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

1.1. Product identifier

Product form : Mixture

Product name : SWAK

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial
For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Swagelok
29495 F.A. Lennon Drive
44139 Solon, OH - United States
T 440-349-5600 - F 440-519-3304
www.swagelok.com

Supplier: Swagelok London
Kingley Park, Station Road, Kings Langley, Herts
UK, WD4 8GW
T +44 (0) 1923 272000
london.swagelok.com

1.4. Emergency telephone number

Emergency number : Infotrac: North America: 1-800-535-5053 International: 1-352-323-3500

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Organic Peroxide Category E	H242
Skin corrosion/irritation Category 2	H315
Serious eye damage/eye irritation Category 2	H319
Skin sensitization, Category 1	H317
Specific target organ toxicity (single exposure) Category 3	H335
Hazardous to the aquatic environment - Chronic Hazard Category 4	H413

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS02 GHS07

Signal word (CLP) : Warning

Hazardous ingredients : Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-; Polyethylene glycol; Cumene hydroperoxide

Hazard statements (CLP) : H242 - Heating may cause a fire.
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H413 - May cause long lasting harmful effects to aquatic life

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P234 - Keep only in original packaging.
P240 - Ground and bond container and receiving equipment.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash hands, forearms and face thoroughly after handling.

P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear personal protective equipment (PPE).
P302+P352 - IF ON SKIN: Wash with plenty of water.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 - Call a POISON CENTRE or doctor if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction)
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use media other than water to extinguish.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P410 - Protect from sunlight.
P411 - Store at temperatures not exceeding 482°F/250°C.
P420 - Store separately.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Other hazards not contributing to the classification : Exposure may aggravate pre-existing eye, skin, or respiratory conditions. Inhalation of fumes from overheating "TEFLON" PTFE may cause polymer fume fever, a temporary flu-like illness with fever, chills and sometimes cough, of approximately 24 hours duration. This material contains an organic peroxide. Heating may cause hazardous decomposition. Hazardous decomposition products from peroxides are flammable and can be explosive under confinement. Dust is not expected to be generated, however repeated or prolonged exposure to titanium dioxide dust via inhalation is suspected of causing cancer of the respiratory tract. Due to the product's final form, combustible dusts are not likely to be generated, however if small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air.

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-	(CAS-No.) 41637-38-1 (EC-No.) 609-946-4	30 - 40	Not classified	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Chronic 4, H413
Polyethylene glycol	(CAS-No.) 25322-68-3 (EC-No.) 500-038-2	20 - 30	Not classified	STOT SE 3, H335
Cumene hydroperoxide	(CAS-No.) 80-15-9 (EC-No.) 201-254-7 (EC Index-No.) 617-002-00-8	<= 1	Not classified	Org. Perox. E, H242 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Corr. 1B, H314 STOT RE 2, H373 Aquatic Chronic 2, H411

Specific concentration limits:			
Name	**Product identifier**	**Specific concentration limits: DSD/DPD**	**Specific concentration limits: CLP**
Cumene hydroperoxide	(CAS-No.) 80-15-9 (EC-No.) 201-254-7 (EC Index-No.) 617-002-00-8		(C < 10) STOT SE 3, H335 (1 =<C < 3) Eye Irrit. 2, H319 (3 =<C < 10) Eye Dam. 1, H318 (3 =<C < 10) Skin Irrit. 2, H315 (C >= 10) Skin Corr. 1B, H314

Full text of R- and H- phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact : Wash with plenty of soap and water. water. Wash contaminated clothing before reuse. Specific treatment (see first aid measures on this label). If skin irritation or rash occurs: seek medical attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : May cause an allergic skin reaction. May cause respiratory irritation.

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Contains substances that are combustible dusts. If dried and allowed to accumulate, may form combustible dust concentrations in air that could ignite and cause an explosion. Take appropriate precautions.

Explosion hazard : Product itself is not explosive but if dust is generated, dust clouds suspended in air can be explosive.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid breathing (vapor, mist, spray). Do not get in eyes, on skin, or on clothing. Avoid generating dust. Remove ignition sources. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Keep away from heat, sparks, open flames, hot surfaces. – No smoking. This material contains an organic peroxide. Heating may cause hazardous decomposition. Hazardous decomposition products from peroxides are flammable and can be explosive under confinement. Inhalation of fumes from overheating "TEFLON" PTFE may cause polymer fume fever, a temporary flu-like illness with fever, chills and sometimes cough, of approximately 24 hours duration.

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Avoid breathing vapor, mist or spray. Use only outdoors or in a well-ventilated area. Avoid dust formation.

Hygiene measures	:	Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	:	Keep only in the original container in a cool, well ventilated place away from : children. Keep container tightly closed.
Incompatible products	:	Strong bases. Strong acids.
Incompatible materials	:	Strong acids, strong bases, strong oxidizers, amines, active metals, ammonia, combustible materials, reducing agents, pure oxygen, oxygen scavengers, peroxides.
Storage area	:	Store in a cool, dry, ventilated area, away from incompatible substances. Keep from freezing.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Proper grounding procedures to avoid static electricity should be followed.

Personal protective equipment:

Avoid all unnecessary exposure.

Materials for protective clothing:

Impervious clothing

Hand protection:

Wear protective gloves.

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Environmental exposure controls:

Avoid release to the environment. Avoid creating or spreading dust.

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Grainy off-white paste with mild odor.
Color	:	Colorless.
Odor	:	Low odor.
Odor threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butyl acetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	> 230 °F
Auto-ignition temperature	:	No data available

Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Non flammable
Vapor pressure	:	No data available
Relative vapor density at 20 °C	:	No data available
Relative density	:	1.3 g/ml
Solubility	:	No data available
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available
Explosion limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

This material contains an organic peroxide. Heating may cause hazardous decomposition. Hazardous decomposition products from peroxides are flammable and can be explosive under confinement.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight, extremely high or low temperatures, and incompatible materials. Sparks, heat, open flame and other sources of ignition. Dust accumulation (to minimize explosion hazard). UV light sources.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizers, amines, active metals, ammonia, combustible materials, reducing agents, pure oxygen, oxygen scavengers, peroxides.

10.6. Hazardous decomposition products

Toxic gases may be formed, fluoride compounds, silicon oxides, carbon oxides (CO, CO2), phenolic compounds, acrid smoke, hydrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Polyethylene glycol (25322-68-3)	
LD50 oral rat	22 g/kg
LD50 dermal rabbit	> 20 g/kg

Cumene hydroperoxide (80-15-9)	
LD50 oral rat	382 mg/kg
LD50 dermal rabbit	0.126 ml/kg
LC50 inhalation rat (ppm)	220 ppm/4h

Irritation	:	Not classified
Corrosivity	:	Not classified
Sensitization	:	Not classified
Repeated dose toxicity	:	Not classified
Carcinogenicity	:	Not classified
Mutagenicity	:	Not classified
Toxicity for reproduction	:	Not classified
Potential Adverse human health effects and symptoms	:	Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : May cause long lasting harmful effects to aquatic life.

Aquatic acute : Not classified
Aquatic chronic : May cause long lasting harmful effects to aquatic life.

Cumene hydroperoxide (80-15-9)	
LC50 fish 1	3.9 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

12.2. Persistence and degradability

SWAK	
Persistence and degradability	May cause long-term adverse effects in the environment.

Polyethylene glycol (25322-68-3)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

SWAK	
Bioaccumulative potential	Not established.

Polyethylene glycol (25322-68-3)	
Bioaccumulative potential	Not established.

Cumene hydroperoxide (80-15-9)	
BCF fish 1	35.5

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to meet all regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : Not applicable
UN-No. (IMDG) : Not applicable
UN-No. (IATA) : Not applicable
UN-No. (ADN) : Not applicable
UN-No. (RID) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Not Evaluated

- Transport by sea

Not Evaluated

- Air transport

Not Evaluated

- Inland waterway transport

Not Evaluated

- Rail transport

Not Evaluated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no REACH candidate substance
Contains no REACH Annex XIV substances.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Other information : None.

Full text of R-, H- and EUH-phrases:

Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation: dust, mist) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment - Chronic Hazard Category 4
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Org. Perox. E	Organic Peroxide Category E
Skin Corr. 1B	Skin corrosion/irritation Category 1B

Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H242	Heating may cause a fire.
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H331	Toxic if inhaled
H335	May cause respiratory irritation
H373	May cause damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.