.04

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**Product identifier****Product name** 80-474 BATTERY TERMINAL PROTECTOR**Recommended use of the chemical and restrictions on use****Product code** F00499**Product Type** Extremely Flammable Aerosol
Synonyms None**Supplier's details****Recommended Use** Battery Terminal Protector.
Uses advised against 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

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
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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 ventilation 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 containment 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 inert, 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, including 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

of the reach of children. Store locked up.

Incompatible products Strong acids, alkalis, oxidizing agents.

Aerosol Level 3

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
HEXANE 110-54-3	TWA: 50 ppm Skin - potential significant contribution to overall exposure by the cutaneous route	TWA: 500 ppm TWA: 1800 mg/m ³ (vacated) TWA: 50 ppm (vacated) TWA: 180 mg/m ³	IDLH: 1100 ppm TWA: 50 ppm TWA: 180 mg/m ³
PROPANE/ISOBUTANE/N-BUTANE 68476-86-8	74-98-6: TWA: 1000 ppm 106-97-8: STEL: 1000 ppm 75-28-5: STEL: 1000 ppm	74-98-6:TWA: 1000 ppm TWA: 1800 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m ³ 106-97-8: (vacated) TWA: 800 ppm (vacated) TWA: 1900 mg/m ³	74-98-6:IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m ³ 106-97-8:TWA: 800 ppm TWA: 1900 mg/m ³ 75-28-5:TWA: 800 ppm TWA: 1900 mg/m ³
PETROLEUM DISTILLATES 8052-41-3	TWA: 100 ppm	TWA: 500 ppm TWA: 2900 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m ³	IDLH: 20000 mg/m ³ Ceiling: 1800 mg/m ³ 15 min TWA: 350 mg/m ³
XYLENE 1330-20-7	STEL: 150 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 435 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 655 mg/m ³	Not Established

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, such 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	Aerosol	Odor	Solvent
Appearance	Opaque	Odor Threshold	
Color	Red		

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	No information available	
Melting/freezing point	No information available	
Boiling point/boiling range		
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/water		
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.

Ingestion May be fatal if swallowed and enters airways.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
HEXANE 110-54-3	= 25 g/kg (Rat)	= 3000 mg/kg (Rabbit)	= 48000 ppm (Rat) 4 h
NAPHTHENIC OIL, SEVERLY HYDROT 64742-52-5	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-
HYDROTREATED HEAVY NAPHTHENIC 64742-48-9	> 6000 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	> 8500 mg/m ³ (Rat) 4 h

Information on toxicological effects

Symptoms Causes skin and serious eye irritation. Suspected of damaging fertility or the unborn child. May cause drowsiness or dizziness. May cause respiratory irritation. May cause damage to organs (listed below) through prolonged or repeated exposure. May be fatal if swallowed and enters airways.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

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 Research on Cancer)
Group 3 - Not Classifiable as to Carcinogenicity in Humans
Reproductive toxicity This product contains a chemical(s) which is a known or suspected reproductive hazard .
Specific target organ systemic toxicity (single exposure) May cause respiratory irritation. May cause drowsiness or dizziness.
Specific target organ systemic toxicity (repeated exposure) May cause damage to target organs listed below through prolonged and repeated exposure.
Chronic toxicity Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest.
Target Organ Effects Eyes, Skin, Respiratory System, Central Nervous System, and Peripheral Nervous System.
Neurological effects Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.
Aspiration hazard May be fatal if swallowed and enters airways.

Numerical measures of toxicity - Product Information

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

The following values are calculated based on chapter 3.1 of the GHS document .

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 110-54-3	-	2.1 - 2.98 mg/L LC50 Pimephales promelas 96h flow-through	-	-
PROPANE/ISOBUTANE/N- BUTANE 68476-86-8	-	-	-	-
NAPHTHENIC OIL, SEVERLY HYDROT	-	5000 mg/L LC50 Oncorhynchus mykiss 96h	-	1000 mg/L EC50 Daphnia magna 48h

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

Persistence and degradability

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Bioaccumulation

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

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**IATA**

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	X	X	X	X	X	X	X	X
PROPANE/ISOBUTANE/N-BUTANE	X	X	X	x	X	X	X	X
NAPHTHENIC OIL, SEVERLY HYDROT	X	X	X	Not listed	X	X	X	X
HYDROTREATED HEAVY NAPHTHENIC	X	X	X	Not listed	X	X	X	X
PETROLEUM DISTILLATES	X	X	X	X	X	X	X	X

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 110-54-3	5000 lb		RQ 5000 lb final RQ 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	X	X	X
PETROLEUM DISTILLATES 8052-41-3	X	X	X
ORGANOPHOSPHATE ESTER,ZINC SALT 68649-42-3	X		X
XYLENE 1330-20-7	X	X	X

EPA Pesticide Registration Number Not applicable

Canada

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
<i>Chronic Hazard Star Legend</i>		<i>Chronic Health Hazard/ Repeated or prolonged exposure may cause central nervous system damage</i>		

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 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