

**SAFETY DATA SHEET****NOROX® MEKP-30 FRED**

Material no.		Version	<b>1.0 / US</b>
Specification	<b>186158</b>	Revision date	<b>03/12/2015</b>
Order Number		Print Date	<b>04/13/2015</b>
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**1. Identification****1.1. Product identifier**

Trade name NOROX® MEKP-30 FRED

**1.2. Recommended use of the chemical and restrictions on use**

Relevant applications identified polymerization initiator

**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 870-572-2935

Telefax 870-572-1416

E-mail 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  
Symbol(s)

Classification according to Regulation 29CFR 1910.1200



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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:                      P201 - Obtain special instructions before use.  
 Prevention                      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/ strong acids, bases, heavy metal salts and other reducing substances /combustible materials.  
 P234 - Keep only in original container.  
 P260 - Do not breathe dust or mist.  
 P264 - Wash skin thoroughly after handling.  
 P273 - Avoid release to the environment.  
 P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.

Precautionary statement:                      P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 Reaction                      P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
 P304 + P340 - IF INHALED: Remove 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.  
 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:                      P403 + P235 - Store in a well-ventilated place. Keep cool.  
 Storage                      P405 - Store locked up.  
 P410 - Protect from sunlight.  
 P411 - Store at temperatures not exceeding 38°C (100°F).  
 P420 - Store away from other materials.

Precautionary statement:                      P501 - Dispose of contents/ container to an approved waste disposal plant.  
 Disposal

**2.3. Other hazards**  
None known.**3. Composition/information on ingredients**

<b>• Methyl ethyl ketone peroxide</b>	19% - 22%
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
<b>• Dimethyl phthalate</b>	35% - 69%
CAS-No.                      131-11-3	
Acute Tox. 4 (Inhalation: vapours)	Category 4
<b>• Phlegmatizer</b>	3% - 15%

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CAS-No.	Proprietary	
Acute aquatic toxicity		Category 2
Chronic aquatic toxicity		Category 2
<b>• Methyl ethyl ketone</b> <= 1%		
CAS-No.	78-93-3	
Flammable liquids		Category 2
Eye irritation		Category 2A
Specific target organ toxicity - single exposure (Central nervous system)		Category 3
<b>• Hydrogen peroxide</b> <= 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
<b>• N-methyl-2-pyrrolidone</b> <= 1%		
CAS-No.	872-50-4	
Flammable liquids		Category 4
Skin irritation		Category 2
Eye irritation		Category 2A
Reproductive toxicity		Category 2
Specific target organ toxicity - single exposure (Respiratory system)		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. Firefighting measures****5.1. Extinguishing media**

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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.

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**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).

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**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 is 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.

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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)

**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.

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**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/boiling 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 - 1.2
Water solubility	soluble

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Solubility/qualitative No data available

Partition coefficient: n-octanol/water No data available

Auto-ignition temperature No data available

Thermal decomposition &gt; 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 &gt; 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 naphthenate 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

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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
Sensitisation	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



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Eye irritation	Corrosive
Sensitisation	Not sensitizing.
Assessment of STOT single exposure	Assessment: May cause respiratory irritation.
<b>Methyl ethyl ketone</b>	
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.

**N-methyl-2-pyrrolidone**

Acute oral toxicity	LD50 Oral rat(male/female): 4150 mg/kg Method: analogy OECD TG 401
Acute inhalation toxicity	LC50 rat(male/female): > 5.1 mg/l / 4 h / Aerosol Method: OECD Test Guideline 403 (limit test)
Acute dermal toxicity	LD50 Dermal Rat(male/female): > 5000 mg/kg Method: Analogy OECD-method
Skin irritation	Rabbit Irritating to skin. Method: Draize Test
Eye irritation	Rabbit Irritating to eyes. Method: Draize Test
Sensitisation	species not listed: not sensitizing to the skin
Assessment of STOT single exposure	Assessment: May cause respiratory irritation.

**CMR assessment**

Teratogenicity	Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.
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**12. Ecological information****12.1. Toxicity**

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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
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**12.3. Bioaccumulative potential**

Bioaccumulation	No data available
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**12.4. Mobility in soil**

Mobility	No data available
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**12.5. Other adverse effects**

Further Information	Avoid release to the environment.
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**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.

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**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

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- 14.3. Transport hazard class(es): <= 45%) 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

**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 45 lbs

**SARA Title III Section 311/312 Hazard Categories**

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

- Acute Health Hazard

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- 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
- N-methyl-2-pyrrolidone  
CAS-No. 872-50-4

**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 birth defects or other reproductive harm.

- N-methyl-2-pyrrolidone  
CAS-No. 872-50-4

**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)	listed/registered
Japan (MITI)	not listed/registered
Korea (TCCL)	not listed/registered
Philippines (PICCS)	not listed/registered
China	not listed/registered
New Zealand	not listed/registered

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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

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**16. Other information****Further information**

Revision date 03/12/2015

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.

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**Legend**

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

**SAFETY DATA SHEET****NOROX® MEKP-30 FRED****UNITED INITIATORS***driving your success*

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**WHMIS**  
**WHO**Workplace Hazardous Materials Information System  
World Health Organization