

Safety Data Sheet

according to 29 CFR 1910.1200(g)

Revision No: 2,14
Revision date: 05/18/2021
Print date: 06/28/2021

US Formliner CR Type N (all elutriation depths)

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1. Identification

Product identifier

US Formliner CR Type N (all elutriation depths)

Recommended use of the chemical and restrictions on use

Use of the substance/mixture

Concrete retarder.

Details of the supplier of the safety data sheet

Company name:	US Formliner, Inc.	
Street:	380 Commerce Blvd.	
Place:	USA Athens, GA 30606	
Telephone:	(706) 549-6787	Telefax: (706) 355-9199
e-mail:	info@USFormliner.com	
Contact person:	Brian Drummond	Telephone: (706) 549-6787
e-mail:	brian.drummond@usformliner.com	

Emergency phone number: INFOTRAC - (800) 535-5053 (Continental US); (352) 323-3500 (Outside US)

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200

Flammable liquids: Flam. Liq. 2
Aspiration hazard: Asp. Tox. 1
Serious eye damage/eye irritation: Eye Irrit. 2A
Specific target organ toxicity single exposure: STOT SE 3 (narcotic effects)
OSHA information: This mixture is classified as hazardous according to 29CFR 1910.1200.

Label elements

29 CFR Part 1910.1200

Signal word: Danger

Pictograms:



Hazard statements

Highly flammable liquid and vapor
May be fatal if swallowed and enters airways
Causes serious eye irritation
May cause drowsiness or dizziness

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Avoid breathing gas/mist/vapors.
Wear protective gloves and eye/face protection.
If swallowed: Immediately call a poison center/doctor.
Do NOT induce vomiting.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Avoid release to the environment.

Hazards not otherwise classified

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Vapours may form explosive mixtures with air.

Further information:

SECTION 12: Ecological information

3. Composition/information on ingredients

Mixtures

Chemical characterization

Mixture of organic acids, solventborne

Hazardous components

CAS No	Components	Quantity
64742-49-0	Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha	2,5 - 25 %
64742-49-0	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	2,5 - 25 %
77-92-9	citric acid	5 - 10 %
87-69-4	2,3-Dihydroxybutanedioic acid	1 - 3 %

Further Information

The hazardous components' concentrations are given in ranges due to the variability of the product's constitution.

3 percent of the mixture consists of ingredient(s) of unknown acute toxicity (inhalative).

4. First-aid measures

Description of first aid measures

General information

Move victim out of danger zone. First aider: Pay attention to self-protection!

Change contaminated, saturated clothing. Do not leave affected person unattended.

After inhalation

Remove casualty to fresh air and keep warm and at rest.

In all cases of doubt, or when symptoms persist, seek medical advice.

If victim is at risk of losing consciousness, position and transport on their side.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

In case of skin reactions, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

Consult an ophthalmologist.

After ingestion

Aspiration hazard. If swallowed, rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

Call a physician immediately.

Most important symptoms and effects, both acute and delayed

The following symptoms may occur: Headache, Cough, Nausea, Dizziness, Impaired consciousness, Respiratory complaints, Pulmonary oedema.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

5. Fire-fighting measures

Extinguishing media

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Suitable extinguishing media

Foam, Water mist, Carbon dioxide (CO₂), Extinguishing powder.
Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

Full water jet.

Specific hazards arising from the chemical

Flammable. Vapors may form explosive mixtures with air.
In case of fire may be liberated: Carbon dioxide (CO₂), Carbon monoxide (CO). Burning produces heavy smoke. Vapors are heavier than air. Reignition possible over considerable distance.

Special protective equipment and precautions for fire-fighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.
Use water spray/stream to protect personnel and to cool endangered containers. Suppress gases/vapors/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Additional information

Flammability classification (OSHA 29 CFR 1910.106): 1 B

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

General measures

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/vapor. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

Methods and material for containment and cleaning up

For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Other information

Treat the recovered material as prescribed in the section on waste disposal.

Reference to other sections

Safe handling: see section 7
Personal protection equipment (PPE): see section 8
Disposal: see section 13

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Provide adequate ventilation. Do not breathe mist/vapors/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.
Vapors may form explosive mixtures with air.

Advice on general occupational hygiene

Change contaminated, saturated clothing. Draw up and observe skin protection programme. Wash hands before breaks and after work. When using do not eat or drink.

Further information on handling

Additional information: See section 8.

Conditions for safe storage, including any incompatibilities

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Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. The floor should be leak tight, jointless and not absorbent.

Never use pressure to empty container.

Hints on joint storage

Do not store together with: Pyrophoric or self-heating substances, Oxidising agent.

Keep away from food, drink and animal feedingstuffs.

8. Exposure controls/personal protection

Control parameters

Additional advice on limit values

To date, no national critical limit values exist.

Exposure controls



Appropriate engineering controls

Provide adequate ventilation. If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tightly sealed safety glasses.

Hand protection

Suitable gloves type Gloves with long cuffs.

Suitable material:

- NBR (Nitrile rubber)

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Skin protection

Wear anti-static footwear and clothing

Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Environmental exposure controls

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	Liquid
Color:	see label
Odor:	like: hydrocarbons, aliphatic.
Odour threshold:	No information available.

Test method

Changes in the physical state

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	105 °C

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Flash point: > 10 °C

Flammability

Solid/liquid: not applicable

Gas: not applicable

Explosive properties

Vapors may form explosive mixtures with air.

Lower explosion limits: 0,6 vol. %

Upper explosion limits: 7,0 vol. %

Auto-ignition temperature: > 200 °C

Self-ignition temperature

Solid: not applicable

Gas: not applicable

Decomposition temperature: not determined

Oxidizing properties

Not oxidising.

pH-Value: not applicable

Viscosity / dynamic: not determined

Flow time:
(at 20 °C) 30 s 4 DIN 53211

Water solubility:
(at 21 °C) Immiscible

Solubility in other solvents

not determined

Partition coefficient n-octanol/water: not determined

Vapor pressure: not determined

Density (at 21 °C): 1,1 g/cm³ ISO 2811

Relative vapour density: not determined

Other information

Other safety characteristics

Solvent content: 40 %

Solid content: not determined

Further Information

No further relevant information available.

10. Stability and reactivity

Reactivity

Flammable, Ignition hazard.

Chemical stability

Stability: Stable

The product is stable under storage at normal ambient temperatures.

Possibility of hazardous reactions

Hazardous reactions: Will not occur

Vapors may form explosive mixtures with air.

Conditions to avoid

Keep away from heat. Protect from direct sunlight.

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Take precautionary measures against static discharges.

Incompatible materials

strong.

Hazardous decomposition products

No known hazardous decomposition products.

11. Toxicological information

Information on toxicological effects

Route(s) of Entry

Inhalation: Yes. Skin contact: Yes. Eye contact: Yes. Ingestion: Yes.

Toxicokinetics, metabolism and distribution

It can take hours before symptoms of poisoning show up following exposure.

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Components				
	Exposure route	Dose	Species	Source	Method
64742-49-0	Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha				
	oral	LD50 > 5000 mg/kg	Rat		
	dermal	LD50 > 2800 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 23,3 mg/l	Rat		
64742-49-0	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics				
	oral	LD50 > 5000 mg/kg	Rat		
	dermal	LD50 > 5000 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 > 4951 mg/l	Rat		
77-92-9	citric acid				
	oral	LD50 5400 mg/kg	Mouse	MSDS	

Irritation and corrosivity

Causes serious eye irritation

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitizing effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - single exposure

May cause drowsiness or dizziness (Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha; Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics)

Specific target organ toxicity (STOT) - repeated exposure

Based on available data, the classification criteria are not met.

Carcinogenicity (OSHA): No ingredient of this mixture is listed.

Carcinogenicity (IARC): No ingredient of this mixture is listed.

Carcinogenicity (NTP): No ingredient of this mixture is listed.

Aspiration hazard

May be fatal if swallowed and enters airways

Information on other hazards

Other information

No further relevant information available.

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Further information

Classification for mixtures and used evaluation method according to regulation 29 CFR 1910.1200. There are no data available on the preparation/mixture itself.

12. Ecological information

Ecotoxicity

Harmful to aquatic life with long lasting effects.

CAS No	Components					
Aquatic toxicity		Dose	[h] [d]	Species	Source	Method
64742-49-0	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics					
Acute fish toxicity		LC50 > 10 - < 30 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
Acute crustacea toxicity		EC50 > 22 - < 46 mg/l	48 h	Daphnia magna		
77-92-9	citric acid					
Acute fish toxicity		LC50 440 mg/l	96 h	Leuciscus idus (golden orfe)	ECHA	OECD 203
Acute crustacea toxicity		EC50 160 mg/l	48 h		GESTIS	

Persistence and degradability

The organic part of the product is biodegradable.

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Endocrine disrupting properties

No information available.

Other adverse effects

No further relevant information available.

Further information

Classification for mixtures and used evaluation method according to regulation 29 CFR 1910.1200.
There are no data available on the mixture itself. The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3).

13. Disposal considerations

Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.
Dispose of waste according to applicable legislation.

Contaminated packaging

Handle contaminated packages in the same way as the substance itself. Non-contaminated packages may be recycled.

14. Transport information

US DOT 49 CFR 172.101

UN/ID number:

UN 1263

Proper shipping name:

PAINT (including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base)

Transport hazard class(es):

3

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Packing group:

II

Hazard label:

3



Marine transport (IMDG)

UN number:

UN 1263

UN proper shipping name:

PAINT (including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base)

Transport hazard class(es):

3

Packing group:

II

Hazard label:

3



Marine pollutant:

no

Special Provisions:

163, 367

Limited quantity:

5 L

Excepted quantity:

E2

EmS:

F-E, S-E

Segregation group:

not applicable

Air transport (ICAO-TI/IATA-DGR)

UN number:

UN 1263

UN proper shipping name:

PAINT (including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base)

Transport hazard class(es):

3

Packing group:

II

Hazard label:

3



Special Provisions:

A3 A72 A192

Limited quantity Passenger:

1 L

Passenger LQ:

Y341

Excepted quantity:

E2

IATA-packing instructions - Passenger:

353

IATA-max. quantity - Passenger:

5 L

IATA-packing instructions - Cargo:

364

IATA-max. quantity - Cargo:

60 L

Environmental hazards

ENVIRONMENTALLY HAZARDOUS:

No

Special precautions for user

Keep away from food, drink and animal feedingstuffs.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

Other applicable information

15. Regulatory information

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U.S. Regulations

National Inventory TSCA

All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

National regulatory information

SARA Section 311/312 Hazards:

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha (64742-49-0): Fire hazard, Immediate (acute) health hazard

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics (64742-49-0): Fire hazard, Immediate (acute) health hazard

citric acid (77-92-9): Immediate (acute) health hazard

2,3-Dihydroxybutanedioic acid (87-69-4): Immediate (acute) health hazard

State Regulations

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Additional information

Entries in the "State Right to Know" Lists: none/none

EU regulatory information

2004/42/EC (VOC):

VOC-value: 440 g/L (40 %)

16. Other information

Hazardous Materials Information Label (HMIS)

Health:	1
Flammability:	3
Physical Hazard:	0
Personal Protection:	B

NFPA Hazard Ratings

Health:	1
Flammability:	3
Reactivity:	0
Unique Hazard:	



Changes

Revision date: 05/18/2021

Revision No: 2,14

This data sheet contains changes from the previous version in section(s): 4,6,8,9,10,12,13,15,16.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

ATE: acute toxicity estimates

ECHA: european chemicals agency

(<http://echa.europa.eu/information-on-chemicals>)

GESTIS: Gefahrstoffinformationssystem der Deutschen Gesetzlichen Unfallversicherung

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(<http://dguv.de/ifa/GESTIS/GESTIS-Stoffdatenbank/index.jsp>)

MSDS:

The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.

Other data

The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.