

3-NITROFLUORANTHENE (CHEM PURITY 87%) (D9, 98%) 50 UG/ML IN TOLUENE-D8

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 04/02/2016 DLM-4711-S Revision date: 29/01/2020

Supersedes: 04/02/2016

Version: 2.0

	e substance/mixture and of the company/undertaking
1.1. Product identifier Product form	: Mixtures
Product name	: 3-NITROFLUORANTHENE (CHEM PURITY 87%) (D9, 98%) 50 UG/ML IN TOLUENE-D8
Product code	: DLM-4711-S
	e substance or mixture and uses advised against
	Substance of mixture and uses advised against
1.2.1. Relevant identified uses	: Professional use
Main use category ndustrial/Professional use spec	: For professional use only
nuusinai/Froiessional use spec	
1.2.2. Uses advised against	
No additional information available	
I.3. Details of the supplier of the sa	afety data sheet
Cambridge Isotope Laboratories, Inc.	
50 Frontage Road Andover, MA 01810	
JSA	
JSA: 1-800-322-1174 Int: 1-978-749-80	
ilsales@isotope.com www.isotope.com	
Emergency telephone number	
Emergency numbers:	
Chemtrec: 1-800-424-9300 (24 hours) nternational: 1-703-741-5970 (24 hours)	
SECTION 2: Hazards identificati	on
2.1. Classification of the substance	e or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Flam. Liq. 2 H225	
Skin Irrit. 2 H315	
Repr. 2 H361	
STOT SE 3 H336	
STOT RE 2 H373	
Asp. Tox. 1 H304	
Full text of hazard classes and H-statemen	its : see section 16
Classification according to Directive 67/	/548/EEC [DSD] or 1999/45/EC [DPD]
-; R11	
(i; R38	
(n; R65 Repr.Cat.3; R62	
Repr.Cat.3; R63	
R67	
N; R51/53	
(n; R48/20 Full text of R-phrases: see section 16	
GHS-US classification	
Flam. Liq. 2 H225 Skin Irrit. 2 H315	
Repr. 2 H361	

 Skin Irrit. 2
 H315

 Repr. 2
 H361

 STOT SE 3
 H336

 STOT RE 2
 H373

 Asp. Tox. 1
 H304

 Aquatic Acute 2
 H401

Full text of H statements : see section 16

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Adverse physicochemical, human health and environmental effects

brain. kidneys. liver. urinary bladder. Suspected of damaging fertility. Suspected of damaging the unborn child. May cause damage to organs (brain, kidneys, liver, urinary bladder) (if inhaled, if swallowed, in contact with skin). May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. Causes skin irritation.

2.2.	Label elements	
Labeling	according to Regulation (EC) No.	1272/2008 [CLP]
Hazard pi	ctograms (CLP)	
Circu ele		GHS02 GHS08 GHS07
Signal wo		: Danger
	s ingredients	: TOLUENE-D8 (D, 99.5%)
Hazaro st	atements (CLP)	 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 H361 - Suspected of damaging fertility. Suspected of damaging the unborn child. (if inhaled, if swallowed, in contact with skin) H373 - May cause damage to organs (liver, kidneys, brain, urinary bladder) through prolonged or repeated exposure (in contact with skin, if inhaled, if swallowed)
Precaution	nary statements (CLP)	 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground/bond container and receiving equipment. P241 - Use explosion-proof electrical, lighting, ventilating equipment P260 - Do not breathe dust, fume, gas, mist, spray, vapors. P264 - Wash hands, forearms and face thoroughly after handling. P271 - Use only outdoors or in a well-ventilated area. P280 - Wear protective clothing, protective gloves.
GHS-US	abeling	
Hazard pi	ctograms (GHS-US)	: CHS02 GHS08 GHS07
Signal wo	rd (GHS-US)	: Danger
•	atements (GHS-US)	 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 H361 - Suspected of damaging fertility, Suspected of damaging the unborn child. (Dermal, Inhalation, oral) H373 - May cause damage to organs (kidneys, liver, urinary bladder, brain) through prolonged or repeated exposure (Dermal, Inhalation, oral) H401 - Toxic to aquatic life
Precaution	nary statements (GHS-US)	 P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P210 - Keep away from heat, hot surfaces, open flames, sparks No smoking. P233 - Keep container tightly closed. P240 - Ground/Bond container and receiving equipment P241 - Use explosion-proof electrical, lighting, ventilating equipment P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. P260 - Do not breathe fume, mist, spray, vapors. P261 - Avoid breathing dust, fume, gas, mist, spray, vapors. P264 - Wash hands, forearms and face thoroughly after handling. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P280 - Wear eye protection, face protection, protective clothing, protective gloves.

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P301+P310 - If swallowed: Immediately call a doctor, a POISON CENTER P302+P352 - If on skin: Wash with plenty of water P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P308+P313 - If exposed or concerned: Get medical advice/attention. P312 - Call a doctor, a POISON CENTER if you feel unwell P314 - Get medical advice/attention if you feel unwell. P321 - Specific treatment (see Hazardous component(s) for labeling on this label) 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 alcohol resistant foam, carbon dioxide (CO2), dry extinguishing powder to extinguish. 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. P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation

2.3. Other hazards

PBT: not relevant - no registration required

SECTION 3: Composition/Information on ingredients

3.1. Substances

- Not applicable
- 3.2. Mixtures

3.2. Mixtures			
Name	Product identifier	%	Classification according to Directive 67/548/EEC
TOLUENE-D8 (D, 99.5%)	(CAS-No.) 2037-26-5 (EC-No.) 218-009-5 (EC Index-No.) 601-021-00-3 (Unlabeled) (REACH-no) 01-2119471310-51	99.9947	F; R11 Xi; R38 Xn; R65 Repr.Cat.3; R62 Repr.Cat.3; R63 R67 N; R51/53 Xn; R48/20
3-NITROFLUORANTHENE (CHEM PURITY 87%) (D9, 98%)	(CAS-No.) 350820-11-0	0.0053	Not classified
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
TOLUENE-D8 (D, 99.5%)	(CAS-No.) 2037-26-5 (EC-No.) 218-009-5 (EC Index-No.) 601-021-00-3 (Unlabeled) (REACH-no) 01-2119471310-51	99.9947	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304
3-NITROFLUORANTHENE (CHEM PURITY 87%) (D9, 98%)	(CAS-No.) 350820-11-0	0.0053	Not classified
Name	Product identifier	%	GHS-US classification
TOLUENE-D8 (D, 99.5%)	(CAS-No.) 2037-26-5	99.9947	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401
3-NITROFLUORANTHENE (CHEM PURITY 87%) (D9, 98%)	(CAS-No.) 350820-11-0	0.0053	Not classified

Full text of R- and H- phrases: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	 Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

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First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Wash with plenty of soap and water. Get medical advice/attention. Specific treatment (see Hazard pictograms (CLP) on this label). Gently wash with plenty of soap and water.
First-aid measures after eye contact	 Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.
First-aid measures after ingestion	: Immediately call a poison center or doctor/physician.
4.2. Most important symptoms and	effects, both acute and delayed
Symptoms/effects	: Suspected of damaging fertility. Suspected of damaging the unborn child. (in contact with skin, if inhaled, if swallowed). Causes damage to organs (brain, kidneys, liver, urinary bladder) (in contact with skin, if inhaled, if swallowed).
Symptoms/effects after inhalation	: Harmful if inhaled. May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: Harmful in contact with skin. Causes skin irritation. Repeated exposure to this material can result in absorption through skin causing significant health hazard.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. Risk of lung edema.
4.3. Indication of any immediate me	dical attention and special treatment needed
No additional information available	
SECTION 5: Firefighting measure	es
5.1. Extinguishing media	
Suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
5.2. Special hazards arising from th	e substance or mixture
Fire hazard	: Highly flammable liquid and vapor.
Explosion hazard	: May form flammable/explosive vapor-air mixture.
Reactivity	: Vapors may form explosive mixture with air.
5.3. Advice for firefighters	
Firefighting instructions	: Use water spray to cool unopened containers.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release n	neasures
	e equipment and emergency procedures
General measures	: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.
6.1.1. For non-emergency personnel	
Emergency procedures	: Use personal protective equipment, and ensure adequate ventilation. Avoid breathing vapors, mist, gas. Remove ignition sources, and move personnel to safe area. Vapors accumulate especially in low areas to form explosive concentrations.
6.1.2. For emergency responders	
Protective equipment	: Avoid breathing dust, mist or spray.
6.2. Environmental precautions	
Prevent further leakage or spillage if safe to	do so. Do not let product enter drains. Discharge into the environment must be avoided.
6.3. Methods and material for conta	inment and cleaning up
For containment	: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet- brushing and place in container for disposal according to local regulations.
6.4. Reference to other sections	
No additional information available	
SECTION 7: Handling and storag	e
7.1. Precautions for safe handling	

Additional hazards when processed	: Handle empty containers with care because residual vapors are flammable.
Precautions for safe handling	: No open flames. No smoking. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Avoid breathing dust, mist or spray.
Hygiene measures	: Wash Both hands thoroughly after handling.

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7.2. Conditions for safe	e storage, including any incompatibilities	
Technical measures	 Proper grounding procedures to avoid static electricity should be followed. Ground/k container and receiving equipment. Use explosion-proof electrical equipment. 	ond
Storage conditions	: Store at room temperature away from light and moisture.	
Incompatible materials	: Heat sources.	
7.3. Specific end use(s)		
No additional information avail	lable	
SECTION 8: Exposure	controls/personal protection	
8.1. Control parameters	S	
3-NITROFLUORANTHENE	(CHEM PURITY 87%) (D9, 98%) 50 UG/ML IN TOLUENE-D8	
Italy - Portugal - USA ACGIH	H ACGIH TWA (ppm) 20.0000000 ppm Visual impairment, Femal	е

		reproductive, Pregnancy loss
TOLUENE-D8 (D, 99.5%) (203	37-26-5)	
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	20.00000000 ppm Visual impairment, Female reproductive, Pregnancy loss
USA OSHA	OSHA PEL (TWA) (ppm)	100 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000
USA OSHA	OSHA PEL (STEL) (ppm)	150 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000

8.2. **Exposure controls**

Personal protective equipment

: Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



Hand protection	: Wear suitable protective clothing and gloves.
Eye protection	: Wear safety glasses with side shields (or goggles) and a face shield.
Skin and body protection	: Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Respiratory protection	: Wear appropriate NIOSH/MSHA approved respirator.

SECTION 9: Physical and chemical properties

9.1.	Information on basic physical and chemical properties
The proper	rties listed helow are for the solvent, the main component of this mixture

The properties listed below are for the solvent, the main com	ponent of this mixture.
Physical state	: Liquid
Appearance	: Liquid
Molecular mass	: 100.19 g/mol (Labeled)
Color	: Colorless
Odor	: No data available
Odor threshold	: No data available
рН	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: -93 °C (-135 °F)
Freezing point	: No data available
Boiling point	: 110 - 111 °C (230 - 232 °F)
Flash point	: 4 °C (39.2 °F) - closed cup
Auto-ignition temperature	: 535 °C (995 °F)
Decomposition temperature	: No data available
Flammability (solid, gas)	: Highly flammable liquid and vapor
Vapor pressure	: 29.1 hPa (21.8 mmHg) at 20.0 °C (68.0 °F)
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 0.865 g/ml at 25 °C (77 °F)
Solubility	: No data available
Log Pow	: No data available
29/01/2020	EN (English US)

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Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: 1.2 - 7 % (V)
9.2. Other information	
No additional information available	
SECTION 10: Stability and reactivity	
10.1. Reactivity	
Vapors may form explosive mixture with air.	
10.2. Chemical stability	
See storage and expiration date on CoA.	
10.3. Possibility of hazardous reactions	
No additional information available	
10.4. Conditions to avoid	
Open flame. Direct sunlight.	
10.5. Incompatible materials	
Strong oxidizing agents.	
10.6. Hazardous decomposition products	
May release flammable gases.	
SECTION 11: Toxicological informati	on
11.1. Information on toxicological effects	
Acute toxicity	: Not classified
3-NITROFLUORANTHENE (CHEM PURITY 87	%) (D9, 98%) 50 UG/ML IN TOLUENE-D8
LD50 oral rat	> 5580 mg/kg
LD50 dermal rabbit	12196 mg/kg
	12 190 mg/kg
LC50 inhalation rat (mg/l)	12500 - 28800 mg/m ³ 4 h
LC50 inhalation rat (mg/l) ATE CLP (dermal) ATE CLP (gases)	12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 4500.000 ppmV/4h
LC50 inhalation rat (mg/l) ATE CLP (dermal) ATE CLP (gases) ATE CLP (vapors)	12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 4500.000 ppmV/4h 11.000 mg/l/4h
LC50 inhalation rat (mg/l) ATE CLP (dermal) ATE CLP (gases)	12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 4500.000 ppmV/4h
LC50 inhalation rat (mg/l) ATE CLP (dermal) ATE CLP (gases) ATE CLP (vapors)	12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 4500.000 ppmV/4h 11.000 mg/l/4h
LC50 inhalation rat (mg/l) ATE CLP (dermal) ATE CLP (gases) ATE CLP (vapors) ATE CLP (dust, mist)	12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 4500.000 ppmV/4h 11.000 mg/l/4h
LC50 inhalation rat (mg/l) ATE CLP (dermal) ATE CLP (gases) ATE CLP (vapors) ATE CLP (dust, mist) TOLUENE-D8 (D, 99.5%) (2037-26-5)	12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 4500.000 ppmV/4h 11.000 mg/l/4h 1.500 mg/l/4h > 5580 mg/kg 12196 mg/kg
LC50 inhalation rat (mg/l)ATE CLP (dermal)ATE CLP (gases)ATE CLP (vapors)ATE CLP (dust, mist)TOLUENE-D8 (D, 99.5%) (2037-26-5)LD50 oral ratLD50 dermal rabbitLC50 inhalation rat (mg/l)	12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 4500.000 ppmV/4h 11.000 mg/l/4h 1.500 mg/l/4h > 5580 mg/kg
LC50 inhalation rat (mg/l) ATE CLP (dermal) ATE CLP (gases) ATE CLP (vapors) ATE CLP (dust, mist) TOLUENE-D8 (D, 99.5%) (2037-26-5) LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l) ATE CLP (dermal)	12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 4500.000 ppmV/4h 11.000 mg/l/4h 1.500 mg/l/4h > 5580 mg/kg 12196 mg/kg 12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight
LC50 inhalation rat (mg/l)ATE CLP (dermal)ATE CLP (gases)ATE CLP (vapors)ATE CLP (dust, mist)TOLUENE-D8 (D, 99.5%) (2037-26-5)LD50 oral ratLD50 dermal rabbitLC50 inhalation rat (mg/l)ATE CLP (dermal)ATE CLP (vapors)	12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 4500.000 ppmV/4h 11.000 mg/l/4h 1.500 mg/l/4h > 5580 mg/kg 12196 mg/kg 12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 12.500 mg/l/4h
LC50 inhalation rat (mg/l) ATE CLP (dermal) ATE CLP (gases) ATE CLP (vapors) ATE CLP (dust, mist) TOLUENE-D8 (D, 99.5%) (2037-26-5) LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l) ATE CLP (dermal)	12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 4500.000 ppmV/4h 11.000 mg/l/4h 1.500 mg/l/4h > 5580 mg/kg 12196 mg/kg 12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight
LC50 inhalation rat (mg/l)ATE CLP (dermal)ATE CLP (gases)ATE CLP (vapors)ATE CLP (dust, mist)TOLUENE-D8 (D, 99.5%) (2037-26-5)LD50 oral ratLD50 dermal rabbitLC50 inhalation rat (mg/l)ATE CLP (dermal)ATE CLP (vapors)	12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 4500.000 ppmV/4h 11.000 mg/l/4h 1.500 mg/l/4h > 5580 mg/kg 12196 mg/kg 12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 12.500 mg/l/4h
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LC50 inhalation rat (mg/l) ATE CLP (dermal) ATE CLP (gases) ATE CLP (vapors) ATE CLP (dust, mist) TOLUENE-D8 (D, 99.5%) (2037-26-5) LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l) ATE CLP (dust, mist) ATE CLP (dermal) ATE CLP (dust, mist) Skin corrosion/irritation Serious eye damage/irritation	12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 4500.000 ppmV/4h 11.000 mg/l/4h 1.500 mg/l/4h > 5580 mg/kg 12196 mg/kg 12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 12.500 mg/l/4h
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LC50 inhalation rat (mg/l) ATE CLP (dermal) ATE CLP (gases) ATE CLP (vapors) ATE CLP (dust, mist) TOLUENE-D8 (D, 99.5%) (2037-26-5) LD50 oral rat LD50 dermal rabbit LC50 inhalation rat (mg/l) ATE CLP (dust, mist) ATE CLP (dermal) ATE CLP (dust, mist) Skin corrosion/irritation Serious eye damage/irritation	12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 4500.000 ppmV/4h 11.000 mg/l/4h 1.500 mg/l/4h > 5580 mg/kg 12196 mg/kg 12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 12.500 mg/l/4h 12.500 mg/l/4h
LC50 inhalation rat (mg/l)ATE CLP (dermal)ATE CLP (gases)ATE CLP (vapors)ATE CLP (dust, mist)TOLUENE-D8 (D, 99.5%) (2037-26-5)LD50 oral ratLD50 dermal rabbitLC50 inhalation rat (mg/l)ATE CLP (dermal)ATE CLP (dermal)ATE CLP (dust, mist)Skin corrosion/irritationSerious eye damage/irritationRespiratory or skin sensitization	12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 4500.000 ppmV/4h 11.000 mg/l/4h 1.500 mg/l/4h > 5580 mg/kg 12196 mg/kg 12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 12.500 mg/l/4h 13.500 mg/l/4h 14.500 mg/l/4h 15.500 mg/l/4h
LC50 inhalation rat (mg/l)ATE CLP (dermal)ATE CLP (gases)ATE CLP (vapors)ATE CLP (dust, mist)TOLUENE-D8 (D, 99.5%) (2037-26-5)LD50 oral ratLD50 dermal rabbitLC50 inhalation rat (mg/l)ATE CLP (dermal)ATE CLP (dermal)ATE CLP (dust, mist)Skin corrosion/irritationSerious eye damage/irritationRespiratory or skin sensitizationGerm cell mutagenicity	12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 4500.000 ppmV/4h 11.000 mg/l/4h 1.500 mg/l/4h > 5580 mg/kg 12196 mg/kg 12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 12.500 mg/l/4h 12.500 mg/l/4h
LC50 inhalation rat (mg/l)ATE CLP (dermal)ATE CLP (gases)ATE CLP (vapors)ATE CLP (dust, mist)TOLUENE-D8 (D, 99.5%) (2037-26-5)LD50 oral ratLD50 dermal rabbitLC50 inhalation rat (mg/l)ATE CLP (dermal)ATE CLP (dermal)ATE CLP (dust, mist)Skin corrosion/irritationSerious eye damage/irritationRespiratory or skin sensitizationGerm cell mutagenicityCarcinogenicityReproductive toxicity	12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 4500.000 ppmV/4h 11.000 mg/l/4h 1.500 mg/l/4h 2 > 5580 mg/kg 12196 mg/kg 12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 12.500 mg/l/4h 13.500 mg/l/4h 14.500 mg/l/4h 15.500 mg/l/4h 16.500
LC50 inhalation rat (mg/l)ATE CLP (dermal)ATE CLP (gases)ATE CLP (vapors)ATE CLP (dust, mist)TOLUENE-D8 (D, 99.5%) (2037-26-5)LD50 oral ratLD50 dermal rabbitLC50 inhalation rat (mg/l)ATE CLP (dermal)ATE CLP (dermal)ATE CLP (dust, mist)Skin corrosion/irritationSerious eye damage/irritationRespiratory or skin sensitizationGerm cell mutagenicityCarcinogenicityReproductive toxicitySpecific target organ toxicity – single exposure	12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 4500.000 ppmV/4h 11.000 mg/l/4h 1.500 mg/l/4h > 5580 mg/kg 12196 mg/kg 12196 mg/kg 12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 12.500 mg/l/4h 12.500 mg/l/4h 12.500 mg/l/4h 12.500 mg/l/4h Skin - rabbit - Skin irritation - 24 h Not classified Not classified Not classified Not classified Skin vertex have shown reproductive toxicity effects in male and female laboratory animals. May cause drowsiness or dizziness.
LC50 inhalation rat (mg/l)ATE CLP (dermal)ATE CLP (gases)ATE CLP (vapors)ATE CLP (dust, mist)TOLUENE-D8 (D, 99.5%) (2037-26-5)LD50 oral ratLD50 dermal rabbitLC50 inhalation rat (mg/l)ATE CLP (dermal)ATE CLP (dermal)ATE CLP (dust, mist)Skin corrosion/irritationSerious eye damage/irritationRespiratory or skin sensitizationGerm cell mutagenicityCarcinogenicityReproductive toxicity	12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 4500.000 ppmV/4h 11.000 mg/l/4h 1.500 mg/l/4h 2 > 5580 mg/kg 12196 mg/kg 12196.000 mg/kg body weight 12500 - 28800 mg/m³ 4 h 12196.000 mg/kg body weight 12.500 mg/l/4h 13.000000000000000000000000000000000000

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Potential Adverse human health effects and symptoms	: Lung irritation, chest pain, pulmonay edema, Inhalation sudies have shown the development of inflammatory and ulcerous lesions of the penis, prepuce, and scrotom in animals. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
IARC group	: 3
Symptoms/effects after inhalation	: Harmful if inhaled. May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: Harmful in contact with skin. Causes skin irritation. Repeated exposure to this material can result in absorption through skin causing significant health hazard.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. Risk of lung edema.

SECTION 12: Ecological information

12.1. Toxicity			
3-NITROFLUORANTHENE (CHEM PURITY 87%) (D9, 98%) 50 UG/ML IN TOLUENE-D8			
LC50 fish 1	74 - 340 mg/l Lepomis macrochirus (Bluegill) - 96h		
LC50 other aquatic organisms 1	10 mg/l Pseudokirchneriella subcapitata (Green algae) - 24 h		
EC50 Daphnia 1	8 mg/l Daphnia magna (Water flea) - 24h		
LC50 fish 2	7.63 mg/l Oncorhynchus mykiss (Rainbow trout) - 96 h		
EC50 Daphnia 2	6 mg/l Daphnia magna (Water flea) - Immobilization - 48 h		
ErC50 (algae)	245 mg/l Chlorella vulgaris (Fresh water algae) - 24 h		
LOEC (chronic) 8.04 mg/l Pimephales promelas (Fathead minnow) - 7 d			
NOEC (chronic)	5.44 mg/l Pimephales promelas (fathead minnow) - 7 d		
TOLUENE-D8 (D, 99.5%) (2037-26-5)			
LC50 fish 1	74 - 340 mg/l Lepomis macrochirus (Bluegill) - 96h		
LC50 other aquatic organisms 1	10 mg/l Pseudokirchneriella subcapitata (Green algae) - 24 h		
EC50 Daphnia 1	8 mg/l Daphnia magna (Water flea) - 24h		
LC50 fish 2	7.63 mg/l Oncorhynchus mykiss (Rainbow trout) - 96 h		
EC50 Daphnia 2	6 mg/l Daphnia magna (Water flea) - Immobilization - 48 h		
ErC50 (algae) 245 mg/l Chlorella vulgaris (Fresh water algae) - 24 h			
LOEC (chronic) 8.04 mg/l Pimephales promelas (Fathead minnow) - 7 d			
NOEC (chronic) 5.44 mg/l Pimephales promelas (fathead minnow) - 7 d			

12.2. Persistence and degradability

3-NITROFLUORANTHENE (CHEM PURITY 87%) (D9, 98%) (350820-11-0)				
Persistence and degradability Not available.				
12.3.	Bioaccumulative potential			
3-NITRO	OFLUORANTHENE (CHEM PURITY 87%	6) (D9, 98%) (350820-11-0)		
Bioaccu	imulative potential	Not available.		
12.4.	Mobility in soil			
3-NITROFLUORANTHENE (CHEM PURITY 87%) (D9, 98%) (350820-11-0)				
Ecology - soil Not available.		Not available.		
12.5.	12.5. Results of PBT and vPvB assessment			
3-NITRO	OFLUORANTHENE (CHEM PURITY 87%	6) (D9, 98%) 50 UG/ML IN TOLUENE-D8		
PBT: not relevant – no registration required				
12.6.	Other adverse effects			
Other adverse effects :		An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life.		

SECTION 13: Disposal considerations 13.1. Waste treatment methods Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and local environmental control regulations. Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Additional information : Handle empty containers with care because residual vapors are flammable. Ecology - waste materials : Hazardous waste due to toxicity.

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SECTION 14: Transport information	
In accordance with ADR / RID / IMDG / IATA / A	DN
14.1. UN number	
UN-No.(DOT)	: 1294
DOT NA no.	UN1294
14.2. UN proper shipping name	
Proper Shipping Name (DOT)	: Toluene
Class (DOT)	: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Hazard labels (DOT)	: 3 - Flammable liquid
	FLAMMABLE LIQUID
Packing group (DOT)	: II - Medium Danger
DOT Special Provisions (49 CFR 172.102)	 IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T4 - 2.65 178.274(d)(2) Normal
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 202
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
14.3. Additional information	
Other information	: No supplementary information available.
Overland transport	
Packing group (ADR)	: 11
Class (ADR)	: 3 - Flammable liquid
Hazard identification number (Kemler No.)	: 33
Classification code (ADR)	: F1
Hazard labels (ADR)	: 3 - Flammable liquids
	3
Orange plates	² 33 1294
Tunnel restriction code (ADR)	: D/E
Limited quantities (ADR)	1
EAC	: 3YE
Excepted quantities (ADR)	: E2
Transport by sea	
DOT Vessel Stowage Location	: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
	: 130

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Air transport	
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 5L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 60 L
Civil Aeronautics Law	: Flammable liquids

14.4.	Environmental hazards		
Other in	nformation	: No supplementary information available.	
14.5.	Special precautions for use	•	
14.6.	4.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code		

Not applicable

SECTION 15: Regulatory information				
15.1. US Federal regulations				
3-NITROFLUORANTHENE (CHEM PURITY 87	%) (D9, 98%) 50 UG/ML IN TOLUENE-D8			
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302			
SARA Section 311/312 Hazard Classes Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard				
SARA Section 313 - Emission Reporting	ubject to reporting requirements of United States SARA Section 313			
3-NITROFLUORANTHENE (CHEM PURITY 87%) (D9, 98%) (350820-11-0)				
SARA Section 302 Threshold Planning Quantity (TPQ)Not subject to reporting requirements of the United States SARA Section 302.SARA Section 313 - Emission ReportingNot subject to reporting requirements of the United States SARA Section 313.				
		TOLUENE-D8 (D, 99.5%) (2037-26-5)		
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.			
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard			
SARA Section 313 - Emission Reporting	Subject to reporting requirements of United States SARA Section 313			
15.2. International regulations				

CANADA

3-NITROFLUORANTHENE (CHEM PURITY 87%) (D9, 98%) 50 UG/ML IN TOLUENE-D8

Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

15.3. US State regulations

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3-NITROFLUORANTHEM	IE (CHEM PURITY 87%) (D9,	98%) 50 UG/ML IN TOLUEN	E-D8 ()		
U.S California - Proposition 65 - Carcinogens List		No			
U.S California - Proposi Toxicity	tion 65 - Developmental	Yes			
U.S California - Proposi Toxicity - Female	tion 65 - Reproductive	Yes			
U.S California - Proposition 65 - Reproductive Toxicity - Male		Yes			
State or local regulations		U.S Massachusetts - Right To Know List U.S New Jersey - Right to Know Hazardous Substance List U.S Pennsylvania - RTK (Right to Know) List			
3-NITROFLUORANTHENE (CHEM PURITY 87%) (D9, 98%) (350820-11-0)					
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	
No	No	No	No		

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TOLUENE-D8 (D, 99.5%) (2037-26-5)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	Yes	No	No	
3-NITROFLUORANTHENE (CHEM PURITY 87%) (D9, 98%) (350820-11-0) State or local regulations U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List				
TOLUENE-D8 (D, 99.5%) (2037-26-5) State or local regulations				
U.S Massachusetts - Right To Know List U.S New Jersey - Right to Know Hazardous Substance List U.S Pennsylvania - RTK (Right to Know) List				

SECTION 16: Other information

Other information

: This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Full text of R-, H- and EUH-phrases:

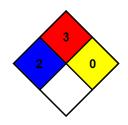
,	
Asp. Tox. 1	Aspiration hazard Category 1
Flam. Liq. 2	Flammable liquids Category 2
Repr. 2	Reproductive toxicity Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
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
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
R11	Highly flammable
R38	Irritating to skin
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R62	Possible risk of impaired fertility
R63	Possible risk of harm to the unborn child
R65	Harmful: may cause lung damage if swallowed
R67	Vapors may cause drowsiness and dizziness
F	Highly flammable
N	Dangerous for the environment
Xi	Irritant
Xn	Harmful

NFPA health hazard

NFPA fire hazard

NFPA reactivity

- : 2 Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
- : 3 Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.
- 0 Material that in themselves are normally stable, even under fire conditions.



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Hazard Rating

hazaru Nating		
Health	:	2 Moderate Hazard - Temporary or minor injury may occur
Flammability	:	3 Serious Hazard
Physical	:	0 Minimal Hazard

CIL Mixture SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product