AAR Aerostructures & Interiors

Safety Data Sheet
acc. to OSHA HCS

Printing date 08/10/2020 Reviewed on 08/10/2020

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1 Identification

· **Product identifier**

· **Trade name: ATR-1000 White**

· **Article number:** I015088-1
· **Application of the substance / the mixture** Polyester filler

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
AAR Aerostructures & Interiors

14201 Myerlake Circle
Clearwater
Florida 33760
USA
Supplier's Name: Sika Advanced Resins, US
Headquarters:
30800 Stephenson Hwy
Madison Heights, MI 48071
USA

advancedresins.ehs@us.sika.com

· **Information department:** Product safety department
· **Emergency telephone number:**
During normal opening times: +1 (248) 588-2270
CHEMTREC 24-hour Emergency: +1 (800) 424-9300

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2 Hazard(s) identification

· **Classification of the substance or mixture**

GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.

GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.
Repr. 2 H361 Suspected of damaging fertility or the unborn child.
STOT RE 1 H372 Causes damage to the hearing organs through prolonged or repeated exposure.

GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.

· **Label elements**
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

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· **Hazard pictograms**

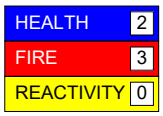
GHS02 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
Styrene
antimony trioxide
· **Hazard statements**
Flammable liquid and vapor.
Causes skin irritation.
Causes serious eye irritation.
Suspected of causing cancer.
Suspected of damaging fertility or the unborn child.
Causes damage to the hearing organs through prolonged or repeated exposure.
· **Precautionary statements**
Avoid breathing dust/fume/gas/mist/vapors/spray
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
· **Classification system:**
· **NFPA ratings (scale 0 - 4)**

Health = 2
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 2
Fire = 3
Reactivity = 0

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**
· **Description:** Mixture of the substances listed below with nonhazardous additions.

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· **Dangerous components:**

CAS: 100-42-5 EINECS: 202-851-5	Styrene	10-20%
CAS: 1309-64-4 EINECS: 215-175-0	antimony trioxide	1-5%
CAS: 78-40-0 EINECS: 201-114-5	triethyl phosphate	1-5%

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4 First-aid measures

· **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:** In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:** If symptoms persist consult doctor.
· **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

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5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
· **Advice for firefighters**
· **Protective equipment:**
Mouth respiratory protective device.
Wear self-contained respiratory protective device.
· **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
· **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.

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Ensure adequate ventilation.
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
· **Protective Action Criteria for Chemicals**

· **PAC-1:**		
100-42-5	Styrene	20 ppm
1309-64-4	antimony trioxide	1.8 mg/m³
78-40-0	triethyl phosphate	23 mg/m³

· **PAC-2:**		
100-42-5	Styrene	130 ppm
1309-64-4	antimony trioxide	16 mg/m³
78-40-0	triethyl phosphate	250 mg/m³

· **PAC-3:**		
100-42-5	Styrene	1100* ppm
1309-64-4	antimony trioxide	96 mg/m³
78-40-0	triethyl phosphate	320 mg/m³

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7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
· **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** Keep receptacle tightly sealed.
· **Specific end use(s)** No further relevant information available.

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8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**
· **Components with limit values that require monitoring at the workplace:**
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the remaining constituent has no known exposure limits.

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100-42-5 Styrene	
ACGIH TLV	Short-term value: 170 at 40 ppm mg/m³ Long-term value: 85 at 20 ppm mg/m³
OSHA PEL	Long-term value: 100 ppm mg/m³ Ceiling limit value: 200 ppm mg/m³
PEL	Long-term value: 100 ppm Ceiling limit value: 200; 600* ppm *5-min peak in any 3 hrs
REL	Short-term value: 425 mg/m³, 100 ppm Long-term value: 215 mg/m³, 50 ppm
TLV	Short-term value: 20 ppm Long-term value: 10 ppm BEI, OTO
78-40-0 triethyl phosphate	
WEEL	Long-term value: 7.45 mg/m³

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
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.
· **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· **Eye protection:**

Tightly sealed goggles

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9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Pasty
Color:	White
· **Odor:**	Pungent
· **Odor threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	145 °C (293 °F)
· **Flash point:**	32 °C (89.6 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	490 °C (914 °F)
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· **Explosion limits:**	
Lower:	0.9 Vol %
Upper:	6.8 Vol %
· **Vapor pressure at 20 °C (68 °F):**	6 hPa (4.5 mm Hg)
· **Density at 20 °C (68 °F):**	1.13 g/cm³ (9.43 lbs/gal)
· **Relative density**	Not determined.
· **Vapor density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with**	
Water:	Fully miscible.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic at 20 °C (68 °F):	>1,000,000 mPas
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	1.6 %
VOC content:	21.49 % 242.9 g/l / 2.03 lb/gal

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Solids content:	41.8 %
· **Other information**	No further relevant information available.

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10 Stability and reactivity

· **Reactivity** No further relevant information available.
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **Possibility of hazardous reactions** No dangerous reactions known.
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:** No further relevant information available.
· **Hazardous decomposition products:** Carbon monoxide and carbon dioxide

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11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

100-42-5 Styrene		
Oral	LD50	>2,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50/4 h	11.8 mg/l (rat)
1309-64-4 antimony trioxide		
Oral	LD50	>20,000 mg/kg (rat)

· **Primary irritant effect:**
· **on the skin:** Irritant to skin and mucous membranes.
· **on the eye:** Irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
14807-96-6	Talc (Mg3H2(SiO3)4)	3
100-42-5	Styrene	2B
13463-67-7	titanium dioxide	2B
112926-00-8	Precipitated silica (Silica-Amorphous)	3
1309-64-4	antimony trioxide	2B
64-17-5	ethanol	1
7631-86-9	silicon dioxide, chemically prepared	3

· **NTP (National Toxicology Program)**
None of the ingredients is listed.

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· OSHA-Ca (Occupational Safety & Health Administration)	
7440-38-2	arsenic

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Behavior in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

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13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.
· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· UN-Number	
· DOT, IMDG, IATA	UN1866
· UN proper shipping name	
· DOT	Resin solution
· IMDG, IATA	RESIN SOLUTION

· **Transport hazard class(es)**

· **DOT**

· **Class** 3 Flammable liquids

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· **Label**	3
· **IMDG, IATA**	
	
· **Class**	3 Flammable liquids
· **Label**	3
· **Packing group**	
· **DOT, IMDG, IATA**	III
· **Environmental hazards:**	
· **Marine pollutant:**	No
· **Special precautions for user**	Warning: Flammable liquids
· **Hazard identification number (Kemler code):**	39
· **EMS Number:**	F-E,S-E
· **Stowage Category**	A
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **DOT**	
· **Quantity limitations**	On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L
· **IMDG**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **UN "Model Regulation":**	UN 1866 RESIN SOLUTION, 3, III

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15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

100-42-5	Styrene
1309-64-4	antimony trioxide

· **TSCA (Toxic Substances Control Act):**

All components have the value ACTIVE.

· **Chemicals regulated by TSCA Section 12(b)**

None of the ingredients is listed.

· **Chemical regulated by TSCA 5(a)(2)rule:**

None of the ingredients is listed.

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· **Hazardous Air Pollutants**	
100-42-5	Styrene
1309-64-4	antimony trioxide
108-10-1	4-methylpentan-2-one

· **Proposition 65**

· **Chemicals known to cause cancer:**	
100-42-5	Styrene
13463-67-7	titanium dioxide
1309-64-4	antimony trioxide
108-10-1	4-methylpentan-2-one
7439-92-1	lead
7440-38-2	arsenic

· **Chemicals known to cause reproductive toxicity for females:**	
7439-92-1	lead

· **Chemicals known to cause reproductive toxicity for males:**	
7439-92-1	lead

· **Chemicals known to cause developmental toxicity:**	
64-17-5	ethanol
108-10-1	4-methylpentan-2-one
7439-92-1	lead

· **Carcinogenic categories**

· **TLV (Threshold Limit Value established by ACGIH)**		
1309-64-4	antimony trioxide	A2

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**	
13463-67-7	titanium dioxide

· **Listed in CWC Regulations**
None of the ingredients is listed.

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**

GHS02 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
Styrene
antimony trioxide
· **Hazard statements**
Flammable liquid and vapor.
Causes skin irritation.
Causes serious eye irritation.
Suspected of causing cancer.
Suspected of damaging fertility or the unborn child.
Causes damage to the hearing organs through prolonged or repeated exposure.

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Trade name: ATR-1000 White

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· **Precautionary statements**
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

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.

· **Date of preparation / last revision** 08/10/2020 / 15
· **Abbreviations and acronyms:**
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Flam. Liq. 3: Flammable liquids – Category 3
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Carc. 2: Carcinogenicity – Category 2
Repr. 2: Reproductive toxicity – Category 2
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
· *** Data compared to the previous version altered.**

AAR Aerostructures & Interiors

Safety Data Sheet
acc. to OSHA HCS

1 Identification

- ***Product Identifier***
- ***Trade Name: ATR-1000 Part B – Cream Hardener***
- ***Article Number:***
- ***Application of substance / the mixture:***
- ***Details of the supplier of the safety data sheet***
- ***Manufacturer/Supplier:***
  AAR Aerostructures & Interiors
  14201 Myerlake Circle
  Clearwater
  Florida 33760
  USA
- ***Information Department:*** *Product Safety Department*
- ***Emergency Telephone Number:***
  CHEMTREC North Amerrica 24-hour Emergency: 1-800-424-9300
  CHEMTREC International 24-hour Emergency: 1-703-527-3887

2 Hazard(s) identification

- ***Classification of the substance or mixture***

GHS02 *Flame*

Organic Peroxides	*E*	*H242*	*Heating may cause a fire.*

GHS07 *Exclamation Mark*

Skin Irritation	*1*	*H317*	*May cause an allergic skin reaction.*
Eye Irritation	*2B*	*H320*	*Causes eye irritation.*

GHS09 *Environment*

Aquatic Toxicity	*1*	*H400*	*Very toxic to aquatic life.*

(Continued on page 2)

(Continued from page 1)

- ***Label elements***
- ***GHS label elements:***
  The product is classified and labelled according to the Globally Harmonized System (GHS).
- ***Hazard pictograms***


GHS02


GHS08


GHS09

- ***Signal word:*** *Warning*
- ***Hazard-determining components of labelling:*** *Benzoyl Peroxide*
- ***Hazard statements:***
  Heating may cause a fire.
  May cause an allergic skin reaction.
  Causes eye irritation.
  Very toxic to aquatic life.
- ***Precautionary statements***
- ***Prevention:***
  Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep/store away from clothing and other combustible materials. Keep only in original container. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/eye protection/face protection.
- ***Response:***
  If on skin: Wash with plenty of water.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  If skin irritation or rash occurs: Get medical advice/attention.
  If eye irritation persists: Get medical advice/attention.
  Wash contaminated clothing before reuse.
  Collect spillage.
- ***Storage:***
  Protect from sunlight. Store at temperatures not exceeding 25°C/77°F. Keep cool. Store away from other materials.
- ***Disposal:***
  Dispose of contents/container in accordance with local/regional/international regulations.
- ***Classification system:***
- ***NFPA ratings (scale 0-4)***

Health	**2**
Flammability	**0**
Instability	**2**

- ***HMIS ratings (scale 0-4)***

Health	**2**
Flammability	**0**
Physical Hazard	**2**
Personal Protection	**D**

3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with non-hazardous additions.

• **Dangerous components:**		
CAS: 94-36-0 EINECS: 202-327-6	Benzoyl Peroxide	50 to <60%
CAS: 7778-18-9 EINECS: 231-900-3	Calcium Sulfate	5 to <10%
CAS: 557-05-1 EINECS: 209-151-9	Zinc Stearate	5 to <10%

4 First-aid measures

- **Description of first-aid measures**
- **General information:**
  Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.
- **After inhalation:** Call a physician if symptoms develop or persist.
- **After skin contact:**
  Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders, seek medical attention and take along these instructions.
- **After eye contact:**
  Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
- **After swallowing:** Rinse mouth. Get medical attention if symptoms occur.
- **Information for doctor**
- **Most Important symptoms and effects, both acute and delayed:**
  Eye: Irritation of the eyes. Exposed individuals may experience eye tearing, redness, and discomfort.
  Skin: May cause an allergic skin reaction. Dermatitis. Rash.
- **Indication of any immediate medical attention and special treatment needed:**
  Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Water fog. Foam. Dry chemical powder. Carbon dioxide.
- **For safety reasons unsuitable extinguishing agents:**
  Do not use water jet as an extinguisher, as this will spread the fire.
- **Specific hazards arising from the chemical or mixture:**
  During fire, gases hazardous to health may be formed.
- **Advice for firefighters:**
  In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Heating may cause a fire.
- **Protective equipment:**
  Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6 Accidental release measures

- ***Personal precautions, protective equipment and emergency procedures:***
  Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8.
- ***Environmental precautions:***
  Avoid release to the environment. Prevent further leakage of spillage if safe to do so. Avoid discharge into drains, water courses of onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.
- ***Methods and materials for containment and clean up:***
  Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material.
  Large spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand, or earth and place into containers. Prevent product from entering drains. Follow product recovery, flush area with water.
  Small spills: Wipe up with absorbent material (i.e. cloth, fleece). Clean surface thoroughly to remove residual contamination.
- ***Reference to other sections:*** *See section 7 for information on sage handling.*

7 Handling and storage

- ***Handling***
- ***Precautions for safe handling:***
  Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personnel protective equipment. Avoid release to environment. Observe good industrial hygiene practices.
- ***Information about protection against explosions and fires:***
  When using do not smoke. Keep away from heat, sparks, and open flame. Keep away from clothing and other combustible materials.
- ***Conditions for safe storage, including any incompatibilities***
- ***Storage****:*
  Store in cool, dry place out of direct sunlight. Keep only in the original container. Store away from other materials.
- ***Requirements to be met by storerooms and receptacles:*** *No special requirements.*
- ***Information about storage in one common storage facility:*** *Not required.*
- ***Further information about storage conditions:*** *No further relevant information available.*
- ***Specific end use(s):*** *No further relevant information available.*

8 Exposure controls/personal protection

- ***Additional information about design of technical systems:*** *No further data; see item 7.*
- ***Control parameters***
- ***Components with limit values that require monitoring at the workplace:***
  The following constituents are the only constituents of the product which have a TLV, PEL, or other recommended exposure limit; the other constituents have no known exposure limits.

94-36-0 Benzoyl Peroxide		
OSHA PEL	*Value: 5 mg/m³*	
ACGIH TWA	*Value: 5 mg/m³*	
NIOSH TWA	*Value: 5 mg/m³*	
7778-18-9 Calcium Sulfate		
OSHA PEL	*Value: 5 mg/m³*	*Respirable fraction*
ACGIH TWA	*Value: 10 mg/m³*	*Inhalable fraction*
NIOSH TWA	*Value: 5 mg/m³*	*Respirable*
7778-18-9 Zinc Stearate		
OSHA PEL	*Value: 5 mg/m³*	*Respirable fraction*
	Value: 15 mg/m³	*Total dust*
ACGIH TWA	*Value: 10 mg/m³*	
NIOSH TWA	*Value: 5 mg/m³*	*Respirable*
	Value: 10 mg/m³	*Total*

- ***Exposure controls:***
  Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.
- ***Personal protective equipment***
- ***General protection and hygienic measures:***
  When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Wear appropriate chemical resistant clothing. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.
- ***Breathing equipment:***
  In case of insufficient ventilation, wear suitable respiratory equipment.
- ***Protection of hands:*** *Wear appropriate chemical resistant gloves.*
- ***Material of gloves:*** *Suitable gloves can be recommended by the glove supplier.*
- ***Penetration time of glove material:***
  The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- ***Eye protection:*** *Wear safety glasses with side shields (or goggles).*

9 Physical and chemical properties

• **Information on basic physical and chemical properties**	
• **General information**	
• **Appearance**	
Form:	Solid paste
Color:	Not available
• **Odor:**	Not available
• **Odor threshold:**	Not available
• **pH-value:**	Not available
• **Change in condition**	
Melting point/Melting range:	Not available
Boiling point/Boiling range:	Not available
• **Flash Point:**	Not available
• **Flammability (solid, gaseous):**	Not available
• **Ignition temperature:**	Not available
• **Decomposition temperature:**	50°C (120°F)
• **Auto igniting:**	Not available
• **Danger of explosion:**	Not available
• **Explosion limits**	
Lower:	Not available
Upper:	Not available
• **Vapor pressure:**	0.0002 hPa (estimated)
• **Density at 20°C (68°F):**	9.98 lbs/gal
• **Relative density:**	Not available
• **Vapor density:**	Not available
• **Evaporation rate:**	Not available
• **Solubility in / Miscibility with water:**	Not available
• **Partition coefficient (n-octanol/water):**	3.46
• **Viscosity**	
Dynamic:	Not available
Kinematic:	Not available
• **Solvent content**	
Organic solvents:	Not available
VOC content:	20% (estimated)
• **Solids content:**	Not available
• **Other information:**	No further relevant information available.

10 Stability and reactivity

- ***Reactivity:***
  The product is stable and non-reactive under normal conditions of use, storage, and transport.
- ***Chemical stability:*** *Material is stable under normal conditions.*
- ***Possibility of hazardous reactions:*** *Hazardous polymerization does not occur.*
- ***Conditions to avoid:***
  Avoid heat, sparks, open flames, and other ignition sources. Sunlight. Contact with incompatible materials.
- ***Incompatible materials:***
  Acids. Strong oxidizing agents. Combustible material. Aluminum. Phosphorus. Amines. Alcohols.
- ***Hazardous decomposition products:*** *No hazardous decomposition products are known.*

11 Toxicological information

- ***Information on toxicological affects***
- ***Acute toxicity***

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

94-36-0 Benzoyl Peroxide		
Oral	*LD50*	*7710 mg/kg (rat)*

- ***Primary irritant effect***
- ***On the skin:*** *May cause an allergic skin reaction*
- ***On the eye:*** *Causes eye irritation*
- ***Sensitization:*** *No sensitizing effects known*
- ***Additional toxicological information:*** *No further relevant information available.*
- ***Carcinogenic categories***

- ***IARC (international Agency for Research on Cancer***

94-36-0	*Benzoyl Peroxide*		*3*

- ***NTP (National Toxicology Program):*** *None of the ingredients are listed.*
- ***OSHA-Ca (Occupational Safety & Health Administration):*** *None of the ingredients are listed.*

12 Ecological information

- ***Toxicity***

• ***Aquatic Toxicity:*** *Very toxic to aquatic life.*		
7778-18-9 Calcium Sulfate		
Aquatic (fish)	*LC50*	*>1970 mg/l (fathead minnow), 96 hours*

- ***Persistence and degradability:*** *No data available.*
- ***Behavior in environmental systems***
- ***Bioaccumulative potential:*** *See section 9 for Partition Coefficient.*
- ***Mobility in soil:*** *No data available.*
- ***Additional ecological information:***
  No other adverse environmental effects (i.e. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
- ***General notes:*** *No further relevant information available*
- ***Results of PBT and vPvB assessment***
- ***PBT:*** *No data available.*
- ***vPvB:*** *No data available.*
- ***Other adverse effects:*** *No further relevant information available*

13 Disposal considerations

- ***Waste treatment methods***
- ***Recommendation:***
  Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways, or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
- ***Uncleaned packagings***
- ***Recommendation:***
  Dispose of in accordance with local regulations. Since emptied containers or liners may retain some product residues, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14 Transport information

• ***UN-Number***	
• ***DOT, IMDG, IATA***	*UN3108*
• ***UN proper shipping name***	
• ***DOT***	*ORGANIC PEROXIDE Type E, Solid (<52% Dibenzoyl Peroxide)*
• ***IMDG, IATA***	*Organic peroxide type E, solid (<52% Dibenzoyl Peroxide)*
• ***Transport hazard class(es)***	
• ***DOT***	
	
• ***Class:***	*5.2*
• ***Label:***	*9*
• ***IMDG, IATA***	
	
• ***Class:***	*5.2*
• ***Label:***	*9*
• ***Packing Group***	
• ***DOT, IMDG, IATA***	*II*
• ***Environmental hazards:***	*No*
• ***Marine pollutant:***	*Yes*
• ***Special precautions for user***	*Read safety instructions, SDS and emergency procedures before handling.*
• ***Danger code (Kemler):***	*5.2*
• ***EMS Number:***	*F-J, S-R*
• ***Stowage Category:***	*D*
• ***Transport in bulk according to Annex II of MARPOL 73/78 and the IBC CodeAuto igniting:***	*Not applicable*
• ***Transport/Additional information***	
• ***DOT***	
• ***Quantity limitations:***	*Not applicable*
• ***IMDG***	
• ***Limited quantities (LQ):***	*5L*
• ***Excepted quantities (EQ):***	*Not applicable*
• ***UN "Model Regulation":***	*UN3108 ORGANIC PEROXIDE TYPE E, SOLID (<52% dibenzoyl peroxide), 5.2, II*

15 Regulatory information

- ***Safety, health and environmental regulations/legislation specific for the substance or mixture.***
- ***Sara***

- ***Section 355 (Extremely hazardous substances):***

  None of the ingredients are listed.

- ***Section 313 (Specific toxic chemical listings):***

94-36-0	*Benzoyl Peroxide*	*(50 to <60%)*
557-05-1	*Zinc Stearate*	*(5 to <10%)*

- ***TSCA (Toxic Substances Control Act):***

  All of the ingredients are listed.

- ***Chemicals regulated by TSCA Section 12(b):***

  None of the ingredients are listed.

- ***Proposition 65***
- ***Chemicals known to cause cancer:***

  None of the ingredients are listed.

- ***Chemicals known to cause reproductive toxicity in females:***

  None of the ingredients are listed.

- ***Chemicals known to cause reproductive toxicity in males:***

  None of the ingredients are listed.

- ***Chemicals known to cause developmental toxicity:***

  None of the ingredients are listed.

- ***Cancerogenity categories***
- ***EPA (Environmental Protection Agency)***

  None of the ingredients are listed.

- ***TLV (threshold Limit Value established by ACGIH)***

  None of the ingredients are listed.

- ***NIOSH-Ca (National Institute for Occupational Safety and Health)***

  None of the ingredients are listed.

- ***National regulations:***
- ***Additional classification according to Decree on Hazardous Materials:***
- ***Information about limitation of use:***
- ***Chemical safety assessment:*** *A chemical safety assessment has not been carried out.*

16 Other information

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 contractural relationship.

- ***Date of preparation / last revision:*** *05/05/2017 / D*