

TO COMPLY WITH OSHA HAZARD COMMUNICATION STANDARD 29 CFR.1910.1200 & THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifier

Substance Name: ORCA SOLUTIONS 981 MEKP

Product Code(s): 081981108, 081981111, 081981113, 081025, 08105, 0811, 0812, 0814, 081P, 081Q

1.2 Details of the Supplier of the Safety Data Sheet

Distributor:

Fiberlay Inc.

1468 Northgate Blvd

Sarasota, FL 34234

T 206-782-0660

F 888-782-0662

www.Fiberlay.com

www.OrcaComposites.com

1.3 Emergency Telephone Number

Emergency Number: CHEMTREC: Domestic - 800-424-9300

2. HAZARDS IDENTIFICATION

Label Elements:

Pictogram



Signal Word

Danger

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, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P220

Keep away from acids, alkalis, heavy metal compounds, oxidizing material, combustible materials.

P234

Keep only in original container.

P280

Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301+P312

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do.

Continue rinsing.

P411+P235

Store at temperatures not exceeding 5-30°C. Keep cool.

P501

Dispose of contents/ container in accordance with national regulations

Contains

Reaction mass of butane-2,2-diyl dihydroperoxide and di-sec-butylhexaoxidane

Other hazards

Reaction mass of butane-2,2-diyl dihydroperoxide and di-sec-butylhexaoxidane

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures:

CHEMICAL	CLASSIFICATION	WT%
Dimethyl Phthalate CAS number: 131-11-3 EC number: 205-011-6	Not Classified	55-70 %
Reaction mass of :		
butane-2,2-diyl dihydroperoxide and di- sec-butylhexaoxidane CAS number: — EC number: 700-954-4	Org. Perox. D - H242 Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Corr. 1B - H314 Eye Dam. 1 - H318	25-40%
Butanone CAS number: 78-93-3 EC number: 201-159-0	Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	1-5%

The full text for all hazard statements is displayed in Section 16.

4. FIRST AID MEASURES

General information Get medical attention if any discomfort continues.
Show this Safety Data Sheet to personnel.
Chemical burns
must be treated by a physician.

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Maintain an open airway.
Loosen tight clothing such as collar, tie or belt.
Rinse nose and mouth with water.
Never give anything by mouth to an unconscious person.
Get medical attention if symptoms are severe or persist.

Ingestion Rinse mouth thoroughly with water.
Never give anything by mouth to an unconscious person.
Place unconscious person on their side in the recovery position and ensure breathing can take place.

Skin contact It is important to remove the substance from the skin immediately.
Rinse immediately with plenty of water.
Continue to rinse for at least 15 minutes and get medical attention.
Chemical burns must be treated by a physician.

Eye contact Rinse immediately with plenty of water.
Do not rub eye.
Remove any contact lenses and open eyelids wide apart.
Continue to rinse for at least 15 minutes and get medical attention.

Most important symptoms and effects, both acute and delayed

General information The severity of the symptoms described will vary dependent on the concentration and the length of exposure. length of exposure.

Inhalation A single exposure may cause the following adverse effects; corrosive to the respiratory tract.
Symptoms following overexposure may include the following: Severe irritation of nose and throat.

Ingestion May cause chemical burns in mouth, esophagus and stomach.
Symptoms following overexposure may include the following: Severe stomach pain, Nausea, vomiting.

Skin contact Causes severe burns.
Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes, Redness.

Notes for the doctor Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

The product is not flammable.
Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture

Specific hazards

May cause or intensify fire; oxidizer.
Containers can burst violently or explode when heated, due to excessive pressure build-up.
This product is toxic.
Severe corrosive hazard.
Water used for fire extinguishing, which has been in contact with the product, may be corrosive.

Hazardous combustion

Thermal decomposition or combustion products may include the following substances:
Very toxic or corrosive gases or vapors.

Advice for firefighters

Protective actions during firefighting

Avoid breathing fire gases or vapors.
Evacuate area.
Keep upwind to avoid inhalation of gases, vapors, fumes and smoke.
May cause or intensify fire; oxidizer.
Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk.
Cool containers exposed to flames with water until well after the fire is out.
If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak.
Avoid discharge to the aquatic environment.
Control run-off water by containing and keeping it out of sewers and watercourses.
If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters

Regular protection may not be safe.
Wear chemical protective suit.
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Wear protective clothing as described in Section 8 of this safety data sheet.
No action shall be taken without appropriate training or involving any personal risk.

Avoid inhalation of dust and vapors.
Use suitable respiratory protection if ventilation is inadequate.
Avoid contact with skin and eyes.

Environmental precautions

Avoid discharge into drains or watercourses or onto the ground.
Avoid discharge to the aquatic environment.

Methods and material for containment and cleaning up

Wear protective clothing as described in Section 8 of this safety data sheet.
Clear up spills immediately and dispose of waste safely.
Eliminate all sources of ignition.
No smoking, sparks, flames or other sources of ignition near spillage.
Use only non-sparking tools.
Do not allow material to enter confined spaces, due to the risk of explosion.
This product is corrosive.
Provide adequate ventilation.
Small Spillages; collect spillage.
Large Spillages: Absorb spillage with non-combustible, absorbent material.
The contaminated absorbent may pose the same hazard as the spilled material.
Collect and place in suitable waste disposal containers and seal securely.
Label the containers containing waste and contaminated materials and remove from the area as soon as possible.
Flush contaminated area with plenty of water.
Wash thoroughly after dealing with a spillage.
For waste disposal, see Section 13.

Reference to other sections

For personal protection, see Section 8.
See Section 11 for additional information on health hazards.
See Section 12 for additional information on ecological hazards.
For waste disposal, see Section 13.

7. HANDLING AND STORAGE

Precautions for safe handling

Read and follow manufacturer's recommendations.
Wear protective clothing as described in Section 8 of this safety data sheet.
Keep away from food, drink and animal feeding stuffs.
Handle all packages and containers carefully to minimize spills.
Keep container tightly sealed when not in use.
Avoid the formation of mists. Avoid the formation of mists.
This product is corrosive.
Immediate first aid is imperative.
Do not handle until all safety precautions have been read and understood.
Do not handle broken packages without protective equipment.
Do not reuse empty containers.

Advice on general occupational hygiene

Wash promptly if skin becomes contaminated.
Take off contaminated clothing.
Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage precautions

Store locked up.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No smoking.
Store away from other materials.

Keep only in the original container.
Keep container tightly closed, in a cool, well ventilated place.
Keep containers upright.
Protect containers from damage.
Protect from sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Occupational exposure limits

Dimethyl Phthalate

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³

Short-term exposure limit (15-minute): WEL 10 mg/m³

butanone

Long-term exposure limit (8-hour TWA): WEL 200 ppm 600 mg/m³

Short-term exposure limit (15-minute): WEL 300 ppm 899 mg/m³

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation

Observe any occupational exposure limits for the product or ingredients.

Eye/face protection



Wear tight-fitting, chemical splash goggles or face shield.



If inhalation hazards exist a full- face respirator may be required instead.

Hand protection



Wear protective gloves.

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected.

Frequent changes are recommended.

Wear protective gauntlets made of the following material: Butyl rubber, Nitrile rubber, Polyvinyl chloride (PVC).

Other skin and body protection

Hygiene measures

Wash hands thoroughly after handling.
Wash at the end of each work shift and before eating, smoking and using the toilet.
Do not eat, drink or smoke when using this product.

Respiratory protection

Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked.
Check that the respirator fits tightly and the filter is changed regularly.
Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136.

Environmental exposure controls

Keep container tightly sealed when not in use.
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.
In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid
Color	Colorless
Odor	Characteristic
pH	No information available
Melting point	No information available
Initial boiling point and range	No information available
Flammability (solid, gas)	No information available
Vapor pressure	No information available
Vapor density	No information available
Relative density	1.18 g/cm ³ @ 20°C
Solubility(ies)	Slightly soluble in water
Auto-ignition temperature	24 mPa s @ 2°C
Viscosity	76°C
Flash Point	
Other information	
SADT	60 C
Active Oxygen Content	8.8-9.0

10. STABILITY AND REACTIVITY

Reactivity

There are no known reactivity hazards associated with this product.

Chemical stability

Stable at normal ambient temperatures and when used as recommended.
Stable under the prescribed storage conditions.

Possibility of hazardous reactions

No potentially hazardous reactions known.

Conditions to avoid

Avoid heat, flames and other sources of ignition.

Incompatible materials to avoid

Strong alkalis. Strong acids. Metal oxides. Strong reducing agents.

Hazardous decomposition products

Oxygen.
Thermal decomposition or combustion products may include the following substances: Corrosive gases or vapors.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity – oral

Notes (oral LD₅₀)

ATE oral (mg/kg)

Acute Tox. 4 - H302 Harmful if swallowed.

1,282.05

Acute toxicity – dermal

Notes (dermal LD₅₀)

Based on available data the classification criteria are not met.

Acute toxicity – inhalation

Notes (inhalation LC₅₀)

ATE inhalation (vapors mg/l)

Based on available data the classification criteria are not met.

28.2

Skin corrosion/irritation

Animal data

Skin Corr. 1B - H314 Causes severe burns.

Serious eye damage/irritation

Serious eye damage/irritation

Eye Dam. 1 - H318 Corrosive to skin. Corrosivity to eyes is assumed.

Respiratory sensitization

Respiratory sensitization

Based on available data the classification criteria are not met.

Skin sensitization

Skin sensitization

Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro

Mutagenicity

Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity

IARC carcinogenicity

Based on available data the classification criteria are not met.

None of the ingredients are listed or exempt.

Reproductive toxicity

Reproductive toxicity - fertility

Reproductive toxicity - development

Based on available data the classification criteria are not met.

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure

Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure

Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard

Based on available data the classification criteria are not met.

Inhalation

Corrosive to the respiratory tract.

Symptoms following overexposure may include the following: Severe irritation of nose and throat.

Ingestion

May cause chemical burns in mouth, esophagus and stomach.

Symptoms following overexposure may include the following: Severe stomach pain. Nausea, vomiting.

Skin contact

Causes severe burns.

Symptoms following overexposure may include the following: pain or irritation, redness. blistering may occur.

Eye contact

Causes serious eye damage.

Symptoms following overexposure may include the following: pain, profuse watering of the eyes, redness.

Reaction mass of butane-2,2-diyl dihydroperoxide and di-sec-butylhexaoxidane

Acute toxicity - oral

ATE oral (mg/kg)	Acute toxicity - inhalation	500.0
ATE inhalation (vapors mg/l)		11.0

12. ECOLOGICAL INFORMATION

Ecotoxicity

Not regarded as dangerous for the environment.
However, large or frequent spills may have hazardous effects on the environment.

Toxicity

Based on available data the classification criteria are not met.

Persistence and degradability

The degradability of the product is not known.

Bio-accumulative potential

No data available on bioaccumulation.

Mobility in soil

The product is partly soluble in water and may spread in the aquatic environment.

Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

Other adverse effects

None known.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

General information

The generation of waste should be minimized or avoided wherever possible.
Reuse or recycle products wherever possible.
This material and its container must be disposed of in a safe way.
When handling waste, the safety precautions applying to handling of the product should be considered.
Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out.
Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal methods

Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor.
Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.
Incineration or landfill should only be considered when recycling is not feasible.

14. TRANSPORT INFORMATION

UN number

UN No (ADR/RID) 3105

UN No. (IMDG) UN 3105

UN No. (ICAO) 3105

UN No. (ADN) 3105

UN proper shipping name

Proper shipping name (ADR/RID)

ORGANIC PEROXIDE TYPE D, LIQUID
(Reaction mass of butane-2,2-diyl dihydroperoxide and di-sec-butylhexaoxidane)

Proper shipping name (IMDG)

ORGANIC PEROXIDE TYPE D, LIQUID
(Reaction mass of butane-2,2-diyl dihydroperoxide and di-sec-butylhexaoxidane)

Proper shipping name (ICAO)

ORGANIC PEROXIDE TYPE D, LIQUID
(Reaction mass of butane-2,2-diyl dihydroperoxide and di-sec-butylhexaoxidane)

Proper shipping name (ADN)

ORGANIC PEROXIDE TYPE D, LIQUID
(Reaction mass of butane-2,2-diyl dihydroperoxide and di-sec-butylhexaoxidane)

Transport hazard class(es)

ADR/RID class	5.2
ADR/RID label	5.2
IMDG class	5.2
ICAO class/division	5.2
ADN class	5.2

Transport labels



Packing group Not applicable.

Environmental hazards

Environmentally hazardous substance/marine pollutant No

Special precautions for user

EmS	F-J, S-R
Emergency Action Code	2WE
Tunnel restriction code	(D)

Transport in bulk according to Annex II of MARPOL 79/78 and the IBC Code Not applicable.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Health and Safety at Work etc. Act 1974 (as amended)
The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EH40/2005 Workplace exposure limits.

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) (as amended).
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Commission Regulation (EU) No 2015/830 of 28 May 2015.

Chemical safety assessment

No chemical safety assessment has been carried out.

16. OTHER INFORMATION

Classification procedures according to Regulation (EC) Acute Tox. 4 - H302: Eye Dam. 1 - H318: Skin Corr. 1B - H314: : Calculation method. Org. Perox. D - H242: : Expert judgement.

Training advice Only trained personnel should use this material.

Hazard statements in full
H225 Highly flammable liquid and vapor.
H242 Heating may cause a fire.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.

ORCA Composites believes the law requires us to inform you that detectable amounts of any of the listed chemicals might be present in ORCA products. Based on a review of the list, ORCA products, like all synthetic and naturally occurring chemical substances, may conceivably contain trace contaminants of some of the listed substances. While not necessarily added to our products as ingredients, some of the listed chemicals may be present in the raw materials as received from suppliers over which we have no control.

Preparation Date: 1-2-2019

Prepared by: Kevin Aber

Comments: This Safety Data Sheet was prepared using information provided by Orca Composites

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