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Version 2.03

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**Product identifier****Product name** 80-1096 COMPLETE BRAKE FINISHING TREATMENT**Recommended use of the chemical
and restrictions on use****Product code** F00509**Product Type** Extremely flammable aerosol
Synonyms None**Supplier's details****Recommended Use** brake treatment.
Uses advised against No information available**Manufactured For:**
Kimball Midwest
4800 Roberts Rd.
Columbus, OH 43228**Emergency telephone number**
Chemical Emergency Phone Chemtrec 1-800-424-9300
Number
Company Emergency Phone 1-800-233-1294
Number

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
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
May cause drowsiness or dizziness
May be harmful 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

Wash hands thoroughly after handling
Wear protective gloves
Avoid breathing 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 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 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

Chemical Name	CAS-No	Weight %*
PROPANE/ISOBUTANE/N-BUTANE	68476-86-8	50-60
PETROLEUM DISTILLATES	64742-47-8	20-30
HEPTANE	64742-49-0	10-20
NAPHTHENIC OIL, SEVERELY HYDROT	64742-52-5	10-20
ALUMINUM POWDER	7429-90-5	1-10
CASTOR OIL	8001-79-4	1-10
GRAPHITE	7782-42-5	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 skin, eyes, and clothing. Avoid breathing, vapors, mist, or gas.
Eye contact	Immediately flush with plenty of water. Get medical attention if irritation persists.
Skin contact	Wash skin with soap and water. Get medical attention if 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	May cause skin irritation. Inhalation causing Central Nervous System effects. Ingestion causing lung damage.
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Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	Treat symptomatically.
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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 Use with adequate ventilation to keep the exposure levels below the OELS.

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 ventilation. 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
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

HEPTANE 64742-49-0	TLV: 400 ppm STEL: 500 ppm	TWA: 500 ppm	-
ALUMINUM POWDER 7429-90-5	TWA: 1 mg/m ³ respirable fraction	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 15 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 5 mg/m ³ Al Aluminum	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust TWA: 5 mg/m ³ Al
GRAPHITE 7782-42-5	TWA: 2 mg/m ³ respirable fraction all forms except graphite fibers	TWA: 15 mg/m ³ total dust synthetic TWA: 5 mg/m ³ respirable fraction synthetic (vacated) TWA: 2.5 mg/m ³ respirable dust natural (vacated) TWA: 10 mg/m ³ total dust synthetic (vacated) TWA: 5 mg/m ³ respirable fraction synthetic TWA: 15 mppcf natural	IDLH: 1250 mg/m ³ TWA: 2.5 mg/m ³ natural respirable dust

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

black

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

-104.4 °C / -156 °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	0.587
Water solubility	Practically insoluble
Partition coefficient: n-octanol/water	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity	No information available
Explosive properties	No information available

Other information

VOC Content(%) 83.21

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 skin contact may defat the skin and produce 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
PETROLEUM DISTILLATES 64742-47-8	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat) 4 h
HEPTANE 64742-49-0	> 5000 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 73680 ppm (Rat) 4 h

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

Skin corrosion/irritation	Irritating to skin.
Sensitization	No information available.
Germ Cell Mutagenicity	No information available.
Carcinogenicity	There are no known carcinogenic chemicals in this product.
Reproductive toxicity	The ingredients are not reproductive hazards.
Specific target organ systemic toxicity (single exposure)	may cause drowsiness and dizziness.
Specific target organ systemic toxicity (repeated exposure)	No information available.
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 Vascular System (CVS), Eyes, 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)	22663 mg/kg
ATEmix (dermal)	22627 mg/kg
ATEmix (inhalation-gas)	1072883 mg/l
ATEmix (inhalation-vapor)	227 mg/l

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
PROPANE/ISOBUTANE/N-BUTANE 68476-86-8	-	-	-	-
PETROLEUM DISTILLATES 64742-47-8	-	2.2 mg/L LC50 Lepomis macrochirus 96h static 2.4 mg/L LC50 Oncorhynchus mykiss 96h static 45 mg/L LC50 Pimephales promelas 96h flow-through	-	-
NAPHTHENIC OIL, SEVERELY HYDROT 64742-52-5	-	5000 mg/L LC50 Oncorhynchus mykiss 96h	-	1000 mg/L EC50 Daphnia magna 48h

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
or
LIMITED 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/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
PROPANE/ISOBUTANE/N-BUTANE	X	X	X	Not listed	X	X	X	X
PETROLEUM DISTILLATES	X	X	X	X	X	X	X	X
HEPTANE	X	X	X	X	X	X	X	X
NAPHTHENIC OIL, SEVERELY HYDROT	X	X	X	X	X	X	X	X
ALUMINUM POWDER	X	X	X	Not listed	X	X	X	X
CASTOR OIL	X	X	X	Not listed	X	X	X	X
GRAPHITE	X	X	X	Not listed	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 %
ALUMINUM POWDER - 7429-90-5	7429-90-5	1-10	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, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

No warning required.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
ALUMINUM POWDER 7429-90-5	X	X	X
GRAPHITE 7782-42-5	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

<u>NFPA</u>	Health Hazard 2	Flammability 4	Instability 0	Physical and chemical hazards -
<u>HMIS</u>	Health Hazard 2	Flammability 4	Physical Hazard 1	Personal protection B

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 Revision Note
 (M)SDS sections updated

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