

SAFETY DATA SHEET.

Issuing date 14-Jun-2016

Revision Date 08-May-2018

Version 1

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

Product identifier

Product name KLEEN ALL FOAMING DEGREASER

Recommended use of the chemical and restrictions on use

Product Type

Extremely flammable aerosol

Synonyms

None

Supplier's details

Recommended Use

Degreaser.

Uses advised against

No information available

Manufacturer;

Nanoplas, Inc.

2950 Prairie St., SW

Suite 900

Grandville, MI 49418

Emergency telephone number

Chemical Emergency Phone Number

Chemtrec 1-800-262-8200 ID 1195

2. HAZARDS IDENTIFICATION

Classification

Serious eye damage/eye irritation	Category 2B
Flammable aerosols	Category 1
Gases under pressure	Compressed Gas

GHS Label elements, including precautionary statements

Emergency Overview

DANGER

Hazard Statements Causes
eye irritation Extremely
flammable aerosol
Contains gas under pressure; may explode if heated



Appearance Clear

Physical state Aerosol

Odor Solvent

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Wear eye/face protection
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 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

Precautionary Statements - Storage

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

Hazards not otherwise classified (HNOC)

None

Other information

0.5438% 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	1-10

1-BUTOXY-2-PROPANOL	5131-66-8	1-10
SODIUM LAURYL SULFATE	151-21-3	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, skin, and clothing. Avoid breathing vapors mist, or gas.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Skin contact	Wash off immediately with plenty of water. Remove and wash contaminated clothing before re-use. Get medical attention immediately if symptoms occur.
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 eye irritation. May cause skin and respiratory irritation. May be harmful if swallowed and enters airways.
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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. 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.

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.
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Environmental precautions

Environmental precautions Vapors can accumulate in low areas. 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. Avoid skin contact. Use with adequate ventilation. Causes severe skin burns and eye damage. 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 acids,alkalis, or oxidizing agents.

Aerosol Level 1

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

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	Odor	Solvent
Appearance	Clear	Odor Threshold	
Color	colorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	No information available	
Melting/freezing point	No information available	
Boiling point/boiling range	No information available	
Flash Point	-91 °C / -132 °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	0.964	
Water solubility	Soluble in water	
Partition coefficient: n-octanol/water		
Autoignition temperature	No information available	
Decomposition temperature		
Viscosity	No information available	
Explosive properties		

Other information

VOC Content(%)	11.89
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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 acids,alkalis, or oxidizing agents.

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.

KLEEN ALL

Eye contact	Irritating to eyes.
Skin contact	May be irritating to skin. Prolonged skin contact may defat the skin and produce dermatitis.
Ingestion	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
1-BUTOXY-2-PROPANOL 5131-66-8	= 1900 mg/kg (Rat)	-	-
SODIUM LAURYL SULFATE 151-21-3	= 1288 mg/kg (Rat)	= 580 mg/kg (Rabbit)	> 3900 mg/m ³ (Rat) 1 h

Information on toxicological effects

Symptoms	Causes eye irritation. May cause skin and respiratory irritation. May be fatal if swallowed and enters airways.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	May cause skin irritation.
Eye damage/irritation	Irritating to eyes.
Sensitization	None known.
Germ Cell Mutagenicity	Not a germ cell mutagen.
Carcinogenicity	There are no known carcinogenic chemicals in this product.

ACGIH: (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

OSHA: (Occupational Safety & Health Administration)

X - Present

Reproductive toxicity	This product does not contain any known or suspected reproductive hazards.
Specific target organ systemic toxicity (single exposure)	None known.
Specific target organ systemic toxicity (repeated exposure)	None known.

Chronic toxicity	May cause adverse liver effects. 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.
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Target Organ Effects	Central Nervous System (CNS), Eyes, Kidney, Liver, Respiratory system, Skin, Lymphatic System, Gastrointestinal tract (GI).
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Aspiration hazard	Not applicable.
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Numerical measures of toxicity - Product Information

Unknown Acute Toxicity	0.5438% of the mixture consists of ingredient(s) of unknown toxicity
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The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	920 mg/kg
ATEmix (dermal)	2501 mg/kg
ATEmix (inhalation-dust/mist)	35.4 mg/l
ATEmix (inhalation-vapor)	106 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
SODIUM LAURYL SULFATE 151-21-3	53 mg/L EC50 Desmodesmus subspicatus 72h 30 - 100 mg/L EC50 Desmodesmus subspicatus 96h 117 mg/L EC50 Pseudokirchneriella subcapitata 96h 3.59 - 15.6 mg/L EC50 Pseudokirchneriella subcapitata 96h static	8 - 12.5 mg/L LC50 Pimephales promelas 96h static 15 - 18.9 mg/L LC50 Pimephales promelas 96h static 22.1 - 22.8 mg/L LC50 Pimephales promelas 96h static 4.3 - 8.5 mg/L LC50 Oncorhynchus mykiss 96h static 4.62 mg/L LC50 Oncorhynchus mykiss 96h flow-through 4.2 mg/L LC50 Oncorhynchus mykiss 96h 6.2 - 9.6 mg/L LC50 Pimephales promelas 96h 13.5 - 18.3 mg/L LC50 Poecilia reticulata 96h semi- static 10.8 - 16.6 mg/L LC50 Poecilia reticulata 96h static 1.31 mg/L LC50 Cyprinus carpio 96h semi- static 9.9 - 20.1 mg/L LC50 Brachydanio rerio 96h semi- static 4.06 - 5.75 mg/L LC50 Lepomis macrochirus 96h static 4.2 - 4.8 mg/L LC50 Lepomis macrochirus 96h flow-through 4.5 mg/L LC50 Lepomis macrochirus 96h 5.8 - 7.5 mg/L LC50 Pimephales promelas 96h static 10.2 - 22.5 mg/L LC50 Pimephales promelas 96h semi-static 7.97 mg/L LC50 Brachydanio rerio 96h flow-through	-	1.8 mg/L EC50 Daphnia magna 48h

Persistence and degradability

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Bioaccumulation

Chemical Name	log Pow
PROPANE/ISOBUTANE/N-BUTANE 68476-86-8	<=2.8
SODIUM LAURYL SULFATE 151-21-3	1.6

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment****Waste Disposal Methods**

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
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/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
PROPANE/ISOBUTANE/N-BUTANE	X	X	X	Not listed	X	X	X	X
1-BUTOXY-2-PROPANOL	X	X	X	X	X	X	X	X
SODIUM LAURYL SULFATE	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:

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 contains the following substances which are regulated 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):

U.S. State Regulations

California Proposition 65

This product does not contain any known Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

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

<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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Issuing date 14-Jun-2016
Revision Date 08-May-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