

Zep Inc.
Compliance Services
3330 Cumberland Blvd., Suite 700
Atlanta GA 30339
Fax 404.603.7576
compliance.services@zep.com

Subject: Product Safety Data Sheets – Material 504200008 – K00073 KIA A/C CLN & REFRESH KIT 10/CASE.

Dear Customer:

This document is a compilation of individual product Safety Data Sheets (SDS) for the products included in Material 504200008 – K00073 KIA A/C CLN & REFRESH KIT 10/CASE. The product SDS included are:

S476 - Aj0405 Wip Kia Foam Evap CL 20. T476 - Aj2404 Wip Kia Intake Refreshe.

Sincerely,

Zep Regulatory Team

Version 3.0 Revision Date 04/12/2018 Print Date 03/14/2025

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : AJ0405 KIA FOAM EVAP CLNR_NS_1EA 20N18

Material number : S476

Manufacturer or supplier's details

Company :

Address :

Telephone :

Emergency telephone numbers

For SDS Information :
For a Medical Emergency :
For a Transportation :
Emergency

Recommended use of the chemical and restrictions on use

Recommended use : Vehicle Maintenance

Note: This product is labeled as a consumer product in accordance with the United States Consumer Product Safety Commission regulations. The warnings presented below in this Safety Data Sheet (SDS) comply with the 2012 OSHA Hazard Communication Standard (GHS - Globally Harmonized System of Classification and Labeling). The requirements for the labeling and warnings of consumer products may differ from those required for GHS based hazard communication.

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Aerosol containing a liquefied gas
Colour	colourless
Odour	alcohol-like, ammoniacal

GHS Classification

Gases under pressure : Liquefied gas Skin corrosion : Category 1 Serious eye damage : Category 1

GHS label elements

Hazard pictograms





Signal word : Danger

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

H314 Causes severe skin burns and eye damage.

Version 3.0 Revision Date 04/12/2018 Print Date 03/14/2025

Precautionary statements : Prevention:

P260 Do not breathe dust or mist.

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ protective clothing/ eye

protection/ face protection.

P251 Pressurized container: Do not pierce or burn, even after

use.

Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT

induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air

and keep comfortable for breathing. Immediately call a

POISON CENTER/doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON

CENTER/doctor.

P363 Wash contaminated clothing before reuse.

Storage:

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

place. **Disposal:**

P501 Dispose of contents/container in accordance with local

regulation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Chemical name	CAS-No.	Concentration [%]
butane	106-97-8	>= 5 - < 10
propan-2-ol	67-63-0	>= 1 - < 3
propane	74-98-6	>= 1 - < 3

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.

Get medical attention immediately if symptoms occur.

If inhaled : If unconscious, place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact : Remove contaminated clothing and shoes.

Wash contaminated clothing before re-use.

Wash off immediately with plenty of water for at least 15

minutes

If skin irritation persists, call a physician.

Version 3.0 Revision Date 04/12/2018 Print Date 03/14/2025

In case of eye contact : Remove contact lenses.

Protect unharmed eye.

Keep eye wide open while rinsing.

Rinse immediately with plenty of water for at least 15 minutes.

If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

DO NOT induce vomiting unless directed to do so by a

physician or poison control center. Take victim immediately to hospital.

Most important symptoms and effects, both acute and

Effects are dependent on exposure (dose, concentration, contact time).

delayed

Effects are immediate and delayed.

Symptoms may include blistering, irritation, burns, and pain.

Causes severe skin burns and eye damage.

Review section 2 of SDS to see all potential hazards.

Notes to physician : Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray

Dry chemical

Carbon dioxide (CO2) Alcohol-resistant foam High volume water jet

Unsuitable extinguishing

media

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

Specific extinguishing

methods

: Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Further information : Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

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. Ensure adequate ventilation.

Remove all sources of ignition.
Evacuate personnel to safe areas.

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

Environmental precautions : Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for : Soak up with inert absorbent material (e.g. sand, silica gel,

Version 3.0 Revision Date 04/12/2018 Print Date 03/14/2025

containment and cleaning up acid binder, universal binder, sawdust).

Sweep up or vacuum up spillage and collect in suitable

container for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Do not breathe vapours/dust.

Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

Dispose of rinse water in accordance with local and national

regulations.

Always replace cap after use.

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.

Observe label precautions.

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

Electrical installations / working materials must comply with

the technological safety standards.

Materials to avoid : Store and keep away from, oxidizing agents and acids.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
butane	106-97-8	TWA	800 ppm 1,900 mg/m3	NIOSH REL
		TWA	800 ppm 1,900 mg/m3	OSHA P0
		PEL	800 ppm 1,900 mg/m3	CAL PEL
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
		PEL	400 ppm 980 mg/m3	CAL PEL
		STEL	500 ppm 1,225 mg/m3	CAL PEL
propane	74-98-6	TWA	1,000 ppm	ACGIH

Version 3.0 Revision Date 04/12/2018 Print Date 03/14/2025

TWA	1,000 ppm	NIOSH REL
	1,800 mg/m3	
TWA	1,000 ppm	OSHA Z-1
	1,800 mg/m3	
TWA	1,000 ppm	OSHA P0
	1,800 mg/m3	
PEL	1,000 ppm	CAL PEL
	1,800 mg/m3	

Biological occupational exposure limits

Component	CAS-No.	Control	Biological	Sampling	Permissible	Basis
		parameters	specimen	time	concentration	
PROPAN-2-OL	67-63-0	Acetone	Urine	End of	40 mg/l	ACGIH BEI
				shift at		
				end of		
				workwee		
				k		

Engineering measures : effective ventilation in all processing areas

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

Material : Protective gloves

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection : Access to clean water to rinse eyes must be available, options

include: eye wash stations or showers, or eye wash bottles

with pure water. Safety glasses

Wear face-shield and protective suit for abnormal processing

problems.

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 : alcohol-like, ammoniacal

Odour Threshold : No data available

pH : 12.5

Melting point/freezing point : No data available Boiling point : 82.2 - 100 °C

Version 3.0 Revision Date 04/12/2018 Print Date 03/14/2025

Flash point :

No data available

Evaporation rate : No data available

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

Upper explosion limit : No data available
Lower explosion limit : No data available
Vapour pressure : No data available
Relative vapour density : No data available
Density : No data available

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 : 4.58 kJ/g

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.

Conditions to avoid : Heat, flames and sparks.

Extremes of temperature and direct sunlight.

Incompatible materials : Acids

Oxidizing agents

Hazardous decomposition

products

: Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical

Condition

: None known.

Version 3.0 Revision Date 04/12/2018 Print Date 03/14/2025

Symptoms of Overexposure : Effects are dependent on exposure (dose, concentration,

contact time).

Effects are immediate and delayed.

Symptoms may include blistering, irritation, burns, and pain.

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 No component of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by ACGIH.

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

equal to 0.1% is on OSHA's list of regulated carcinogens.

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

Components:

propan-2-ol:

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

Method: Calculation method

Skin corrosion/irritation

Product:

Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation

Product:

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

Version 3.0 Revision Date 04/12/2018 Print Date 03/14/2025

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-

octanol/water Components:

butane:

Partition coefficient: n-

octanol/water

: Pow: 2.89

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of

: Remarks: No data available

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

Version 3.0 Revision Date 04/12/2018 Print Date 03/14/2025

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with local regulations.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

The product should not be allowed to enter drains, water

courses or the soil.

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):

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

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.

SECTION 15. REGULATORY INFORMATION

TSCA list : No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification

requirements.

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
ammonia, aqueous solution	1336-21-6	1000	*

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

Version 3.0 Revision Date 04/12/2018 Print Date 03/14/2025

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

SARA 311/312 Hazards : Gases under pressure

Skin corrosion or irritation

Serious eye damage or eye irritation

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

This product does not contain any chemicals known to State of

California to cause cancer, birth defects, or any other

reproductive harm.

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

DSL All components of this product are on the Canadian DSL

TSCA On TSCA Inventory

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

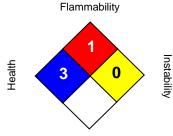
Inventory Acronym and Validity Area Legend:

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

SECTION 16. OTHER INFORMATION

Further information





Special hazard.

HMIS III:

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	1

0 = not significant, 1 =Slight,

2 = Moderate, 3 = High

4 = Extreme, * = Chronic

Version 3.0 Revision Date 04/12/2018 Print Date 03/14/2025

OSHA GHS Label Information:

Hazard pictograms





Signal word : Danger:

Hazard statements : Contains gas under pressure; may explode if heated. Causes severe skin burns and

eye damage.

Precautionary statements

Prevention: Do not breathe dust or mist. Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection. Pressurized

container: Do not pierce or burn, even after use.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before

Storage: Protect from sunlight. Store in a well-ventilated place.

Disposal: Dispose of contents/container in accordance with local regulation.

Version:	3.0
Revision Date:	04/12/2018
Print Date:	03/14/2025

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.

Version 4.0 Revision Date 11/05/2021 Print Date 03/14/2025

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : KIA A/C INTAKE REFRESHER STEP 2 OF 2 6N4

Material number : T476

Manufacturer or supplier's details

Company :

Address :

Telephone :

Emergency telephone numbers

For SDS Information :
For a Medical Emergency :
For a Transportation :

Emergency

Recommended use of the chemical and restrictions on use

Recommended use : 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 Eye irritation : Category 2A

GHS label elements

Hazard pictograms



Exclamation

Signal word : Warning

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

H319 Causes serious eye irritation.

Precautionary statements : **Prevention**:

P210 Keep away from heat, hot surfaces, sparks, open flames

Version 4.0 Revision Date 11/05/2021 Print Date 03/14/2025

and other ignition sources. No smoking. P264 Wash skin thoroughly after handling.

P251 Pressurized container: Do not pierce or burn, even after

use.

P280 Wear eye protection/ face protection.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

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

attention. **Storage:**

P410 Protect from sunlight.

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

Disposal:

P501 Dispose of contents/container in accordance with local

regulation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
propan-2-ol	67-63-0	>= 10 - < 20
1,1-difluoroethane	75-37-6	>= 5 - < 10
sodium nitrite	7632-00-0	>= 0.1 - < 1

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

SECTION 4. FIRST AID MEASURES

General advice : Do not leave the victim unattended.

Get medical attention.

Show this safety data sheet to the doctor in attendance.

Move out of dangerous area.

If inhaled : If unconscious, place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact : Remove contaminated clothing and shoes.

If symptoms persist, call a physician.

Wash off immediately with plenty of water for at least 15

minutes.

Wash contaminated clothing before reuse.

In case of eye contact : Remove contact lenses.

Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes.

If swallowed : Keep respiratory tract clear.

Version 4.0 Revision Date 11/05/2021 Print Date 03/14/2025

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

DO NOT induce vomiting unless directed to do so by a

physician or poison control center.

Most important symptoms and effects, both acute and

Notes to physician

delaved

: Effects are dependent on exposure (dose, concentration,

contact time).

Effects are immediate and delayed.

Symptoms may include irritation, redness, pain, and rash.

Causes serious eye irritation.

Review section 2 of SDS to see all potential hazards.

Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Alcohol-resistant foam

Carbon dioxide (CO2)

Dry chemical Water spray jet

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

Fluorine compounds

Specific extinguishing

methods

: Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Further information : Standard procedure for chemical fires.

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.

Ensure adequate ventilation. Remove all sources of ignition.

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

Evacuate personnel to safe areas.

Environmental precautions : Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains, inform

respective authorities.

Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Sweep up or vacuum up spillage and collect in suitable

container for disposal.

SECTION 7. HANDLING AND STORAGE

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

Version 4.0 Revision Date 11/05/2021 Print Date 03/14/2025

For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

Take precautionary measures against static discharges.

Provide sufficient air exchange and/or exhaust in work rooms.

Always replace cap after use.

Dispose of rinse water in accordance with local and national

regulations.

Do not breathe vapours or spray mist.

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.

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

Electrical installations / working materials must comply with

the technological safety standards.

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 parameters / Permissible concentration	Basis
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
		PEL	400 ppm 980 mg/m3	CAL PEL
		STEL	500 ppm 1,225 mg/m3	CAL PEL
1,1-difluoroethane	75-37-6	TWA	1,000 ppm	US WEEL

Biological occupational exposure limits

Component	CAS-No.	Control	Biological	Sampling	Permissible	Basis
		parameters	specimen	time	concentration	
PROPAN-2-OL	67-63-0	Acetone	Urine	End of shift at end of workwee k	40 mg/l	ACGIH BEI

Version 4.0 Revision Date 11/05/2021 Print Date 03/14/2025

Engineering measures : effective ventilation in all processing areas

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

Material : Protective gloves

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection : Safety goggles

Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles

include: eye wash stations or showers, or eye wash bottles

with pure water.
: Impervious clothing

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 : Wash hands before breaks and at the end of workday.

When using do not eat, drink or smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Aerosol containing a liquefied gas

Colour : colourless
Odour : characteristic
Odour Threshold : No data available

pH : 11

Melting point/freezing point : No data available Boiling point : 82.2 - 100 °C

Flash point

Not applicable

Evaporation rate : No data available

Flammability (solid, gas,

liquid)

: Not classified as a flammability hazard

Upper explosion limit : No data available
Lower explosion limit : No data available
Vapour pressure : No data available

Density : 0.95 g/cm3

Solubility(ies)

Water solubility : soluble

Partition coefficient: n-

octanol/water

: No data available

Auto-ignition temperature : not determined

Version 4.0 Revision Date 11/05/2021 Print Date 03/14/2025

Thermal decomposition : No data available

Viscosity

Viscosity, kinematic : No data available

Heat of combustion : 7.2 kJ/g

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable

Chemical stability : Stable under normal conditions.

Possibility of hazardous

reactions

: No decomposition if stored and applied as directed.

Conditions to avoid : Heat, flames and sparks.

Extremes of temperature and direct sunlight.

Incompatible materials : Acids

Strong oxidizing agents : Carbon oxides

Hazardous decomposition

products

Nitrogen oxides (NOx)

Hydrocarbons

Smoke

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical

Condition

: None known.

Symptoms of Overexposure : Effects are dependent on exposure (dose, concentration,

contact time).

Effects are immediate and delayed.

Symptoms may include irritation, redness, pain, and rash.

Causes serious eye irritation.

Review section 2 of SDS to see all potential hazards. Treat symptomatically. Symptoms may be delayed.

Carcinogenicity:

IARC Group 2A: Probably carcinogenic to humans

sodium nitrite 7632-00-0

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

equal to 0.1% is identified as a carcinogen or potential

carcinogen by ACGIH.

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

equal to 0.1% is on OSHA's list of regulated carcinogens.

Version 4.0 Revision Date 11/05/2021 Print Date 03/14/2025

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

Components:

propan-2-ol:

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

Method: Calculation method

1,1-difluoroethane:

Acute inhalation toxicity : LC50 Mouse: 977,000 mg/l

Exposure time: 2 h

Skin corrosion/irritation

Product:

Remarks: May irritate skin.

Serious eye damage/eye irritation

Product:

Remarks: Severe eye irritation

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

Product:

Version 4.0 Revision Date 11/05/2021 Print Date 03/14/2025

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

Product:

Partition coefficient: n-

octanol/water Components: propan-2-ol:

Partition coefficient: n-

octanol/water

: Remarks: No data available

: log Pow: 0.05

Mobility in soil

No data available

Other adverse effects

No data available

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

: An environmental hazard cannot be excluded in the

event of unprofessional handling or disposal.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water

courses or the soil.

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.

Version 4.0 Revision Date 11/05/2021 Print Date 03/14/2025

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):

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

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.

SECTION 15. REGULATORY INFORMATION

TSCA list : No substances are subject to a Significant New Use Rule.

The following substance(s) is/are subject to TSCA 12(b) export

notification requirements:

sodium nitrite 7632-00-0

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
sodium nitrite	7632-00-0	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 : Gases under pressure

Serious eye damage or eye irritation

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

requirements of SARA Title III, Section 302.

Version 4.0 Revision Date 11/05/2021 Print Date 03/14/2025

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 can expose you to chemicals including biphenyl-2-ol, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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

DSL All components of this product are on the Canadian DSL

TSCA On TSCA Inventory

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 11/05/2021 Print Date 03/14/2025

Further information

NFPA:

HEALTH	3
FLAMMABILITY	1
INSTABILITY 0	
SPECIAL HAZARD.	

0 = not significant, 1 =Slight,

2 = Moderate, 3 = High

4 = Extreme

HMIS III:

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	1

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High 4 = Extreme, * = Chronic

OSHA GHS Label Information:

Hazard pictograms



Exclamation

Gas cylinder

Signal word Hazard statements Precautionary statements

Contains gas under pressure; may explode if heated. Causes serious eye irritation.

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wash skin thoroughly after handling. Pressurized container: Do not pierce or burn, even after use. Wear eye protection/ face protection.

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.

Storage: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122

Disposal: Dispose of contents/container in accordance with local regulation.

Version 4.0 Revision Date 11/05/2021 Print Date 03/14/2025

Version:	4.0
Revision Date:	11/05/2021
Print Date:	03/14/2025

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.