E-III™ Industrial Grade Fire Training Fluid

Version 1.4 Revision Date 2025-10-01

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product information

Product Name	:	E-III™ Industrial Grade Fire Training Fluid
Material	:	1072500, 1072617, 1073902, 1072462, 1083826, 1074078
Use	:	Fire Training Fluid
Uses advised against	:	This material should not be used for purposes other than the identified uses in section 1 without expert advice.
Company	:	Chevron Phillips Chemical Company LP Specialty Chemicals 9500 Lakeside Blvd. The Woodlands, TX 77381

Emergency telephone:

Health:
866.442.9628 (North America)
1.832.813.4984 (International)
Transport:
CHEMTREC 800.424.9300 or 703.527.3887(int'l)
Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090
Mexico CHEMTREC 01-800-681-9531 (24 hours)
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600
Argentina: +(54)-1159839431
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
Austria: VIZ +43 1 406 43 43 (24 hours/day, 7 days/week)
Belgium: 070 245 245 (24 hours/day, 7 days/week)
Bulgaria: +359 2 9154 233
Croatia: +3851 2348 342 (24 hours/day, 7 days/week)
Cyprus: 1401
Czech Republic: Toxicological Information Center +420 224 919 293, +420 224 915 402
Denmark: Danish Poison Center (Giftlinjen): +45 8212 1212
Estonia: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
Finland: 0800 147 111 09 471 977 (24 hours/day)
France: ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (24 hours/day, 7 days/week)
Germany: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
Greece: (0030) 2107793777 (24 hours/day, 7 days/week)
Hungary: +36-80-201-199 (24 hours/day, 7 days/week)
Iceland: 543 2222 (24 hours/day, 7 days/week)
Ireland: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Italy: POISON CENTER MILAN – Azienda Ospedaliera Niguarda Ca` Grande Tel. +39 02 66101029; POISON CENTER ROME – Policlinico “Agostino Gemelli”, Servizio di tossicologia clinica Tel. +39 06 3054343; POISON CENTER ROME – Ospedale Pediatrico Bambino Gesù Tel. +39 06 68593726;POISON CENTER ROME – Policlinico “Umberto I” Tel. +39 06 4997 8000; POISON CENTER FOGGIA – Azienda Ospedaliera Universitaria Riuniti Tel. +39 0881 732326; POISON CENTER NAPLES – Azienda Ospedaliera “Antonio Cardarelli” Tel. +39 081 7472870; POISON CENTER FLORENCE – Azienda Ospedaliera universitaria Careggi Tel. +39 055 7947819; POISON CENTER PAVIA – IRCCS Fondazione Salvatore Maugeri Tel. +39 0382 24444; POISON CENTER BERGAMO – Azienda Ospedaliera “Papa Giovanni XXIII” Tel. 800 883 300; POISON CENTER VERONA – Azienda Ospedaliera Universitaria integrata Tel. 800 011 858;
Latvia: State Fire and Rescue Service, phone number: 112; Toxicology and Sepsis Clinic Poisoning and Drug Information Center, Hipokrāta 2, Riga, Latvia, LV-1038, phone number +371 67042473. (24 hours.)
Liechtenstein: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
Lithuania: +370 (85) 2362052
Luxembourg: (+352) 8002 5500 (24 hours/day, 7 days/week)
Malta: +356 2395 2000
The Netherlands: NVIC: +31 (0)88 755 8000
Norway: 22 59 13 00 (24 hours/day, 7 days/week)
Poland: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
Portugal: CIAV phone number: +351 800 250 250
Romania: +40213183606
Slovakia: +421 2 5477 4166
Slovenia: Phone number: 112
Spain: National Emergency Telephone Number of Spanish Poison Centre: +34 91 562 04 20 (24 hours/day, 7 days/week)
Sweden: 112 – ask for Poisons Information

Organization that prepared the SDS	:	Product Safety and Toxicology Group
E-mail address	:	SDS@CPChem.com
Website	:	www.CPChem.com

SECTION 2: Hazards identification

Classification of the substance or mixture
This product has been classified in accordance with the hazard communication standard 29 CFR 1910.1200; the SDS and labels contain all the information as required by the standard.

Classification

: Flammable liquids, Category 2
Skin irritation, Category 2
Specific target organ toxicity - single exposure, Category 3, Central nervous system
Aspiration hazard, Category 1

Labeling

Symbol(s) :

Signal Word : Danger

Hazard Statements : H225: Highly flammable liquid and vapor.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.

H336: May cause drowsiness or dizziness.

Precautionary Statements : **Prevention:**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P261 Avoid breathing mist or vapors.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.
Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P331 Do NOT induce vomiting.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Potential Health Effects

Symptoms of Overexposure : No data available

Carcinogenicity:

IARC Group 2B: Possibly carcinogenic to humans

Naphtha (petroleum), light alkylate	64741-66-8

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3: Composition/information on ingredients

Synonyms : None

Molecular formula : Mixture

Component	CAS-No.	Weight %
Naphtha (petroleum), light alkylate	64741-66-8	0 - 95
C9-C11 Isoalkanes	68551-16-6	0 - 95
C8-C10 Isoalkanes	68551-15-5	0 - 95
Isopentane	78-78-4	0 - 15

SECTION 4: First aid measures

General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Material may produce a serious, potentially fatal pneumonia if swallowed or vomited.

If inhaled : Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice.

In case of skin contact : If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact : Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. 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. Take victim immediately to hospital.

Notes to physician

Symptoms : No data available.

Risks : No data available.

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

Flash point : <10°C (<50°F)
Method: ASTM D 93

Autoignition temperature : No data available

Suitable extinguishing media : Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical.

Unsuitable extinguishing media : High volume water jet.

Specific hazards during fire fighting : Do not allow run-off from fire fighting to enter drains or water courses.

Special protective : Wear self-contained breathing apparatus for firefighting if

equipment for fire-fighters		necessary.
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. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.
Fire and explosion protection	:	Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.
Hazardous decomposition products	:	Carbon oxides.

SECTION 6: Accidental release measures

Personal precautions	:	Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors 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 for cleaning up	:	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7: Handling and storage

Handling

Advice on safe handling	:	Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. 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. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.
Advice on protection against fire and explosion	:	Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

Storage

Requirements for storage areas and containers	:	No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.
Uses advised against	:	This material should not be used for purposes other than the identified uses in section 1 without expert advice.
Use	:	Fire Training Fluid

SECTION 8: Exposure controls/personal protection

Ingredients with workplace control parameters

Chevron Phillips Chemical Company LP

Components	Basis	Value	Control parameters	Note
C9-C11 Isoalkanes	Manufacturer	TWA	1,200 mg/m3	RCP,

RCP Reciprocal Calculation Procedure

US

Components	Basis	Value	Control parameters	Note
Naphtha (petroleum), light alkylate	OSHA Z-1-A	TWA	400 ppm, 1,600 mg/m3	
	OSHA Z-1	TWA	500 ppm, 2,000 mg/m3	
	OSHA Z-1	TWA	5 mg/m3	Mist
	OSHA Z-1-A	TWA	5 mg/m3	Mist
	NIOSH REL	TWA	5 mg/m3	Mist
	NIOSH REL	ST	10 mg/m3	Mist
	CAL PEL	PEL	5 mg/m3	particulate
3,3-Dimethylpentane	ACGIH	TWA	400 ppm,	
	ACGIH	STEL	500 ppm,	
Isopentane	ACGIH	TWA	1,000 ppm,	
2,2,4-Trimethylpentane (Isooctane)	ACGIH	TWA	300 ppm,	
2,3-Dimethylpentane	ACGIH	TWA	400 ppm,	
	ACGIH	STEL	500 ppm,	
2,4-Dimethylpentane	ACGIH	TWA	400 ppm,	
	ACGIH	STEL	500 ppm,	
2,3,4-Trimethylpentane	ACGIH	TWA	300 ppm,	
2,3,3-Trimethylpentane	ACGIH	TWA	300 ppm,	
2,3-Dimethylbutane	OSHA Z-1-A	TWA	500 ppm, 1,800 mg/m3	
	OSHA Z-1-A	STEL	1,000 ppm, 3,600 mg/m3	
	ACGIH	TWA	200 ppm,	A3,
2,5-Dimethylhexane	ACGIH	TWA	300 ppm,	

A3 Confirmed animal carcinogen with unknown relevance to humans

Immediately Dangerous to Life or Health Concentrations (IDLH)

Substance name	CAS-No.	Control parameters	Update
Naphtha (petroleum), light alkylate	64741-66-8	Immediately Dangerous to Life or Health Concentration Value 2500 mg/m³	2020-07-01

Engineering measures

Adequate ventilation to control airborned concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Personal protective equipment

Respiratory protection : If ventilation or other engineering controls are not adequate to

maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure, a supplied-air NIOSH approved respirator may be appropriate. If exposure to harmful levels of airborne material may occur, a NIOSH approved respirator that provides protection may be appropriate, such as:. Air-Purifying Respirator for Organic Vapors. Full-Face Air-Purifying Respirator for Organic Vapors, Dusts and Mists. A positive pressure, air-supplying respirator may be appropriate if there is potential for uncontrolled release, aerosolization, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.

Hand protection	:	The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Eye protection	:	Eye wash bottle with pure water. Tightly fitting safety goggles.
Skin and body protection	:	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate:. Flame retardant antistatic protective clothing. Workers should wear antistatic footwear.
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

Information on basic physical and chemical properties

Appearance

Form	:	liquid
Physical state	:	liquid
Color	:	blue
Odor	:	Mild

Safety data

Flash point	:	<10°C (<50°F) Method: ASTM D 93
Lower explosion limit	:	0.75 %(V) No data available
Upper explosion limit	:	6.88 %(V)
Oxidizing properties	:	No
Autoignition temperature	:	No data available
Thermal decomposition	:	No data available

Molecular formula	:	Mixture
Molecular weight	:	Not applicable
pH	:	Not applicable
Freezing point	:	No data available
Pour point		No data available
Boiling point/boiling range	:	41-202°C (105-395°F)
Vapor pressure	:	2.00 - 5.00 PSI at 38°C (100°F)
Relative density	:	0.711 at 15.6 °C (60.1 °F)
Density	:	5.93 L/G
Water solubility	:	negligible
Partition coefficient: n-octanol/water	:	No data available
Viscosity, kinematic	:	No data available
Relative vapor density	:	1 (Air = 1.0)
Evaporation rate	:	1
Percent volatile	:	> 99 %

SECTION 10: Stability and reactivity

Reactivity : Stable under recommended storage conditions.

Chemical stability : This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Possibility of hazardous reactions

Hazardous reactions : Hazardous reactions: Hazardous polymerization does not occur.

Hazardous reactions: Vapors may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.

Materials to avoid : May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Thermal decomposition : No data available

Hazardous decomposition products : Carbon oxides

Other data : No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

E-III™ Industrial Grade Fire Training Fluid
Acute oral toxicity : LD50 Oral: > 5,000 mg/kg
Species: Rat
Method: Acute toxicity estimate

E-III™ Industrial Grade Fire Training Fluid
Acute inhalation toxicity : LC50: > 20 mg/l
Exposure time: 4 h
Species: Rat
Test atmosphere: dust/mist
Method: Acute toxicity estimate
An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.

E-III™ Industrial Grade Fire Training Fluid
Acute dermal toxicity : LD50: > 2,000 mg/kg
Species: Rabbit
Method: Acute toxicity estimate

E-III™ Industrial Grade Fire Training Fluid
Skin irritation : Skin irritation
largely based on animal evidence.
May cause skin irritation in susceptible persons.

E-III™ Industrial Grade Fire Training Fluid
Eye irritation : Vapors may cause irritation to the eyes, respiratory system and the skin.

E-III™ Industrial Grade Fire Training Fluid
Sensitization : Did not cause sensitization on laboratory animals.

Repeated dose toxicity

Naphtha (petroleum), light alkylate : Species: Rat, male
Sex: male
Application Route: oral gavage
Dose: 500, 2000 mg/kg
Exposure time: 4 wk
Number of exposures: once daily, 5 d/wk
Target Organs: Kidney

	Information given is based on data obtained from similar substances. Species: Rabbit, male and female Sex: male and female Application Route: Dermal Dose: 0, 200, 1000, 2000 mg/kg Exposure time: 4 wk Number of exposures: 3 times/wk NOEL: 1,000 mg/kg Lowest observable effect level: 2,000 mg/kg Method: OECD Test Guideline 410 Target Organs: Skin Information given is based on data obtained from similar substances. Species: Rat, male and female Sex: male and female Application Route: Inhalation Dose: 322, 1402, 9869 mg/m3 Exposure time: 107 - 109 wk Number of exposures: 6 h/d 5 d/wk NOEL: 1402 mg/m3 Method: OECD Test Guideline 453 Information given is based on data obtained from similar substances. Species: Mouse, male and female Sex: male and female Application Route: Inhalation Dose: 322, 1402, 9869 mg/m3 Exposure time: 107- 113 wk Number of exposures: 6 h/d 5 d/wk NOEL: 1402 mg/m3 Method: OECD Test Guideline 453 Information given is based on data obtained from similar substances.
C9-C11 Isoalkanes	Species: Rat, male and female Sex: male and female Application Route: Inhalation Dose: 0, 2600, 5200, 10400 mg/3 Exposure time: 13 wk Number of exposures: 6 h/d, 5 d/wk NOEL: > 10,400 mg/m3 Method: OECD Test Guideline 413 No significant adverse effects were reported Information given is based on data obtained from similar substances.
Isopentane	Species: Rat, male and female Sex: male and female Application Route: Inhalation Dose: 668, 2220, 6646 ppm Exposure time: 13 wk Number of exposures: 6 h/d, 5 d/wk NOEL: > 2220 ppm Lowest observable effect level: > = 6646 ppm Method: OECD Guideline 413 Target Organs: Kidney

Information given is based on data obtained from similar substances.

Genotoxicity in vitro

Naphtha (petroleum), light alkylate	:	Test Type: Mouse lymphoma assay Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative Remarks: Information given is based on data obtained from similar substances. Test Type: Sister chromatid exchange Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 479 Result: negative Remarks: Information given is based on data obtained from similar substances. Test Type: Ames test Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Remarks: Information given is based on data obtained from similar substances.
C9-C11 Isoalkanes		Test Type: E. Coli bacterial reverse mutation assay Result: negative Remarks: Information given is based on data obtained from similar substances. Test Type: Ames test Metabolic activation: with and without metabolic activation Result: negative Remarks: Information given is based on data obtained from similar substances. Test Type: Bacterial DNA repair test Result: negative Remarks: Information given is based on data obtained from similar substances.
Isopentane		Test Type: Ames test Concentration: 1, 2, 5, 8, 10% Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative

Test Type: Ames test
Concentration: 1, 2, 5, 8, 10, 25, 50%
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
Remarks: Information given is based on data obtained from similar substances.

Test Type: Chromosome aberration test in vitro
Metabolic activation: with and without metabolic activation
Method: Mutagenicity (in vitro mammalian cytogenetic test)
Result: negative
Remarks: Information given is based on data obtained from similar substances.

Test Type: In vitro mammalian cell gene mutation test
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
Remarks: Information given is based on data obtained from similar substances.

Genotoxicity in vivo

Naphtha (petroleum), light alkylate	:	Test Type: In vivo micronucleus test Species: Rat Cell type: Bone marrow Dose: 2000, 10,000, 20,000 mg/m3 Method: OECD Test Guideline 475 Result: negative Remarks: Information given is based on data obtained from similar substances.
C9-C11 Isoalkanes		Test Type: Dominant lethal assay Result: negative Remarks: Information given is based on data obtained from similar substances. Test Type: Mouse micronucleus assay Result: negative Remarks: Information given is based on data obtained from similar substances.
Isopentane		Test Type: In vivo micronucleus test Species: Rat Cell type: Bone marrow Route of Application: inhalation (vapor) Exposure time: 13 wk Dose: 5000, 10,000, 20,000 mg/m3 Method: Directive 67/548/EEC, Annex V, B.12. Remarks: Information given is based on data obtained from similar substances.

Reproductive toxicity

Naphtha (petroleum), light alkylate	:	Species: Rat Sex: male and female Application Route: Inhalation Dose: 5,000, 10,000, 20,000 mg/L

Number of exposures: 6 h/d, 7 d/wk
Method: OECD Test Guideline 416
NOAEL Parent: 24.7 mg/l
NOAEL F1: 24.7 mg/l
No adverse effects expected
Information given is based on data obtained from similar substances.

Isopentane

Species: Rat
Sex: male and female
Application Route: inhalation (vapor)
Dose: 0, 500, 2000, 7000 ppm
Number of exposures: 6 h/d 5 d/wk
Method: OECD Test Guideline 416
NOAEL Parent: 7000 ppm
NOAEL F1: 2000 ppm
NOAEL F2: 2000 ppm
Information given is based on data obtained from similar substances.
Reduced fetal weight.

Developmental Toxicity

Naphtha (petroleum), light alkylate : Species: Rat
Application Route: Dermal
Dose: 30, 125, 500 mg/kg/d
Exposure time: GD 0 - 19
Number of exposures: Daily
Test period: 19 d
NOAEL Teratogenicity: 500 mg/kg
NOAEL Maternal: 500 mg/kg
Animal testing did not show any effects on fetal development.
Information given is based on data obtained from similar substances.

C9-C11 Isoalkanes

Species: Rat
Application Route: Inhalation
Dose: 0, 291, 817 ppm
Number of exposures: 6 h/d
Test period: GD 6-15
NOAEL Teratogenicity: > 817 ppm
NOAEL Maternal: > 817 ppm

Isopentane

Species: Rat
Application Route: oral gavage
Dose: 0, 100, 500, 1000 mg/kg/d
Exposure time: GD 6-15
Number of exposures: daily
Method: OECD Guideline 414
NOAEL Teratogenicity: 1,000 mg/kg
NOAEL Maternal: 1,000 mg/kg
Information given is based on data obtained from similar substances.

Species: Rat
Application Route: Inhalation
Dose: 0, 500, 2000, 7000 ppm
Exposure time: GD 6-15
Number of exposures: 5 d/wk
Method: OECD Guideline 414
NOAEL Teratogenicity: 7000 ppm
NOAEL Maternal: 500 - 2000 ppm
Information given is based on data obtained from similar substances.

Species: Rabbit
Application Route: Inhalation
Dose: 0, 500, 2000, 7000 ppm
Exposure time: GD 6-18
Method: OECD Guideline 414
NOAEL Teratogenicity: 7000 ppm
NOAEL Maternal: 7000 ppm
Information given is based on data obtained from similar substances.

E-III™ Industrial Grade Fire Training Fluid
Aspiration toxicity : May be fatal if swallowed and enters airways.

CMR effects

Isopentane : Carcinogenicity: Not available
Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects., In vivo tests did not show mutagenic effects
Teratogenicity: Animal testing did not show any effects on fetal development.
Reproductive toxicity: Animal testing did not show any effects on fertility.

E-III™ Industrial Grade Fire Training Fluid
Further information : Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

SECTION 12: Ecological information

Toxicity to fish

Naphtha (petroleum), light alkylate : LL50: 8.2 mg/l
Exposure time: 96 h
Species: Pimephales promelas (fathead minnow)
semi-static test

C9-C11 Isoalkanes LL50: 3.6 mg/l
Exposure time: 96 h
Species: Oncorhynchus mykiss (rainbow trout)
semi-static test Method: OECD Test Guideline 203
Information given is based on data obtained from similar substances.

C8-C10 Isoalkanes LL50: 3.6 mg/l
Exposure time: 96 h

	Species: Oncorhynchus mykiss (rainbow trout) semi-static test Method: OECD Test Guideline 203 Information given is based on data obtained from similar substances.
Isopentane	LC50: 4.26 mg/l Exposure time: 96 h Species: Oncorhynchus mykiss (rainbow trout) semi-static test Method: OECD Test Guideline 203 Information given is based on data obtained from similar substances.
	LL50: 34.3 mg/l Exposure time: 96 h Species: Oncorhynchus mykiss (rainbow trout) Method: QSAR modeled data The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.

Toxicity to daphnia and other aquatic invertebrates

Naphtha (petroleum), light alkylate	:	EL50: 4.5 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) static test Method: OECD Test Guideline 202
C9-C11 Isoalkanes		EL50: 22 - 46 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) static test Method: OECD Test Guideline 202 Information given is based on data obtained from similar substances.
Isopentane		EC50: 2.3 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) static test Method: OECD Test Guideline 202
		EL50: 59.9 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Method: QSAR modeled data The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.

Toxicity to algae

Naphtha (petroleum), light alkylate	:	EC50: 3.1 mg/l Exposure time: 96 h Species: Selenastrum capricornutum (algae) static test Method: OECD Test Guideline 201
C9-C11 Isoalkanes		ErL50: > 1,000 mg/l Exposure time: 72 h Species: Pseudokirchneriella subcapitata (algae) static test Method: OECD Test Guideline 201

Information given is based on data obtained from similar substances.

Isopentane

EC50: 7.51 mg/l
Exposure time: 72 h
Species: Scenedesmus capricornutum (fresh water algae)
Growth inhibition Method: OECD Test Guideline 201
Information given is based on data obtained from similar substances.

EL50: 25.3 mg/l
Exposure time: 72 h
Species: Raphidocellus subcapitata (algae)
Method: QSAR modeled data
The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.

Toxicity to fish (Chronic toxicity)

C9-C11 Isoalkanes : NOELR: 0.132 mg/l
Species: Oncorhynchus mykiss (rainbow trout)
Method: QSAR modeled data

Isopentane

EL10: 6.57 mg/l
Exposure time: 60 d
Species: Oncorhynchus mykiss (rainbow trout)
Method: QSAR modeled data
The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

Naphtha (petroleum), light alkylate : NOELR: 2.6 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
semi-static test
Method: OECD Test Guideline 211

Isopentane : EL10: 11.5 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.

Biodegradability : Taking into consideration the properties of several ingredients, the product is estimated not to be readily biodegradable according to OECD classification.
Expected to be inherently biodegradable.

Elimination information (persistence and degradability)

Bioaccumulation : The product may be accumulated in organisms.

Mobility

Naphtha (petroleum), light alkylate	:	This product may float or sink in water. After release, disperses into the air.
C9-C11 Isoalkanes	:	The product will be dispersed amongst the various environmental compartments (soil/ water/ air).
Isopentane	:	No data available

Results of PBT assessment

Isopentane	:	Non-classified PBT substance, Non-classified vPvB substance
Additional ecological information	:	Toxic to aquatic life with long lasting effects.

Ecotoxicology Assessment

Short-term (acute) aquatic hazard	:	Toxic to aquatic life.
Long-term (chronic) aquatic hazard	:	Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

The information in this SDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Product	:	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. Send to a licensed waste management company.
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

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)
UN3295, HYDROCARBONS, LIQUID, N.O.S., 3, II

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)
UN3295, HYDROCARBONS, LIQUID, N.O.S., 3, II, (< 10 °C c.c.), MARINE POLLUTANT, (NAPHTHA (PETROLEUM) LIGHT ALKYLATE, C9-C11 ISOALKANES)

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)
UN3295, HYDROCARBONS, LIQUID, N.O.S., 3, II

ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))
UN3295, HYDROCARBONS, LIQUID, N.O.S., 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS, (NAPHTHA (PETROLEUM) LIGHT ALKYLATE, C9-C11 ISOALKANES)

RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))
33,UN3295,HYDROCARBONS, LIQUID, N.O.S., 3, II, ENVIRONMENTALLY HAZARDOUS, (NAPHTHA (PETROLEUM) LIGHT ALKYLATE, C9-C11 ISOALKANES)

ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)
UN3295, HYDROCARBONS, LIQUID, N.O.S., 3, II, ENVIRONMENTALLY HAZARDOUS, (NAPHTHA (PETROLEUM) LIGHT ALKYLATE, C9-C11 ISOALKANES)

Maritime transport in bulk according to IMO instruments

SECTION 15: Regulatory information

National legislation

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Aspiration hazard
Skin corrosion or irritation
Specific target organ toxicity (single or repeated exposure)

EPCRA - EMERGENCY PLANNING COMMUNITY RIGHT - TO – KNOW

CERCLA Reportable Quantity	:	6667 lbs 2,2,4-Trimethylpentane (Isooctane)
SARA 302 Reportable Quantity	:	This material does not contain any components with a SARA 302 RQ.
SARA 302 Threshold Planning Quantity	:	This material does not contain any components with a section 302 EHS TPQ.
SARA 304 Reportable	:	This material does not contain any components with a section

Quantity 304 EHS RQ.

SARA 313 Components : 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.

Clean Air Act

Ozone-Depletion Potential : 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).

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 112 (40 CFR 61):
: 2,2,4-Trimethylpentane (Isooctane) - 540-84-1

The following chemical(s) are listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F):
: Isopentane - 78-78-4

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):
: Isopentane - 78-78-4

US State Regulations

Pennsylvania Right To Know
: Naphtha (petroleum), light alkylate - 64741-66-8
C9-C11 Isoalkanes - 68551-16-6
C8-C10 Isoalkanes - 68551-15-5
3,3-Dimethylpentane - 562-49-2
Isopentane - 78-78-4
2,2,4-Trimethylpentane (Isooctane) - 540-84-1
2,3-Dimethylpentane - 565-59-3
2,4-Dimethylpentane - 108-08-7
2,3,3-Trimethylpentane - 560-21-4
2,3-Dimethylbutane - 79-29-8
2,2,5-Trimethylhexane - 3522-94-9

California Prop. 65 Components : WARNING: This product can expose you to chemicals including [listed below], which is [are] known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov/food.

Ethylbenzene 100-41-4

Benzene	71-43-2

WARNING: This product can expose you to chemicals including [listed below], which is [are] known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

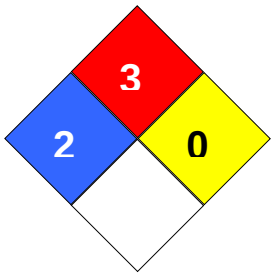
Toluene	108-88-3
Benzene	71-43-2

Notification status

Europe REACH	:	Not in compliance with the inventory
Switzerland CH INV	:	Not in compliance with the inventory
United States of America (USA) TSCA	:	On or in compliance with the active portion of the TSCA inventory
Canada DSL	:	All components of this product are on the Canadian DSL
Australia AIIC	:	On the inventory, or in compliance with the inventory
New Zealand NZIoC	:	Not in compliance with the inventory
Japan ENCS	:	On the inventory, or in compliance with the inventory
Japan ISHL	:	On the inventory, or in compliance with the inventory
Philippines PICCS	:	On the inventory, or in compliance with the inventory
Korea KECI	:	Not in compliance with the inventory
China IECSC	:	On the inventory, or in compliance with the inventory
Taiwan TCSI	:	On the inventory, or in compliance with the inventory
Other TECI	:	On the inventory, or in compliance with the inventory

SECTION 16: Other information

NFPA Classification : Health Hazard: 2
Fire Hazard: 3
Reactivity Hazard: 0



Revision Date : 2025-10-01
Date of last issue : 2020-11-17

Further information

Legacy SDS Number : CPC00047

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is

not to be considered 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 materials or in any process, unless specified in the text.

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AIIC	Australian Inventory of Industrial Chemicals	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%	ATE	Acute toxicity estimate