1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name	:	IGEPAL OD 410
CAS-No.	:	122-99-6

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

Uses of the Substance/Mixture	:	Industry sector: Manufacture of chemical products Specific use(s): Intermediate for synthesis, Solvent

Details of the supplier of the safety data sheet

Company	:	RHODIA Italia S.p.a. Via Milano, 78/80 20021 Ospiate di Bollate - Milano - Italia Tel : +39.02.38.33.41
Emergency telephone number	:	MULTI LINGUAL EMERGENCY NUMBER (24/7) Europe/America/Africa : +44 1235 239 670 (UK) Middle East & Africa speaking Arabic : +44 1235 239 671 (UK) Asia Pacific : +65 3158 1074 (Singapore) China : +86 10 5100 3039 (Beijing)
E-mail address	:	information.fds@eu.rhodia.com

2. HAZARDS IDENTIFICATION

Classification

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Oral, Category 4	H302: Harmful if swallowed.
Eye irritation, Category 2	H319: Causes serious eye irritation.

Classification (67/548/EEC,1999/45/EC)

Xn: Harmful	R22: Harmful if swallowed.
Xi: Irritant	R36: Irritating to eyes.

Label elements

Hazardous products which must be listed on the label:

- 603-098-00-9 2-phenoxyethanol

REGULATION (EC) No 1272/2008

Pictogram :

Signal word : Warning

Hazard statements : H302 Harmful if swallowed.
H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ eye protection/ face protection.
Response:
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
P330 Rinse mouth.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P313 Get medical advice/ attention.

Other hazards which do not result in classification

Does NOT present any particular fire hazard. On combustion, toxic gases are released. Hazardous reactions may occur on contact with certain chemicals. (Refer to the list of incompatible materials section 10: "Stability-Reactivity").

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical nature : PHENOXYETHANOL

CAS-No. : 122-99-6

Information on Components and Impurities

Chemical Name	Identification number	Classification 67/548/EEC	Classification REGULATION (EC) No 1272/2008	Concentration [%]
2-phenoxyethanol	Index-No. : 603-098-00-9 CAS-No. : 122-99-6 EINECS-No. : 204-589-7	Xn; R22 Xi; R36	H302 : Acute toxicity , Category 4 H319 : Eye irritation , Category 2	>= 95 - < 99
Poly(oxy-1,2-ethanediyl), .alpha.-phenyl-.omega.-hydroxy-	CAS-No. : 9004-78-8 self classification	Xn; R22 Xi; R36	H302 : Acute toxicity , Category 4 H319 : Eye irritation , Category 2	>= 1 - < 5
phenol	Index-No. : 604-001-00-2 CAS-No. : 108-95-2 EINECS-No. : 203-632-7	Mut.Cat.3; R68 T; R23/24/25 C; R34 Xn; R48/20/21/22	H341 : Germ cell mutagenicity , Category 2 H331 : Acute toxicity , Category 3 H311 : Acute toxicity , Category 3 H301 : Acute toxicity , Category 3 H373 : Specific target organ toxicity - repeated exposure , Category 2 H314 : Skin corrosion , Category 1B	< 0,2

For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

Description of necessary first-aid measures

General advice : First aider needs to protect himself.
Place affected clothing in a sealed bag for subsequent decontamination.

Inhalation : not applicable

Skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.

Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If eye irritation persists, consult a physician

Ingestion : Do NOT induce vomiting.
Do not give anything to drink.
Consult a physician if necessary.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media	:	Carbon dioxide (CO2) Foam Water spray
Unsuitable extinguishing media	:	Do not use a solid water stream as it may scatter and spread fire. High volume water jet

Special hazards arising from the substance or mixture

Specific hazards during fire fighting	:	Combustible. However, does not present any particular risk in the event of a fire. On combustion, toxic gases are released.

Advice for firefighters

Special protective equipment for fire-fighters	:	Self-contained breathing apparatus (EN 133) Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing
Specific fire fighting methods	:	Avoid release to the environment. Do not use a solid water stream as it may scatter and spread fire.
Further information	:	Standard procedure for chemical fires. In the event of fire, cool tanks with water spray. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Avoid contact with the skin and the eyes. Wear suitable gloves. Safety glasses Wear suitable protective equipment. Do not allow uncontrolled discharge of product into the environment.
Environmental precautions	:	Dam up.

Methods for Cleaning or Taking Up

Recovery	:	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Pump up the product into a spare container :- suitably labelled. Keep in suitable, closed containers for disposal.
Decontamination/cleaning	:	Wash off with plenty of water. Recover the cleaning water for subsequent disposal.
Disposal	:	Dispose of in accordance with local regulations.
Additional advice	:	Stop the leak. Turn leaking containers leak-side up to prevent the escape of liquid. Material can create slippery conditions.

7. HANDLING AND STORAGE

Handling

Technical measures	:	Does not require any specific or particular measures.
Advice on safe handling and usage	:	Handle in accordance with good industrial hygiene and safety practice.

Storage

Technical Measures for storage	:	Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems. No special storage conditions required.
Storage conditions		
Recommended	:	Stable under normal conditions. Store away from heat.
Incompatible products	:	Strong oxidizing agents
Packaging Measures		
Packaging materials - Recommended	:	Plastic materials., Steel drum

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	Value type	Value	Update	Basis
phenol	TWA	2 ppm 8 mg/m3	2009-12-19	Europe. COMMISSION DIRECTIVE 2009/161/EU establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC
	Identifies the possibility of significant uptake through the skin, Indicative			
phenol	STEL	4 ppm 16 mg/m3	2009-12-19	Europe. COMMISSION DIRECTIVE 2009/161/EU establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC
	Identifies the possibility of significant uptake through the skin, Indicative			

Control measures

Engineering measures : Maintain air concentrations below occupational exposure standards.
Apply technical measures to comply with the occupational exposure limits.

Provide adequate ventilation.
Extract at emission point.

Personal protective equipment

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

Hand protection : Glove material: Neoprene gloves
Protective index Class 6
Break through time: > 480 min
Glove thickness: 1,8 mm

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Gloves must be inspected prior to use.

Eye protection : Safety goggles
Face-shield

Skin and body protection : Light overall.
Complete suit protecting against chemicals

Hygiene measures	:	Emergency equipment immediately accessible, with instructions for use. Ensure that eyewash stations and safety showers are close to the workstation location. Wash hands before breaks and immediately after handling the product. When using do not eat, drink or smoke.
Protective measures	:	The protective equipment must be selected in accordance with current CEN standards and in cooperation with the supplier of the protective equipment. Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards and/or risks that may occur during use.
General advice	:	Dam up.
Risk Management Measures to control aqueous release	:	Retain and dispose of contaminated wash water.
Risk Management Measures to control release to soil	:	Avoid subsoil penetration.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	:	transparent
Physical state	:	liquid
Colour	:	colourless
Odour	:	characteristic
Odour Threshold	:	no data available

Safety data

pH	:	5,0 - 7,0 at 5 % (m/v) Aqueous alcohol solution
Freezing point	:	ca. 14 °C
Boiling point/boiling range	:	ca. 245 °C
Flash point	:	127 °C closed cup
Flammability (solid, gas)	:	no data available
Autoignition temperature	:	no data available
Oxidizing properties	:	Not considered as oxidizing, Structure-activity relationship (SAR)
Water solubility	:	partly soluble 29,8 g/l at 20 °C

Solubility in other solvents	:	common organic solvents soluble Aromatic hydrocarbons soluble
Partition coefficient: n-octanol/water	:	log Pow: 1,16
Vapour pressure	:	ca. 0,013 hPa at 20 °C
Evaporation rate	:	no data available
Relative vapour density	:	no data available
Density	:	ca. 1,11 g/cm3 at 20 °C
Oxidation/Reduction Potential	:	no data available
Viscosity, dynamic	:	no data available
Viscosity, kinematic	:	no data available
Explosive properties	:	no data available
Thermal decomposition	:	no data available
Lower explosion limit	:	no data available
Upper explosion limit	:	no data available

10. STABILITY AND REACTIVITY

Chemical stability	:	Stable under normal conditions.
Hazardous reactions		
Conditions to avoid	:	no data available
Materials to avoid	:	Strong oxidizing agents
Decomposition products	:	On combustion or on thermal decomposition (pyrolysis) releases: Carbon oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Acute oral toxicity	:	LD50 : 1.386 - 2.563 mg/kg - rat Published data

Acute inhalation toxicity	:	no data available
Acute dermal toxicity	:	LD50 : 2.250 - 3.815 mg/kg - rabbit Published data LD50 : 14.300 mg/kg - rat Published data
Acute toxicity (other routes of administration)	:	no data available
Aspiration toxicity	:	no data available

Skin corrosion/irritation

Skin irritation	:	rabbit Mild skin irritation Published data May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation

Eye irritation	:	rabbit Irritating to eyes. Published data Vapours may cause irritation to the eyes, respiratory system and the skin.

Respiratory or skin sensitization

Sensitisation	:	Magnusson and Kligman method - guinea pig no cutaneous sensitisation reaction observed Published data no data available

Repeated dose toxicity

Repeated dose toxicity	:	Dermal exposure 90 Days - rabbit NOAEL: 500 mg/kg Haemotoxic effects Published data Oral exposure 90 Days - rat NOAEL: 80 mg/kg Haemotoxic effects Unpublished reports

STOT

STOT - single exposure	:	no data available
STOT - repeated exposure	:	no data available

Carcinogenicity

Carcinogenicity	:	no data available

Mutagenicity

Genotoxicity in vitro	:	Mutagenicity (Salmonella typhimurium - reverse mutation assay) negative In vitro tests did not show mutagenic effects Published data Mutagenicity (in vitro mammalian cytogenetic test) negative Published data
Genotoxicity in vivo	:	In vivo micronucleus test negative In vivo tests did not show mutagenic effects Published data

Reproductive toxicity

Reproductive toxicity	:	Fertility study 2 generations - mouse NOEL parent: 400 mg/kg NOEL F1: 400 mg/kg NOEL F2: 400 mg/kg no impairment of fertility has been observed The effects on the reproductive system and the development of the unborn child are considered not significant since they were observed at doses inducing parental toxicity Published data
Developmental Toxicity / Teratogenicity	:	rabbit Dermal exposure NOEL teratogenicity: 600 mg/kg NOEL maternal: 300 mg/kg Foetal toxicity is not considered to be significant since it was only observed at doses which also caused maternal toxicity Published data
Further information	:	no data available

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Aquatic Compartment (including sediment)

Toxicity to fish	:	LC50 - 96 h : 344 mg/l - Pimephales promelas (fathead minnow) Published data

Toxicity to daphnia and other aquatic invertebrates.	:	EC50 - 48 h : 488 mg/l - Daphnia magna (Water flea) Published data
Toxicity to aquatic plants	:	EC50 - 72 h : > 500 mg/l - Desmodesmus subspicatus (green algae) Published data
Toxicity to fish (Chronic toxicity)	:	NOEC: 0,1 mg/l - 58 d - Oncorhynchus mykiss (rainbow trout) Published data

Ecotoxicity assessment

Ecotoxicity assessment	:	The product does not have any known adverse effects on the aquatic organisms tested There is no data available for this product.

Persistence and degradability

Biodegradability

Biodegradability	:	Ultimate aerobic biodegradability Readily biodegradable Method: OECD Test Guideline 301 Published data Ultimate aerobic biodegradability 90 % - 28 d Method: Ready biodegradability study: Published data

Bioaccumulation

Partition coefficient: n-octanol/water	:	Not potentially bioaccumulable

Mobility

Known distribution to environmental compartments	:	Ultimate destination of the product : Water

Other adverse effects

Environment assessment

2-phenoxyethanol	:	Not classified as Dangerous for the Environment, according to EC criteria
Poly(oxy-1,2-ethanediyl), .alpha.-phenyl-.omega.-hydroxy-	:	Not classified as Dangerous for the Environment, according to EC criteria

13. DISPOSAL CONSIDERATIONS

Product Disposal

Prohibition	:	Should not be released into the environment.
Advice on Disposal	:	Dispose of wastes in an approved waste disposal facility.

Advice on cleaning and disposal of packaging

Measures for waste avoidance.	:	Do not dispose of the product at a rubbish tip. Do not dispose of together with household waste.
Advice	:	Completely empty the packaging prior to decontamination. Carefully drain and then steam clean.
Other data	:	Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

ADR
not regulated

RID
not regulated

IMDG
not regulated

IATA
not regulated

ADN / ADNR
not regulated

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transport regulations for hazardous materials, it would be advisable to check their validity with your sales office.

15. REGULATORY INFORMATION

According to our knowledge, no specific regulatory information.

16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R22	Harmful if swallowed.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R34	Causes burns.
R36	Irritating to eyes.
R48/20/21/22	Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
R68	Possible risk of irreversible effects.

Full text of H-Statements referred to under sections 2 and 3.

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H341	Suspected of causing genetic defects.
H373	May cause damage to organs through prolonged or repeated exposure.

Full text of P-Statements referred to under sections 2 and 3.

P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/ eye protection/ face protection.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/ physician 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.
P313	Get medical advice/ attention.
P330	Rinse mouth.

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. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in an other manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.

NB: In this document the numerical separator of the thousands is the "." (point), the decimal separator is "," (comma).