

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

1.1 Product identifier

Trade name: **HI-POINT 90**

CAS Number: 1338-23-4

EC number: 215-661-2

1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

Application of the substance / the mixture

Reaction initiator
For industrial use

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Pergan Marshall LLC
710 Bussey Road
Marshall TX 75670
903-934-7763

Further information obtainable from:

903-934-7763 or 877-2-Pergan (877-273-7426)
customerservice@pergan.com

1.4 Emergency telephone number:

CHEMTREC (24 hours) 800-424-9300
Pergan Marshall LLC 903-938-5141

2 Hazards identification

2.1 Classification of the substance or mixture

Organic Peroxide - Type D H242 Heating may cause a fire.
Skin Corrosion - 1B H314 Causes severe skin burns and eye damage.
Eye Damage - 1 H318 Causes serious eye damage.
Acute Toxicity, oral - 4 H302 Harmful if swallowed.
GHS Classification Scale (1 = severe hazard; 4 = slight hazard)

2.2 Label elements

Hazard symbols



Signal word

Danger

Hazard-determining components of labelling:

methyl ethyl ketone peroxide
hydrogen peroxide solution

Hazard statements

H242 Heating may cause a fire.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P220 Keep away from dirt, rust, chemicals in particular concentrated acids, alkalis and accelerators (e. g. heavy metal compounds and amines).
P234 Keep only in original container.
P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P405 Store locked up.
P410 Protect from sunlight.
P411+P235 Store at temperatures not exceeding 38°C (100°F). Keep cool.
P420 Do not mix with peroxide-accelerators or reducing agents.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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3 Composition/information on ingredients

3.1 Chemical characterization: Mixtures

Dangerous components:

CAS: 1338-23-4 EINECS: 215-661-2	Methyl ethyl ketone peroxide Org. Perox. D, H242; Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302	36-40%
CAS: 131-11-3 EINECS: 205-011-6	Dimethyl phthalate No GHS classification	32-36%
	Proprietary safety diluent No GHS classification	26-30%
CAS: 7722-84-1 EINECS: 231-765-0	Hydrogen peroxide solution Ox. Liq. 1, H271; Skin Corr. 1A, H314; Acute Tox. 4, H302; Acute Tox. 4, H332	≤ 1.5%
CAS: 78-93-3 EINECS: 201-159-0	Methyl ethyl ketone Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	≤ 1.0%

Additional information: For the wording of the listed H phrases refer to section 16.

4 First aid measures

4.1 Description of first aid measures

- General information: Immediately remove any clothing soiled by the product. Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- After inhalation: Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur. In case of unconsciousness, place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly. Immediately remove contaminated clothing. If irritation persists or if contact has been prolonged, obtain medical attention.
- After eye contact: Rinse opened eye for at least 15 minutes under running water. Get medical attention.
- After swallowing: Obtain medical attention immediately. If patient is fully conscious, rinse mouth with water. Give water to drink in small sips. (diluting effect) Never give anything by mouth to an unconscious person. Do NOT induce vomiting.
- 4.2 Most important symptoms and effects, both acute and delayed: No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents: CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- 5.2 Special hazards arising from the substance or mixture: Under certain fire conditions, traces of other toxic gases cannot be excluded. Hydrocarbons, carbon dioxide and -monoxide.
- 5.3 Advice for firefighters
- Protective equipment: Do not inhale explosion gases or combustion gases.
- Additional information: Cool endangered receptacles with water spray. Self-protection first!

6 Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures: Keep away from ignition sources. In case of further temperature, cool with water spray from a safe distance. Wear breathing apparatus during decomposition of materials. Wear protective equipment. Keep unprotected persons away.
- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up: Ensure adequate ventilation. Large quantities should be diluted with suitable desensitization agent to a concentration below 10% before disposal. Stop the leak if it can be done without risk. Dike to contain spill. Soak up with inert absorbent material (e.g. vermiculite). Cover with small quantities of water. Sweep up using non-sparking equipment. Collect in suitable container and dispose of in accordance with government regulations. In case of large spillage, the environmental authority should be informed.

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7 Handling and storage

· 7.1 Precautions for safe handling

Keep away from heat and direct sunlight.
 Open and handle receptacle with care.
 Prevent formation of aerosols.
 Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.
 Do not refill residue into storage receptacles.
 Restrict the quantity stored at the work place.
 Before break and at the end of work hands should be thoroughly washed.
 Only use tools made of suitable materials (e. g. polyethylene or stainless steel).
 Keep away from dirt, rust, chemicals in particular concentrated acids, alkalis and accelerators (e. g. heavy-metal compounds and amines).
 Oxidizing because of releasing oxygen.
 While using do not eat, drink or smoke.
 Do not generate flames or sparks.
 Keep product and emptied container away from heat and sources of ignition.
 Avoid shock and friction.
 Take precautionary measures against static discharges.
 Do not smoke.

· Information about fire and explosion protection:

Protect from heat.
 Protect against electrostatic charges.
 Prevent impact and friction.
 Use explosion-proof apparatus / fittings and spark-proof tools.
 Fumes can combine with air to form an explosive mixture.
 Wear shoes with conductive soles.
 Formation of flammable or explosive gas/air-mixtures is possible.
 Avoid open flames, sparks, direct sunlight and other sources of ignition.
 Keep ignition sources away – Do not smoke.

· 7.2 Conditions for safe storage, including any incompatibilities

· **Storage:** Pay attention to the special requirements of your local authorities for storing dangerous goods.

· Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.
 Prevent any seepage into the ground.
 Use only receptacles specifically permitted for this substance/product.

· Information about storage in one common storage facility:

Do not store or park organic peroxide together with heavy metal compounds and amines.
 Store away from foodstuffs, drinks and feeding stuffs.

· Further information about storage conditions:

Keep container tightly sealed.
 Protect from heat and direct sunlight.
 Protect from contamination.

· Recommended storage temperature (To maintain quality):

max.: 0 °C to 30 °C (32°F to 86 °F)

· Storage class:

5.2

Shelf Life: (Calculated from half-life data in benzene solution) Estimate >48 months at which 95% of the original manufactured assay remains when stored at or below 30°C (86°F).

· 7.3 Specific end use(s)

No further relevant information available.

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8 Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters

EXPOSURE LIMITS

Component	Type	Value	Remark
Methyl ethyl ketone peroxides	Ceiling, ACGIH	1.5 mg/m ³	
	TWA	1.5 mg/m ³ 0.2 ppm	8 hours
Dimethyl phthalate	TWA, ACGIH	5.0 mg/m ³	
Methyl Ethyl Ketone	TWA, ACGIH	200.0 ppm	
	STEL, ACGIH	300.0 ppm	
Hydrogen peroxide	TWA, ACGIH	1.0 ppm	

Consult local authorities for acceptable provincial values.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing.
 Wash hands before breaks and at the end of work.
 Store protective clothing separately.
 Avoid contact with the eyes and skin.
 Do not eat, drink, smoke or sniff while working.
 Be sure to clean skin thoroughly after work and before breaks.

Respiratory protection:

Not necessary if room is well-ventilated.
 Use suitable respiratory device when insufficiently ventilated.

Protection of hands:

Use chemical-protective gloves.

Material of gloves

Butyl rubber, BR
 Fluorocarbon rubber (Viton)
 Nitrile rubber, NBR
 Neoprene

Eye protection:

Wear suitable eye protection: face shield, safety goggles. Contact lenses should not be worn.

Body protection:

Protective work clothing

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

- Form: Fluid
- Color: Colorless
- Odor: Characteristic

Change in condition

- Melting point/Melting range: Not applicable.
- Boiling point/Boiling range: Not applicable.

- Flash point: > SADT

- Decomposition temperature: 70 °C (158° F)

- Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures is possible.

- Specific Gravity at 20 °C: ~1.08 g/cm³

Solubility in / Miscibility with

- water: Undetermined.

- Partition coefficient (n-octanol/water): not determined

- Percent volatiles < 3%(m)

- Kinematic viscosity 15 cSt at 25 °C

9.2 Other information

No further relevant information available.

- Active oxygen 8.85 - 9.0 %

(Contd. on page 5)

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10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** SADT (Self Accelerating Decomposition Temperature) is the lowest temperature at which self accelerating decomposition may occur with substance in the packaging as used in transport. A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can cause decomposition at and above the temperature. Contact with incompatible substances can cause decomposition at or below the SADT.
No decomposition if used and stored according to specifications.
To avoid thermal decomposition do not overheat.
- **10.3 Possibility of hazardous reactions** Self-accelerating decomposition at SADT.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Rapid decomposition by dirt, rust, chemicals in particular concentrated acids, alkalis and accelerators (e. g. heavy-metal compounds and amines).
- **10.6 Hazardous decomposition products:** Hydrocarbons, carbon dioxide and -monoxide.
No hazardous decomposition products if used and stored according to specifications.
- **Additional information:** Emergency procedures will vary depending on conditions. The customer should have an emergency response plan in place.

11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

1338-23-4 methyl ethyl ketone peroxide

Oral	LD50	1017 mg/kg (rat)
Dermal	LD50	4000 mg/kg (rabbit)
Inhalative	LC50 / 4h	17 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** Caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:** Harmful
Corrosive
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

1338-23-4 methyl ethyl ketone peroxide

EC50 / 48h	39 mg/l (daphnia magna)
LC50	44.2 mg/l (poecilia reticulata)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or un-neutralized.
- **12.5 Other adverse effects** No further relevant information available.

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13 Disposal considerations

- 13.1 Waste treatment methods

- Recommendation

After diluting with a suitable desensitization agent to 10 %, the solution must be supplied to a special treatment (e. g. thermal utilization). Dispose of waste material in compliance with all federal, state and local regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- Contaminated packaging:

- Recommendation

Dispose according to local regulations. Emptied container might retain product residues. Follow all warnings even after container is emptied. Do not shred containers before they are thoroughly cleaned from product residues. Do not wash residues into drains or other waterways.

14 Transport information

- 14.1 UN-Number

UN3105

- 14.2 Proper shipping name

- US Department of Transportation (DOT)

ORGANIC PEROXIDE TYPE D, LIQUID (METHYL ETHYL KETONE PEROXIDE(S), <=45%)

- International Maritime Dangerous Goods Code (IMDG)

ORGANIC PEROXIDE TYPE D, LIQUID (METHYL ETHYL KETONE PEROXIDE(S), <=45%)

- 14.3 Transport hazard class(es)

- DOT



- IMDG



- Class

5.2 Organic peroxides.

- Label

5.2

- 14.4 Packing group

- DOT

II

- 14.5 Environmental hazards:

- Marine pollutant:

No

- 14.6 Special precautions for user

Warning: Organic peroxides.

(Contd. on page 7)

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15 Regulatory information

· Chemical Inventory Status

The ingredients of this product are on the following chemical inventory lists.

US. Toxic Substances Control Act	TSCA
EU. European Inventory of Existing Chemical Substances	EINECS
Canada. Domestic Substances List	DSL
Japan. Kashin-Hou Laws List	ENCS
Korea. Existing Chemicals Inventory	KECI
China. Inventory of Existing Chemical Substances	IECSC
Taiwan. National Existing Chemical Inventory	NECI
New Zealand Inventory of Chemicals	NZIoC
Australian Inventory of Chemical Substances	AICS
Philippine Inventory of Chemicals and Chemical Substances	PICCS

· United States – Federal Regulations

SARA Title III – Section 313 Toxic Chemicals:

Components present in this product at a level which could require reporting under the statute are:

Chemical Name	CAS Number	Max weight %
Dimethyl phthalate	131-11-3	32 -36

· United States – State Regulations

New Jersey Right to Know

Chemical Name	CAS Number	New Jersey TS Number
Methy ethyl ketone peroxide(s)	1338-23-4	-
Dimethyl phthalate	131-11-3	

16 Other information

Disclaimer: This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H225 Highly flammable liquid and vapor.
 H242 Heating may cause a fire.
 H271 May cause fire or explosion; strong oxidizer
 H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H318 Causes serious eye damage.
 H319 Cause serious eye irritation.
 H332 Harmful if inhaled.
 H336 May cause drowsiness or dizziness.

· Hazards ratings: 0 = no hazard, 1 = slight, 2 = moderate, 3 = high, 4 = extreme

	Health	Fire	Reactivity Physical Hazard
NFPA	3	2	2
HMIS	3	2	2