

ELAN-Plus™ MEKP-9 Red Catalyst

Version 3

Revision Date 06/09/2015

Print Date 06/09/2015

SECTION 1. IDENTIFICATION

Product name : ELAN-Plus™ MEKP-9 Red Catalyst

Manufacturer or supplier's details

Company : ELANTAS PDG, INC.
5200 North 2nd Street
St. Louis MO 63147

Telephone : (314) 621-5700

Visit our web site : www.elantas.com

E-mail address : Todd.Thomas@altana.com

Emergency telephone : INFOTRAC - 1-800-535-5053
number

Recommended use of the chemical and restrictions on use

Recommended use : Polymerization Initiator

Restrictions on use : Refer to Section 15 for any restrictions that may apply

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Organic peroxides : Type D

Acute toxicity (Oral) : Category 4

Skin corrosion : Category 1B

Serious eye damage : Category 1

GHS Label element

Hazard pictograms :



Signal word : Danger

Hazard statements : H242 Heating may cause a fire.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

Precautionary statements : **Prevention:**
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.
P264 Wash skin thoroughly after handling.

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P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 + P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Immediately call a POISON CENTER or doctor/ physician.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

P363 Wash contaminated clothing before reuse.

Storage:

P405 Store locked up.

P410 Protect from sunlight.

P411 + P235 Store at temperatures not exceeding .? °C/ .? °F.

Keep cool.

P420 Store away from other materials.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Organic Peroxide

Hazardous components

Component	CAS-No.	Concentration (%)
2-Butanone, peroxide	1338-23-4	>= 33 - < 34
Methyl ethyl ketone	78-93-3	>= 1 - < 2
Hydrogen peroxide	7722-84-1	>= 1 - < 2

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

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- Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
Contact with incompatible materials or exposure to temperatures exceeding the SADT may result in a self accelerating decomposition reaction with release of flammable vapors which may auto-ignite.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must

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be disposed of in accordance with local regulations.
For safety reasons in case of fire, cans should be stored separately in closed containments.
Use a water spray to cool fully closed containers.

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Remove all sources of ignition.

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Do not breathe vapours/dust.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Open drum carefully as content may be under pressure.
To avoid spills during handling keep bottle on a metal tray.
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Store under conditions specified on the product Technical Data Sheet to maintain product quality.
Store in cool place.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Value type	Control	Basis
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		(Form of exposure)	parameters / Permissible concentration	
2-Butanone, peroxide	1338-23-4	C	0.2 ppm	ACGIH
		C	0.2 ppm 1.5 mg/m ³	NIOSH REL
Methyl ethyl ketone	78-93-3	TWA	200 ppm	ACGIH
		STEL	300 ppm	ACGIH
		TWA	200 ppm 590 mg/m ³	OSHA Z-1
		TWA	200 ppm 590 mg/m ³	OSHA P0
		STEL	300 ppm 885 mg/m ³	OSHA P0
		TWA	200 ppm 590 mg/m ³	NIOSH REL
		ST	300 ppm 885 mg/m ³	NIOSH REL
Hydrogen peroxide	7722-84-1	TWA	1 ppm	ACGIH
		TWA	1 ppm 1.4 mg/m ³	NIOSH REL

Engineering measures : Use with adequate ventilation.
All application areas should be ventilated in accordance with applicable OSHA regulations. (29 CFR 1910.94)

Personal protective equipment

Hand protection

Remarks

: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

: Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection

: impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

: When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

: liquid

Odour Threshold

: No data available

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pH	: No data available
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: No data available
Flash point	: Greater than 201 °F (94 °C) Method: No information available. Information taken from reference works and the literature.
Evaporation rate	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative Density/Specific Gravity	: No data available
Density	: 1.0094 g/cm3 (68 °F (20 °C))
Solubility(ies)	
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity	
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Self-Accelerating decomposition temperature (SADT)	: 158 °F (70 °C)

SECTION 10. STABILITY AND REACTIVITY

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Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: Heat, flames and sparks.
Hazardous decomposition products	: Carbon monoxide in a fire. Nitrogen oxides in a fire.

SECTION 11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Skin contact

Inhalation

Eyes

Acute toxicity**Product:**

Acute oral toxicity : Acute toxicity estimate : 1,463 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : > 40 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Components:**78-93-3 Methyl ethyl ketone:**

Acute oral toxicity : LD50 (Rat): 2,737 mg/kg

Acute inhalation toxicity : LC50 (Rat): 20 mg/l

Acute dermal toxicity : LD50 (Rabbit): > 8,000 mg/kg

Skin corrosion/irritation**Product:**

Remarks: Extremely corrosive and destructive to tissue.

Components:**78-93-3 Methyl ethyl ketone:**

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

GLP: yes

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Serious eye damage/eye irritation**Product:**

Remarks: May cause irreversible eye damage.

Components:**78-93-3 Methyl ethyl ketone:**

Species: Rabbit

Result: Eye irritation

Respiratory or skin sensitisation**Components:****78-93-3 Methyl ethyl ketone:**

Test Type: Buehler Test

Exposure routes: Dermal

Species: Guinea pig

Method: OECD Test Guideline 406

Result: Does not cause skin sensitisation.

GLP: yes

Carcinogenicity**IARC**

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.

ACGIH

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

OSHA

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.

NTP

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.

Further information**Product:**

Remarks: No data available

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SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation

40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information

: No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

EPA Hazardous Waste Code(s)

: D001: Ignitable
D003: Reactive
D035: Methyl ethyl ketone

Waste from residues

: Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging

: Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.**SECTION 14. TRANSPORT INFORMATION****International Regulation**

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IATA-DGR

UN/ID No. : UN 3105
Proper shipping name : Organic peroxide type D, liquid
Class : 5.2
Packing group : Not assigned by regulation
Labels : Organic peroxide
Packing instruction (cargo aircraft) : 570
Packing instruction (passenger aircraft) : 570

IMDG-Code

UN number : UN 3105
Proper shipping name : ORGANIC PEROXIDE TYPE D, LIQUID
Class : 5.2
Packing group : Not assigned by regulation
Labels : 5.2
EmS Code : F-J, S-R
Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations**49 CFR**

UN/ID/NA number : UN 3105
Proper shipping name : Organic peroxide type D, liquid
(METHYL ETHYL KETONE PEROXIDE, <= 45%)
Class : 5.2
Packing group : II
Labels : Organic peroxide
Marine pollutant : no

SECTION 15. REGULATORY INFORMATION**EPCRA - Emergency Planning and Community Right-to-Know Act****CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
2-Butanone, peroxide	1338-23-4	10	30

SARA 304 Extremely Hazardous Substances Reportable Quantity

Calculated RQ exceeds reasonably attainable upper limit.

SARA 302 Extremely Hazardous Substances Reportable Quantity

Calculated RQ exceeds reasonably attainable upper limit.

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SARA 311/312 Hazards : Fire Hazard
Acute Health Hazard
Reactivity Hazard

SARA 302 : The following components are subject to reporting levels established by SARA Title III, Section 302:

Hydrogen peroxide	7722-84-1	1 %
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SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

Methyl ethyl ketone	78-93-3	1 %
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Non-volatile (Wt) : Refer to the product technical data sheet for VOC information.

Massachusetts Right To Know

2-Butanone, peroxide	1338-23-4
Methyl ethyl ketone	78-93-3
Hydrogen peroxide	7722-84-1

Pennsylvania Right To Know

Plasticizer	-
2-Butanone, peroxide	1338-23-4
Methyl ethyl ketone	78-93-3
Hydrogen peroxide	7722-84-1

New Jersey Right To Know

Plasticizer	-
2-Butanone, peroxide	1338-23-4
Water	7732-18-5
Methyl ethyl ketone	78-93-3
Hydrogen peroxide	7722-84-1

New Jersey Trade Secret Registry Number for the product (NJ TSRN) : NOT APPLICABLE

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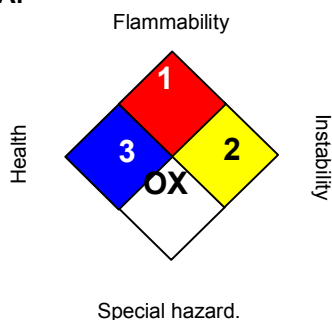
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California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

TSCA	: We certify that all of the components of this product are either listed on the TSCA Inventory or are not subject to the notification requirements per 40 CFR 720.30(h).
Section 4 / 12(b)	: Not applicable
Section 5	: Not applicable
DSL	: We certify that all of the components of this product are listed on the DSL.
	: Proprietary Component
	: Red Dye

SECTION 16. OTHER INFORMATION
Further information
NFPA:

HMIS III:

HEALTH	3
FLAMMABILITY	2
PHYSICAL HAZARD	2

0 = not significant, 1 = Slight,
 2 = Moderate, 3 = High
 4 = Extreme, * = Chronic

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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.