

A07244 ZP FOAM HD DEGREASER R06701 20n18

Version 2.2 Revision Date 08/31/2016 Print Date 02/15/2018

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : A07244 ZP FOAM HD DEGREASER R06701 20n18

Material number : 0000000001042221

Manufacturer or supplier's details

Company : Zep Inc.

Address : 1310 Seaboard Industrial Blvd., NW

Atlanta, GA 30318

Telephone : 404-352-1680

For SDS Information : Compliance Services 1-877-428-9937

For a Medical Emergency : 877-541-2016 Toll Free - All Calls Recorded

For a Transportation : CHEMTREC: 800-424-9300 - All Calls Recorded.

In the District of Columbia 202-483-7616

Recommended use of the chemical and restrictions on use

Recommended use : Degreaser

Floor Care

Vehicle Maintenance

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Aerosol containing a liquefied gas	
Colour	colourless	
Odour	characteristic	

GHS Classification

Gases under pressure : Liquefied gas Skin irritation : Category 2 Eye irritation : Category 2A

GHS label elements

Hazard pictograms





Signal word : Warning

Hazard statements : H280 Contains gas under pressure; may explode if heated.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements : Prevention:

P264 Wash skin thoroughly after handling. P280 Wear eye protection/ face protection.



Version 2.2 Revision Date 08/31/2016 Print Date 02/15/2018

P280 Wear protective gloves.

P251 Do not pierce or burn, even after use.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P332 + P313 If skin irritation occurs: Get medical advice/

attention.

P337 + P313 If eye irritation persists: Get medical advice/

attention.

P362 Take off contaminated clothing and wash before reuse.

Storage:

P410 + P403 Protect from sunlight. Store in a well-ventilated

place.

P412 Do not expose to temperatures exceeding 50 °C/ 122 °F.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
ethanol	64-17-5	>= 10 - < 20
butane	106-97-8	>= 1 - < 5
2-butoxyethanol	111-76-2	>= 1 - < 5
2-aminoethanol	141-43-5	>= 1 - < 5
propan-2-ol	67-63-0	>= 1 - < 5
propane	74-98-6	>= 1 - < 5

The exact percentages of disclosed substances are withheld as trade secrets.

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If unconscious place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact : If skin irritation persists, call a physician.

Wash off immediately with plenty of water for at least 15

minutes.

If on clothes, remove clothes.

In case of eye contact : Remove contact lenses.

Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist. If in eyes, rinse with water for 15 minutes.

If swallowed : Keep respiratory tract clear.

Never give anything by mouth to an unconscious person.



Version 2.2 Revision Date 08/31/2016 Print Date 02/15/2018

DO NOT induce vomiting unless directed to do so by a

physician or poison control center. If symptoms persist, call a physician.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray jet

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

: High volume water jet

Specific hazards during

firefighting

Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion

products

: Carbon dioxide (CO2)

Carbon monoxide

Smoke

Nitrogen oxides (NOx)

Specific extinguishing

methods

Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Further information : Standard procedure for chemical fires.

Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Special protective equipment

for firefighters

: Wear self-contained breathing apparatus for firefighting if

necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Evacuate personnel to safe areas. Ensure adequate ventilation. Remove all sources of ignition.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

Prevent product from entering drains.

Methods and materials for containment and cleaning up

: Neutralise with acid.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid contact with skin and eyes.

For personal protection see section 8.



Version 2.2 Revision Date 08/31/2016 Print Date 02/15/2018

Smoking, eating and drinking should be prohibited in the application area.

Always replace cap after use.

Dispose of rinse water in accordance with local and national

regulations.

Do not breathe vapours or spray mist.

Avoid exposure - obtain special instructions before use. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms.

Conditions for safe storage : BEWARE: Aerosol is pressurized. Keep away from direct sun

exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or

red-hot objects. No smoking.

Observe label precautions.

Electrical installations / working materials must comply with

the technological safety standards.

Keep in a dry, cool and well-ventilated place.

Materials to avoid : Do not store near acids.

Strong oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control Basis parameters / Permissible concentration	
ethanol	64-17-5	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,900 mg/m3	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m3	OSHA Z-1
		TWA	1,000 ppm 1,900 mg/m3	OSHA P0
butane	106-97-8	TWA	800 ppm 1,900 mg/m3	NIOSH REL
		TWA	800 ppm 1,900 mg/m3	OSHA P0
2-butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
		TWA	5 ppm 24 mg/m3	NIOSH REL
		TWA	50 ppm 240 mg/m3	OSHA Z-1
		TWA	25 ppm 120 mg/m3	OSHA P0
		PEL	20 ppm 97 mg/m3	CAL PEL
2-aminoethanol	141-43-5	TWA	3 ppm	ACGIH
		STEL	6 ppm	ACGIH
		TWA	3 ppm 8 mg/m3	NIOSH REL
		ST	6 ppm	NIOSH REL



A07244 ZP FOAM HD DEGREASER R06701 20n18

Version 2.2 Revision Date 08/31/2016 Print Date 02/15/2018

			15 mg/m3	
		TWA	3 ppm 6 mg/m3	OSHA Z-1
		STEL	6 ppm 15 mg/m3	OSHA P0
		TWA	3 ppm 8 mg/m3	OSHA P0
propan-2-ol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m3	NIOSH REL
		ST	500 ppm 1,225 mg/m3	NIOSH REL
		TWA	400 ppm 980 mg/m3	OSHA Z-1
		TWA	400 ppm 980 mg/m3	OSHA P0
		STEL	500 ppm 1,225 mg/m3	OSHA P0
propane	74-98-6	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,800 mg/m3	NIOSH REL
		TWA	1,000 ppm 1,800 mg/m3	OSHA Z-1
		TWA	1,000 ppm 1,800 mg/m3	OSHA P0

Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
2-BUTOXYETHANOL	111-76-2	Butoxyacetic acid (BAA)	Urine	End of shift (As soon as possible after exposure ceases)	200.mg/g Creatinine	ACGIH BEI
PROPAN-2-OL	67-63-0	Acetone	Urine	End of shift at end of workwee k	40 mg/l	ACGIH BEI

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust

ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Hand protection

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection : Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal processing

problems.



A07244 ZP FOAM HD DEGREASER R06701 20n18

Version 2.2 Revision Date 08/31/2016 Print Date 02/15/2018

Ensure that eyewash stations and safety showers are close to

the workstation location.

Skin and body protection : Impervious clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Aerosol containing a liquefied gas

Colour : colourless
Odour : characteristic

Odour Threshold : No data available

pH : 10.5 - 11.5

Melting point/freezing point : No data available

Boiling point : $98.3 \, ^{\circ}\text{C}$ Flash point : $< 60 \, ^{\circ}\text{C}$

Evaporation rate : < 1

Flammability (solid, gas) : The product is not flammable.

Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

Vapour pressure : No data available

Relative vapour density : No data available

Density : 0.97 g/cm3

Solubility(ies)

Water solubility : soluble

Solubility in other solvents : not determined

Partition coefficient: n-

octanol/water

: No data available

Auto-ignition temperature : not determined

Thermal decomposition : No data available

Viscosity

Viscosity, kinematic : No data available

Heat of combustion : < 20 kJ/g



A07244 ZP FOAM HD DEGREASER R06701 20n18

Version 2.2 Revision Date 08/31/2016 Print Date 02/15/2018

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable

Chemical stability : Stable under normal conditions.

Possibility of hazardous

reactions

Vapours may form explosive mixture with air.
 No decomposition if stored and applied as directed.

The decempention in elered and applied de alleet

Conditions to avoid : Heat, flames and sparks.

Extremes of temperature and direct sunlight.

Incompatible materials : Acids

Strong oxidizing agents

Hazardous decomposition

products

: Carbon monoxide, carbon dioxide and unburned

hydrocarbons (smoke). Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Carcinogenicity:

IARC No component of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

ACGIH Confirmed animal carcinogen with unknown relevance to

humans

2-butoxyethanol 111-76-2

OSHA No component of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by OSHA.

NTP No component of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : > 10 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method



A07244 ZP FOAM HD DEGREASER R06701 20n18

Version 2.2 Revision Date 08/31/2016 Print Date 02/15/2018

Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg

Method: Calculation method

Components:

ethanol:

Acute oral toxicity : LD50 Oral Rat: 7,060 mg/kg

Acute inhalation toxicity : LC50 Rat: 124.7 mg/l

Exposure time: 4 h

butane:

Acute inhalation toxicity : LC50 Mouse: 1,237 mg/l

Exposure time: 2 h

LC50 Rat: 1,355 mg/l

2-aminoethanol:

Acute oral toxicity : LD50 Oral Mouse: 700 mg/kg

LD50 Oral Rat: 1,515 mg/kg

Acute inhalation toxicity : LC50 Mouse: > 1.21 mg/l

propan-2-ol:

Acute oral toxicity : LD50 Oral Rat: 4,396 mg/kg

Method: Calculation method

propane:

Acute inhalation toxicity : LC50 Mouse: 1,237 mg/l

Exposure time: 2 h

LC50 Rat: 658 mg/l Exposure time: 4 h

LC50 Rat: 1,355 mg/l

Skin corrosion/irritation

Product:

Remarks: Irritating to skin.

Serious eye damage/eye irritation

Product:

Remarks: Severe eye irritation

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity



A07244 ZP FOAM HD DEGREASER R06701 20n18

Version 2.2 Revision Date 08/31/2016 Print Date 02/15/2018

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

ethanol:

butane:

2-butoxyethanol:

2-aminoethanol:

propan-2-ol:

propane:

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

Product:

Partition coefficient: n-

: Remarks: No data available

octanol/water Components:

butane:

Partition coefficient: n-

: Pow: 2.89

octanol/water

Mobility in soil

No data available

Other adverse effects

No data available



A07244 ZP FOAM HD DEGREASER R06701 20n18

Version 2.2 Revision Date 08/31/2016 Print Date 02/15/2018

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of

Stratospheric Ozone - CAA Section 602 Class I

Substances

Remarks This product neither contains, nor was manufactured

with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A

+ B).

Additional ecological

information

: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Do not dispose of waste into sewer.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

Dispose of in accordance with local regulations.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product. Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA): ORM-D, CONSUMER COMMODITY

Transportation Regulation: IMDG (Vessel):

UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

Transportation Regulation: IATA (Cargo Air):

UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

Transportation Regulation: IATA (Passenger Air):

UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

Transportation Regulation: TDG (Canada):

UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.



Version 2.2 Revision Date 08/31/2016 Print Date 02/15/2018

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
2,2'-iminodiethanol	111-42-2	100	*

^{*:} Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard

Sudden Release of Pressure Hazard

SARA 302 : No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65 WARNING! This product contains a chemical known to the

State of California to cause cancer.

2,2'-iminodiethanol 111-42-2

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive

harm.

methanol 67-56-1

The components of this product are reported in the following inventories:

TSCA On TSCA Inventory

DSL This product contains one or several components that are not on the

Canadian DSL nor NDSL.

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

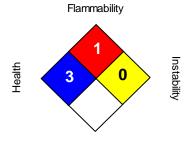
SECTION 16. OTHER INFORMATION



Revision Date 08/31/2016 Version 2.2 Print Date 02/15/2018

Further information

NFPA:



Special hazard.

HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	2

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic

OSHA - GHS Label Information:

Hazard pictograms





Signal word Warning:

Hazard statements Contains gas under pressure; may explode if heated. Causes skin irritation. Causes

serious eye irritation.

Precautionary statements

Prevention: Wash skin thoroughly after handling. Wear eye protection/face protection.

Wear protective gloves. Do not pierce or burn, even after use.

Response: IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and w ash before reuse.

Storage: Protect from sunlight. Store in a well-ventilated place. Do not expose to

temperatures exceeding 50 °C/ 122 °F.

Version:	2.2
Revision Date:	08/31/2016
Print Date:	02/15/2018

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®,Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next Dimension™, Petro®, i-Chem®, TimeMist®, TimeWick™, MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National™, FC Forward Chemicals®,Rexodan®, Mykal™, and a number of private labeled brands.



A07244 ZP FOAM HD DEGREASER R06701 20n18

Version 2.2 Revision Date 08/31/2016

Print Date 02/15/2018