M37

1. Identification

1.1. Product identifier

Trade name: NOROX® MEKP-9 RED

1.2. Recommended use of the chemical and restrictions on use

Relevant applications identified: Curing agent (polymer technology)

1.3. Details of the supplier of the safety data sheet

Company: United Initiators, Inc.
334 Phillips 311 Rd.
Helena, AR 72342-9033
USA

Telephone: 870-575-2935

Telefax: 870-572-1416

Email address: Cs-initiators.nafta@united-in.com

1.4. 24 HOUR EMERGENCY TELEPHONE NUMBERS:

CHEMTREC - US & CANADA: 800-424-9300

CHEMTREC INTERNATIONAL: +1 703-527-3887 **(collect calls accepted)**

Product Regulatory Services : 800-231-2702

2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation 29CFR 1910.1200

Flammable liquids	Category 4	H227
Organic peroxides	Type D	H242
Skin corrosion	Category 1B	H314
Serious eye damage	Category 1	H318
Reproductive toxicity	Category 2	H361
Acute aquatic toxicity	Category 3	H402
Chronic aquatic toxicity	Category 3	H412

2.2. Label elements

Statutory basis: Classification according to Regulation 29CFR 1910.1200

Symbol(s)

Signal word	Danger
Hazard statement	H227 - Combustible liquid. H242 - Heating may cause a fire. H314 - Causes severe skin burns and eye damage. H361 - Suspected of damaging fertility or the unborn child. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statement: Prevention	P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P220 - Keep/Store away from clothing/ combustible materials. P234 - Keep only in original container. P260 - Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. P264 - Wash skin thoroughly after handling. P273 - Avoid release to the environment. P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.
Precautionary statement: Reaction	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 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308 + P313 - IF exposed or concerned: Get medical advice/ attention. P310 - Immediately call a POISON CENTER or doctor/ physician. P363 - Wash contaminated clothing before reuse. P370 + P378 - In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.
Precautionary statement: Storage	P405 - Store locked up. P410 - Protect from sunlight. P411 - Store at temperatures not exceeding 38°C (100°F). P235 - Keep cool. P420 - Store away from other materials.
Precautionary statement: Disposal	P501 - Dispose of contents/ container to an approved waste disposal plant.

2.3. Other hazards

None known.

3. Composition/information on ingredients

• **Methyl ethyl ketone peroxide**	32% - 35%	
CAS-No. 1338-23-4		
Flammable liquids		Category 4
Organic peroxides		Type D
Acute toxicity (Oral)		Category 4
Skin corrosion		Category 1B
Serious eye damage		Category 1
• **Dimethyl phthalate**	35% - 60%	
CAS-No. 131-11-3		
Acute Tox. 4 (Inhalation: vapours)		Category 4
• **Phlegmatizer**	6% - 26%	

CAS-No. Proprietary	
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 2

• **Methyl ethyl ketone** 0% - 2%	
CAS-No. 78-93-3	
Flammable liquids	Category 2
Eye irritation	Category 2A
Specific target organ toxicity - single exposure (Central nervous system)	Category 3

• **Hydrogen peroxide** <= 1%	
CAS-No. 7722-84-1	
Oxidizing liquids	Category 1
Acute toxicity (Oral)	Category 4
Skin corrosion	Category 1A
Serious eye damage	Category 1
Specific target organ toxicity - single exposure (Respiratory system)	Category 3
Chronic aquatic toxicity	Category 3

• **2-Naphthalenol ((phenylazo) phenyl) azo alkyl derivatives** 0.1% - 0.5%	
CAS-No. 92257-31-3	
Reproductive toxicity	Category 2

• **Xylene** 0.1% - 0.5%	
CAS-No. 1330-20-7	
Flammable liquids	Category 3
Skin irritation	Category 2
Eye irritation	Category 2A
Specific target organ toxicity - single exposure (Respiratory system)	Category 3
Specific target organ toxicity - repeated exposure	Category 2
Aspiration hazard	Category 1
Acute aquatic toxicity	Category 1

• **ethylbenzene** <= 0.1%	
CAS-No. 100-41-4	
Flammable liquids	Category 2
Acute toxicity (Inhalation)	Category 4
Skin irritation	Category 2
Eye irritation	Category 2A
Specific target organ toxicity - single exposure (Respiratory system)	Category 3
Specific target organ toxicity - repeated exposure	Category 2
Aspiration hazard	Category 1
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 3

Other information
This material is classified as hazardous under OSHA regulations.

4. First aid measures

4.1. Description of first aid measures

Inhalation
If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If unconscious, evaluate the need for artificial respiration. Get immediate medical attention.

Skin contact
Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Obtain medical attention immediately if symptoms occur. Wash clothing before reuse.

Eye contact
In case of contact, immediately flush eyes with plenty of water. Obtain medical attention if irritation develops.

Ingestion
If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms
None known

4.3. Indication of any immediate medical attention and special treatment needed
None known.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide., Dry Chemical combined with peroxide may reignite fire., Light water additives may be particularly effective at extinguishing peroxide fires.

Unsuitable extinguishing media: High volume water jet.

5.2. Special hazards arising from the substance or mixture
The heat of decomposition of the peroxides adds to the heat of the fire. Dry chemical fire extinguishing agent may catalyze the decomposition.

5.3. Advice for firefighters
If dry chemical is used to extinguish a peroxide fire, the extinguished area must be thoroughly wetted down with water to prevent reignition.
As in any fire, wear self-contained positive-pressure breathing apparatus and full protective gear.

Containers near the source of fire should be cooled with a water spray to prevent contents from reaching decomposition temperature.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Evacuate personnel to safe areas. Wear a self-contained breathing apparatus and appropriate personal protective equipment. (See Section 8 - Exposure Controls/Personal Protection.) Remove all sources of ignition. Ventilate the area.

6.2. Environmental precautions
Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

6.3. Methods and material for containment and cleaning up
Dike spill to prevent runoff from entering drains, sewers, streams, etc. Wet spilled material with water and absorb with an inert absorbent material such as perlite, vermiculite, or sand. Sweep up using non-sparking tools and place in a clean polyethylene drum or a polyethylene pail. DO NOT place into a steel container, lined or unlined, as decomposition may occur. Treat any contaminated cardboard packaging as hazardous waste. Wet container with additional water prior to sealing. Use absorbent/absorbent material to solidify liquids. Clean up promptly by sweeping or vacuum. Wear protective equipment, including eye protection, to avoid exposure (see Section 8 for specific handling precautions).

7. Handling and storage

7.1. Precautions for safe handling

Rotate stock using the oldest material first. Avoid contact with skin, eyes and clothing. Use PPE as specified in section 8. Keep containers closed to prevent contamination. Keep away from sources of heat, sparks, or flame. Do not add to hot solvents or monomers as a violent decomposition and/or reaction may result. When using spray equipment, never spray raw peroxide onto curing or into raw resin or flues. Keep peroxide in its original container. DO NOT USE NEAR FOOD OR DRINK. Wash thoroughly after handling. Protect from contamination. Keep tightly sealed in original packing. Risk of decomposition. Wash thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage

The stability of peroxide formulations us directly related to the shipping and storage temperature history. Cool storage at 80° F (27°C) or below is recommended for longer shelf life and stability. Prolonged storage at elevated temperatures of 100° F (38°C) and higher will cause product degradation, gassing and potential container rupture which can result in a fire and/or explosion. Store out of direct sunlight in a well ventilated area away from combustible and incompatible material. DO NOT STORE WITH FOOD OR DRINK.
Refer to NFPA 400 Hazardous Materials Code from the National Fire Protection Association for additional storage information.

Further information

Store apart from other dangerous and incompatible substances.
STORE BELOW 38 °C (100 °F).
Keep away from direct sunlight.
Keep containers tightly closed in a cool, well-ventilated place.

8. Exposure controls/personal protection

8.1. Control parameters

• **Methyl ethyl ketone peroxide**		
CAS-No.	1338-23-4	
Control parameters	0.2 ppm	Ceiling Limit Value:(ACGIH)
Control parameters	0.2 ppm 1.5 mg/m3	Ceiling Limit Value:(US CA OEL)
• **Dimethyl phthalate**		
CAS-No.	131-11-3	
Control parameters	5 mg/m3	Time Weighted Average (TWA):(ACGIH)
Control parameters	5 mg/m3	Permissible exposure limit:(OSHA Z1)
Control parameters	5 mg/m3	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):(US CA OEL)
• **Methyl ethyl ketone**		
CAS-No.	78-93-3	
Control parameters	200 ppm	Time Weighted Average (TWA):(ACGIH)
Control parameters	300 ppm	Short Term Exposure Limit (STEL):(ACGIH)
Control parameters	200 ppm 590 mg/m3	Permissible exposure limit:(OSHA Z1)
Control parameters	200 ppm 590 mg/m3	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):(US CA OEL)
Control parameters	300 ppm 885 mg/m3	Short Term Exposure Limit (STEL):(US CA OEL)
• **Hydrogen peroxide**		
CAS-No.	7722-84-1	
Control parameters	1 ppm	Time Weighted Average (TWA):(ACGIH)

Control parameters	1 ppm 1.4 mg/m3	Permissible exposure limit:(OSHA Z1)
Control parameters	1 ppm 1.4 mg/m3	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):(US CA OEL)
• **Xylene**		
CAS-No. Control parameters	1330-20-7 100 ppm 435 mg/m3	Permissible exposure limit:(OSHA Z1)
Control parameters	100 ppm	Time Weighted Average (TWA):(ACGIH)
Control parameters	150 ppm	Short Term Exposure Limit (STEL):(ACGIH)
Control parameters	100 ppm 435 mg/m3	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):(US CA OEL)
Control parameters	300 ppm	Ceiling Limit Value:(US CA OEL)
Control parameters	150 ppm 655 mg/m3	Short Term Exposure Limit (STEL):(US CA OEL)
• **ethylbenzene**		
CAS-No. Control parameters	100-41-4 20 ppm	Time Weighted Average (TWA):(ACGIH)
Control parameters	100 ppm 435 mg/m3	Permissible exposure limit:(OSHA Z1)
Control parameters	5 ppm 22 mg/m3	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):(US CA OEL)
Control parameters	30 ppm 130 mg/m3	Short Term Exposure Limit (STEL):(US CA OEL)

8.2. Exposure controls

Engineering measures

Local exhaust and mechanical ventilation recommended.

8.3. Personal protective equipment

Respiratory protection

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

Hand protection

Wear protective gloves made of the following materials:.
Solvent-resistant gloves (butyl-rubber)
Nitrile rubber
Neoprene gloves
Skin should be washed after contact.

Eye protection

Use chemical splash goggles or face shield.

Skin and body protection

A safety shower and eye wash fountain should be readily available.
To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.

Hygiene measures

Do not eat, drink or smoke during use.
Wash hands before breaks and immediately after handling the product.

Protective measures
Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

physical state	liquid	
Colour	red	
Form	liquid	
Odour	slight	
Odour Threshold	No data available	
pH	not applicable	
Melting point/range	no data available	
Boiling point/range	not determined	
Flash point	76 °C	(Seta closed cup)
Evaporation rate	not determined	
Flammability (solid, gas)	not applicable	
Lower explosion limit	no data available	
Upper explosion limit	no data available	
Vapour pressure	no data available	
Relative vapour density	> 1	
Relative density	1.1	
Water solubility	soluble	
Solubility/qualitative	no data available	
Partition coefficient: n-octanol/water	no data available	
Autoignition temperature	no data available	
Thermal decomposition	> 60 °C	
Viscosity, dynamic	no data available	
Viscosity, kinematic	not determined	

9.2. Other information

peroxides	The substance or mixture is an organic peroxide classified as type D.	
SADT	SADT	> 60 °C

10. Stability and reactivity

10.1. Reactivity
Stable under recommended storage conditions.

10.2. Chemical stability
Contact with incompatible substances can cause disintegration at or below SADT.

10.3. Possibility of hazardous reactions

Stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Vapors may form explosive mixtures with air.

10.4. Conditions to avoid
Keep away from heat and sources of ignition.
Exposure to sunlight.
Prolonged storage above 100°F (38°). Storage above SADT. Storage near flammable or combustible material.

10.5. Incompatible materials
Keep away from strong acids, bases, heavy metals, salts, reducing agents and accelerators. Contaminants (e.g. rust, dust, ash). Combustible materials., Risk of decomposition. Dimethylaniline, cobalt napthenate and other promoters, accelerators, reducing agents, or any hot material.

10.6. Hazardous decomposition products
Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke)., Irritant, caustic, flammable, noxious/toxic gases and vapors can develop in the case of fire and decomposition., Acrid smoke and irritating fumes.

11. Toxicological information

11.1. Information on toxicological effects

No toxicological studies are available on the mixture.

carcinogenicity assessment	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. 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. No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Toxicological information on components
Methyl ethyl ketone peroxide

Acute oral toxicity	LD50 Oral Rat(male): 1017 mg/kg
Skin irritation	/ Causes severe skin burns and eye damage. Causes burns.
Eye irritation	/ Causes serious eye damage. Risk of serious damage to eyes.

Dimethyl phthalate

Acute oral toxicity	LD50 Oral Rat: 8200 mg/kg
Acute inhalation toxicity	LC50 : 10.4 mg/l / 6 h Assessment: H332: Harmful if inhaled.
Acute dermal toxicity	LD50 Dermal Rat: > 12000 mg/kg
Skin irritation	No skin irritation
Eye irritation	No eye irritation
Sensitization	Not sensitizing.

Phlegmatizer

Acute oral toxicity	LD50 Oral Rat(female): > 2000 mg/kg
Acute inhalation toxicity	LCLo Rat: > 0.12 mg/l / 6 h
Acute dermal toxicity	LD50 Dermal Rat(male/female): > 2000 mg/kg
Skin irritation	No skin irritation
Eye irritation	No eye irritation

Hydrogen peroxide

Acute oral toxicity	LD50 Oral Rat(male): 1026 mg/kg Test substance: Hydrogen peroxide >= 50% LD50 Oral Rat(female): 693.7 mg/kg Test substance: Hydrogen peroxide >= 50%
Acute inhalation toxicity	Assessment: Harmful if inhaled.
Acute dermal toxicity	LD50 Dermal Rat(male and female): > 2000 mg/kg
Skin irritation	Corrosive
Eye irritation	Corrosive
Sensitization	Not sensitizing.
Assessment of STOT single exposure	Assessment: May cause respiratory irritation.

Methyl ethyl ketone

Acute oral toxicity	LD50 Oral Rat: 2737 mg/kg
Acute inhalation toxicity	LC50 Rat: 23500 mg/l / 8 h
Acute dermal toxicity	LD50 Rabbit: 6480 mg/kg
Eye irritation	/ Irritating to eyes. irritating

Assessment of STOT single exposure	Target Organs:	Central nervous system
	Assessment:	May cause drowsiness or dizziness.
Mutagenicity assessment		This product may cause mutagenic effects.

2-Naphthalenol ((phenylazo) phenyl) azo alkyl derivatives

Acute oral toxicity	LD50 Oral Rat: > 5000 mg/kg
Skin irritation	No skin irritation

CMR assessment

Toxicity to reproduction	Some evidence of adverse effects on development, based on animal experiments.

Xylene

Acute oral toxicity	LD50 Rat: 3523 mg/kg
Acute inhalation toxicity	LD50 Rat: 27.5 mg/l / 4 h / vapour
Acute dermal toxicity	LD50 Rabbit: > 4200 mg/kg
Skin irritation	Skin irritation
Eye irritation	Irritating to eyes.
Assessment of STOT single exposure	Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.
Assessment of STOT repeat exposure	Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.
Risk of aspiration toxicity	May be fatal if swallowed and enters airways.
Teratogenicity	Suppliers of xylene have reported that high levels of exposure to xylene in some laboratory animal studies were reported to have affected the development of the embryo/fetus. These effects were often at levels toxic to the mother. The significance of this to human exposure has not been determined.

Suppliers of xylene have reported that high levels of exposure to xylene in some laboratory animal studies were reported to have affected the development of the embryo/fetus. These effects were often at levels toxic to the mother. The significance of this to human exposure has not been determined.

inhalative Rat: in maternally non-toxic doses

NOAEL (No Observed Adverse Effect Level) teratogenesis:	2.165 mg/l
Method:	OECD TG 414

Suppliers of xylene have reported that high levels of exposure to xylene in some animal studies were reported to have affected the development of the embryo/fetus. These effects were often at levels which are toxic to the

mother. The significance of these findings to human exposure has not been determined, particularly the exposure to the low levels of xylene found in this product.

teratogenicity assessment: Potential embryo-foetal toxicity and teratogenicity.

Further information: Overexposure to xylene has been suggested as a cause of the following effects in laboratory animals and may aggravate pre-existing disorders of these organs in humans: kidney damage; mild, reversible liver effects; effects on hearing and cardiac sensitization.

ethylbenzene

Acute oral toxicity: LD50 Rat: 3500 mg/kg

Acute inhalation toxicity: LC50 Rat: 17.6 mg/l / 4 h / vapour

Acute dermal toxicity: LD50 Rabbit: 15400 mg/kg

LD50 Rabbit: 5000 mg/kg

Skin irritation: Skin irritation

Eye irritation: Irritating to eyes.

Sensitization: Does not cause skin sensitisation.

Assessment of STOT single exposure: Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

Assessment of STOT repeat exposure: Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

Risk of aspiration toxicity: May be fatal if swallowed and enters airways.

carcinogenicity assessment: Contains a component which is classified as an IARC 2B carcinogen (possibly carcinogenic to humans).

12. Ecological information

12.1. Toxicity

Toxicity to fish: There is no data available for this product.

Toxicity in aquatic invertebrates: No data is available on the product itself.

Toxicity to algae: No data is available on the product itself.

12.2. Persistence and degradability

Biodegradability: no data available

12.3. Bioaccumulative potential

Bioaccumulation: no data available

12.4. Mobility in soil

Mobility — No data available

12.5. Other adverse effects

Further Information — Avoid release to the environment.

13. Disposal considerations

13.1. Waste treatment methods

Product

Waste must be disposed of in accordance with federal, state and local regulations. Incineration is the preferred method of disposal. Contact United Initiators for additional information. Empty containers must be handled with care due to product residue. DO NOT HEAT OR CUT THE EMPTY CONTAINER WITH ELECTRIC OR GAS TORCH.

Uncleaned packaging

Packaging material should be recycled or disposed of in accordance with federal, state and local regulations.

14. Transport information

D.O.T. Road/Rail

14.1.	UN number:	UN 3105
14.2.	UN proper shipping name:	Organic peroxide type D, liquid(Methyl ethyl ketone peroxide <= 45%)
14.3.	Transport hazard class(es):	5.2
14.4.	Packing group:	II
14.5.	Environmental hazards (Marine pollutant):	--
14.6.	Special precautions for user:	No

Air transport ICAO-TI/IATA-DGR

14.1.	UN number:	UN 3105
14.2.	UN proper shipping name:	Organic peroxide type D, liquid(Methyl ethyl ketone peroxide <= 45%)
14.3.	Transport hazard class(es):	5.2
14.4.	Packing group:	--
14.5.	Environmental hazards:	--
14.6.	Special precautions for user:	Yes

IATA-C: ERG-Code 5L
Must be protected from direct sunlight and stored away from all sources of heat in a well-ventilated area.

IATA-P: ERG-Code 5L
Must be protected from direct sunlight and stored away from all sources of heat in a well-ventilated area.

Sea transport IMDG-Code/GGVSee (Germany)

14.1.	UN number:	UN 3105

14.2.	UN proper shipping name:	ORGANIC PEROXIDE TYPE D, LIQUID(Methyl ethyl ketone peroxide <= 45%)
14.3.	Transport hazard class(es):	5.2
14.4.	Packing group:	--
14.5.	Environmental hazards (Marine pollutant):	--
14.6.	Special precautions for user:	Yes
	EmS:	F-J,S-R
	"Separated from" acids and alkalis. Protected from sources of heat.	

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:
for transportapproval see regulatory information

15. Regulatory information

US Federal Regulations

OSHA

If listed below, chemical specific standards apply to the product or components:

- None listed

Clean Air Act Section (112)

If listed below, components present at or above the de minimus level are hazardous air pollutants:

- Dimethyl phthalate
  CAS-No. 131-11-3
- Xylene
  1330-20-7
- ethylbenzene
  100-41-4

CERCLA Reportable Quantities

If listed below, a reportable quantity (RQ) applies to the product based on the percent of the named component:

- Methyl ethyl ketone peroxide
  CAS-No. 1338-23-4
  Reportable Quantity 29 lbs
- Xylene
  CAS-No. 1330-20-7
  Reportable Quantity 526 lbs
- ethylbenzene
  CAS-No. 100-41-4
  Reportable Quantity 28571 lbs

SARA Title III Section 311/312 Hazard Categories

The product meets the criteria only for the listed hazard classes:

- Acute Health Hazard
- Chronic Health Hazard
- Fire Hazard

SARA Title III Section 313 Reportable Substances

If listed below, components are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

- Dimethyl phthalate
  CAS-No. 131-11-3
- Methyl ethyl ketone
  CAS-No. 78-93-3
- Xylene
  CAS-No. 1330-20-7
- ethylbenzene
  CAS-No. 100-41-4

Toxic Substances Control Act (TSCA)

If listed below, non-proprietary substances are subject to export notification under Section 12 (b) of TSCA:

- None listed

State Regulations

California Proposition 65

A warning under the California Drinking Water Act is required only if listed below:

WARNING! This product contains a chemical known to the State of California to cause cancer.

- ethylbenzene
  CAS-No. 100-41-4

International Chemical Inventory Status

Unless otherwise noted, this product is in compliance with the inventory listing of the countries shown below. For information on listing for countries not shown, contact the Product Regulatory Services Department.

Europe (EINECS/ELINCS)	listed/registered
USA (TSCA)	listed/registered
Canada (DSL)	listed/registered
Australia (AICS)	not listed/registered
Japan (MITI)	not listed/registered
Korea (TCCL)	listed/registered
Philippines (PICCS)	not listed/registered
China	listed/registered
New Zealand	not listed/registered

An employer using HMIS/NFPA labeling must through training ensure that its employees are fully aware of the hazards of the chemicals used.

HMIS Ratings

Health :	3 *
Flammability :	2
Physical Hazard :	2

NFPA Ratings

Health :	3
Flammability :	2
Reactivity :	2

16. Other information

Further information

Revision date 04/01/2015

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

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.

Legend

ACC	American Chemistry Council
ACGIH	American Conference of Governmental Industrial Hygenists
ACS	Advisory Committee on Sustainability
ADI	Acceptable Daily Intake
ASTM	American Society for Testing and Materials
ATP	Adaptation to Technical Progress
BCF	Bioconcentration factor
BOD	Biochemical oxygen demand
c.c.	closed cup
CAO	Cargo Aircraft Only
Carc	Carcinogen
CAS	Chemical Abstract Services
CDN	Canada
CEPA	Canadian Environmental Protection Act
CERCLA	Comprehensive Environmental Response – Compensation and Liability Act
CFR	Code of Federal Regulations
CMR	carcinogenic-mutagenic-toxic for reproduction
COD	Chemical oxygen demand
DIN	German Institute for Standardization
DMEL	Derived minimum effect level
DNEL	Derived no effect level
DOT	Department of Transportation
EC50	half maximal effective concentration
EPA	Environmental Protection Agency
ErC50	Reduction of Growth Rate
ERG	Emergency Response Guide Book
FDA	Food and Drug Administration
GHS	Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
GLP	Good Laboratory Practice
GMO	Genetic Modified Organism
HCS	Hazard Communication Standard
HMIS	Hazardous Materials Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	Intermediate Bulk Container
ICAO-TI	International Civil Aviation Organization- Technical Instructions
ICCA	International Council of Chemical Association
ID	Identification number
IMDG	International Maritime Dangerous Goods
IUPAC	International Union of Pure and Applied Chemistry
ISO	International Organization For Standardization
LC50	50 % Lethal Concentration
LD50	50 % Lethal Dose
L(E)C50	LC50 or EC50
LOAEL	Lowest observed adverse effect level
LOEL	Lowest observed effect level
MARPOL	International Convention for the Prevention of Pollution from Ships
NFPA	National Fire Protection Association
NOAEL	No observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
o. c.	open cup
OECD	Organisation for Economic Cooperation and Development
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration
PBT	Persistent, bioaccumulative, toxic
PEC	Predicted effect concentration
PNEC	Predicted no effect concentration
RQ	Reportable Quantity
SDS	Safety Data Sheet
STOT	Specific Target Organ Toxicity
UN	United Nations
vPvB	very persistent, very bioaccumulative
voc	volatile organic compounds

WHMIS	Workplace Hazardous Materials Information System
WHO	World Health Organization