KIMBALL MIDWEST
Specializing in Materials Management

SAFETY DATA SHEET.

Issuing date 08-Jan-2015 **Revision Date** 08-Jan-2015 **Version** 1.03

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

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 drowsiness or dizziness
May cause damage to organs (central nervous system , lungs ,and respiratory system) through prolonged or 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
Use personal protective equipment as required
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
Do not eat, drink or smoke when using this product
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
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 before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED: Immediately call a POISON CENTER or 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 50 °C/122 °F

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None

Other information

• Toxic to aquatic life with long lasting effects

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, SEVERELY HYDROT	64742-52-5	10-20
HYDROTREATED HEAVY NAPHTHENIC	64742-48-9	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 clothing.Avoid breathing, vapors,mist,or gas.

Eye contact In the case of contact with eyes, rinse immediately with plenty of water for 15 minutes and seek medical advice.

Skin contact Wash off immediately with plenty of water. If skin irritation persists, call a physician.

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 or Poison Control Center 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 May cause skin irritation. Drowsiness. Dizziness. Difficulty breathing.

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
Flammable or extremely flammable aerosol. Container may burst in fire.

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 Ensure adequate ventilation.

Environmental precautions

Environmental precautions Report spills as required by local and federal regulations.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Contain liquid and collect with an inter,non-combustible material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with eyes. Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can. Avoid skin contact. Use with adequate ventiliation. Keep container away from heat, flames, and all other sources of ignition. Keep can away from all sources of electricity such as electric motors and batteries. Do not spray on hot surfaces.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible products Store away from strong oxidizers and acids.

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/m³ (vacated) TWA: 50 ppm (vacated) TWA: 180 mg/m³	IDLH: 1100 ppm TWA: 50 ppm TWA: 180 mg/m³
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/m³ (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m³ 106-97-8: (vacated) TWA: 800 ppm (vacated) TWA: 1900 mg/m³	74-98-6:IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m³ 106-97-8:TWA: 800 ppm TWA: 1900 mg/m³ 75-28-5:TWA: 800 ppm TWA: 1900 mg/m³
PETROLEUM DISTILLATES 8052-41-3	TWA: 100 ppm	TWA: 500 ppm TWA: 2900 mg/m³ (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m³	IDLH: 20000 mg/m³ Ceiling: 1800 mg/m³ 15 min TWA: 350 mg/m³

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 OELs.

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
Appearance opaque
Color red
Odor Solvent
Odor Threshold No information available

Property	Values	Remarks • Methods
pH	No information available	
Melting/freezing point	No information available	
Boiling point/boiling range	No information available	
Flash Point	-96.4 °C / -141 °F	Based on propellant
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
upper flammability limit	No information available	
lower flammability limit	No information available	
Vapor pressure	No information available	
Vapor density	No information available	

Specific Gravity	0.718	
Water solubility	Practically insoluble	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	Not applicable
Decomposition temperature	No information available	
Viscosity	No information available	
Explosive properties	No information available	

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
Store away from strong oxidizers and acids.

Hazardous Decomposition Products
Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Product does not present an acute toxicity hazard based on known information

Inhalation Exposure to high vapour concentrations may cause nervous systems effects such as headache, nausea, and dizziness.

Eye contact May cause slight irritation.

Skin contact Irritating to skin. Prolonged or repeated exposure may cause dermatitis.

Ingestion Not acutely toxic. Aspiration into the lungs during swallowing may cause serious lung damage which may be fatal.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
HEXANE 110-54-3	-	= 3000 mg/kg (Rabbit)	= 48000 ppm (Rat) 4 h
HYDROTREATED HEAVY NAPHTHENIC 64742-48-9	> 5000 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea,and vomiting.May cause mild irritation.Irritating to skin.Prolonged or repeated exposure may cause dermatitis. Not acutely toxic. Aspiration into the lungs during swallowing may cause serious lung damage which may be fatal.

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	No information available.
Germ Cell Mutagenicity	No information available.
Carcinogenicity	There are no known carcinogenic chemicals in this product.
Reproductive toxicity	Suspected of damaging fertility or the unborn child.
Specific target organ systemic toxicity (single exposure)	causes damage to central nervous system and respiratory system.
Specific target organ systemic toxicity (repeated exposure)	Causes damage to organs through prolonged or 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. Prolonged skin contact may defat the skin and produce dermatitis.
Target Organ Effects	Central nervous system, Eyes, Kidney, Peripheral Nervous System (PNS), Respiratory system, Skin.
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)	11122 mg/kg
ATEmix (dermal)	6667 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, SEVERELY HYDROT 64742-52-5	-	5000 mg/L LC50 Oncorhynchus mykiss 96h	-	1000 mg/L EC50 Daphnia magna 48h
HYDROTREATED HEAVY NAPHTHENIC 64742-48-9	-	2200 mg/L LC50 Pimephales promelas 96h	-	-

Persistence and degradability
No information available.

Bioaccumulation
No information available.

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.

Contaminated packaging Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Ground CONSUMER COMMODITY ORM-D

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/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
HEXANE	X	X	X	X	X	X	X	X
PROPANE/ISOBUTANE/N-BUTANE	X	X	X	Not listed	X	X	X	X
NAPHTHENIC OIL, SEVERELY HYDROT	X	X	X	X	X	X	X	X
HYDROTREATED HEAVY NAPHTHENIC	X	X	X	X	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 contains 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 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, contains one or more 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 does not contain any known Proposition 65 chemicals.

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

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 MSDS 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

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Disclaimer
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End of Safety Data Sheet