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

Product identifier

Trade name	:	RHODAFAC RA 600
Product number	:	68130-47-2

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

Uses of the Substance/Mixture	:	Specific use(s): Emulsifier, (For further information, refer to the product technical data sheet)

Details of the supplier of the safety data sheet

Company	:	RHODIA Opérations 40 Rue de la Haie Coq 93306 Aubervilliers Cedex - France Tel : +33 (0)1.53.56.50.00
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)

Skin corrosion, Category 1C	H314: Causes severe skin burns and eye damage.

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

C: Corrosive	R34: Causes burns.

Label elements

Hazardous products which must be listed on the label:

- 68130-47-2 Ethoxylated alcohols phosphate ether

REGULATION (EC) No 1272/2008

Pictogram :

Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.

Precautionary statements : **Prevention:**
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 IF exposed or concerned:
P310 Immediately call a POISON CENTER or doctor/ physician.

Other hazards

Toxic to aquatic organisms. NO particular fire or explosion hazard. On combustion, toxic gases are released. acidic. 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 : Polyoxyethylene alkyl ether phosphate

CAS-No. : 68130-47-2

Information on Components and Impurities

Chemical Name	Index-No. CAS-No.	Classification 67/548/EEC	Classification REGULATION (EC) No 1272/2008	Concentration [%]
Ethoxylated alcohols phosphate ether	68130-47-2 self classification	C; R34	Skin Corr. 1C; H314	>= 80 - < 90
Alcohols, C8-10, ethoxylated	71060-57-6 self classification	Xi; R41	Eye Dam. 1; H318	>= 5 - < 10
orthophosphoric acid	015-011-00-6 7664-38-2	C; R34	Skin Corr. 1B; H314	>= 1 - < 5
1,4-dioxane	603-024-00-5 123-91-1	F; R11-R19 Carc.Cat.3; R40 Xi; R36/37 R66	Flam. Liq. 2; H225 Carc. 2; H351 Eye Irrit. 2; H319 STOT SE 3; H335	< 0.03

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 : Show this safety data sheet to the doctor in attendance.
First aider needs to protect himself.
Place affected clothing in a sealed bag for subsequent decontamination.

Inhalation : Move to fresh air.
Keep at rest.
Consult a physician.

Skin contact : Take off contaminated clothing and shoes immediately.
Wash off with plenty of water.
Wash immediately and thoroughly for a prolonged period (at least 15 minutes).
Consult a physician.

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.
Obtain medical attention.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media	:	Water spray Foam Carbon dioxide (CO2)
Unsuitable extinguishing media	:	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	:	Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing Wear self contained breathing apparatus for fire fighting if necessary.
Further information	:	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. Do not allow uncontrolled discharge of product into the environment. Personal protective equipment Wear suitable protective equipment. Impervious gloves Tightly fitting safety goggles Face-shield Boots
Environmental precautions	:	Dam up. Do not let product enter drains.

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). Pick up and transfer to properly labelled containers. 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	:	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	:	Do not get in eyes or mouth or on skin. Avoid the formation or spread of mists in the atmosphere. 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.

Storage conditions

Recommended	:	Keep in a well-ventilated place. Keep in a dry, cool place. Keep away from incompatible materials to be indicated by the manufacturer.
Incompatible products	:	Strong bases Strong oxidizing agents Strong reducing agents.

Packaging Measures

Packaging materials - Recommended	:	Plastic materials.
Other data	:	The product may become coloured over a period of time. This does not affect its properties.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	Value type	Value	Update	Basis
orthophosphoric acid	TWA	1 mg/m3	2000-06-16	Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values
	Indicative			
orthophosphoric acid	STEL	2 mg/m3	2000-06-16	Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values
	Indicative			
orthophosphoric acid	TWA	1 mg/m3	2005-04-06	UK. EH40 WEL - Workplace Exposure Limits
orthophosphoric acid	STEL	2 mg/m3	2005-04-06	UK. EH40 WEL - Workplace Exposure Limits
1,4-dioxane	TWA	25 ppm 91 mg/m3	2005-04-06	UK. EH40 WEL - Workplace Exposure Limits
	Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
1,4-dioxane	STEL	100 ppm 366 mg/m3	2005-04-06	UK. EH40 WEL - Workplace Exposure Limits
	Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
1,4-dioxane	TWA	20 ppm 73 mg/m3		Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

Control measures

Engineering measures	:	Avoid splashes. Extract at emission point.

Personal protective equipment

Respiratory protection	:	Use a respirator with an approved filter if a risk assessment indicates this is necessary
Hand protection	:	Where there is a risk of contact with hands, use appropriate gloves 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. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Eye protection	:	Safety goggles In case of contact through splashing: Wear face-shield and protective suit.
Skin and body protection	:	Overall made of HYPALON or, failing this of PVC. Acid-resistant boots. Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures	:	Emergency equipment immediately accessible, with instructions for use. Ensure that eyewash stations and safety showers are close to the workstation location. Regular cleaning of equipment, work area and clothing. Use clean, well-maintained personal protection equipment. Store personal protection equipment in a clean location away from the work area. Contaminated work clothing should not be allowed out of the workplace. Before reuse, thoroughly clean personal protection equipment Wash hands before breaks and immediately after handling the product. Shower or bathe at the end of working. 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. Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	:	no data available
Physical state	:	liquid
Colour	:	colourless to pale yellow. Over a period of time, the product turns brown
Odour	:	slight
Odour Threshold	:	no data available

Safety data

pH	:	< 1.5 at 10 % (m/v) Aqueous solution
Melting point/range	:	no data available

Boiling point/boiling range	:	> 260 °C
Flash point	:	> 100 °C closed cup
Flammability (solid, gas)	:	no data available
Autoignition temperature	:	no data available
Oxidizing properties	:	No information available.
Water solubility	:	soluble
Solubility in other solvents	:	organic polar solvents soluble Aromatic hydrocarbons soluble
Partition coefficient: n-octanol/water	:	no data available
Vapour pressure	:	no data available
Evaporation rate	:	no data available
Relative vapour density	:	no data available
Density	:	ca. 1.08 g/cm3 at 20 °C
Oxidation/Reduction Potential	:	no data available
Viscosity, dynamic	:	900 mPa.s at 20 °C
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		
Materials to avoid	:	Strong bases Strong oxidizing agents Strong reducing agents.

Decomposition products	:	On combustion or on thermal decomposition (pyrolysis) releases: (Carbon oxides (CO + CO2)). Oxides of phosphorus

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Acute oral toxicity	:	LD50 : 3,950 mg/kg - rat Unpublished internal reports
Acute inhalation toxicity	:	no data available
Acute dermal toxicity	:	no data available
Acute toxicity (other routes of administration)	:	no data available
Aspiration toxicity	:	no data available

Skin corrosion/irritation

Skin irritation	:	rabbit Corrosive, subcategory 1C - where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days. Unpublished internal reports

Serious eye damage/eye irritation

Eye irritation	:	no data available

Respiratory or skin sensitization

Sensitisation	:	Not classified as sensitising by skin contact By analogy Information given is based on data obtained from similar substances. Unpublished internal reports

Repeated dose toxicity

Repeated dose toxicity	:	No information available.

STOT

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

Carcinogenicity

Carcinogenicity	:	No information available.

Mutagenicity

Genotoxicity in vitro	:	Mutagenicity (Salmonella typhimurium - reverse mutation assay) with or without metabolic activation negative Information given is based on data obtained from similar substances. Unpublished internal reports
Genotoxicity in vivo	:	no data available

Reproductive toxicity

Reproductive toxicity	:	no data available

Experience with human exposure

Experience with human exposure : Ingestion	:	May cause irritation to the digestive tract

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Aquatic Compartment (including sediment)

Toxicity to fish	:	LC50 - 96 h : 5.5 mg/l - Oncorhynchus mykiss (rainbow trout) Unpublished internal reports

Ecotoxicity assessment

Ecotoxicity assessment	:	Toxic to aquatic organisms.

Persistence and degradability

Biodegradability

Biodegradability	:	Readily biodegradable Ultimate aerobic biodegradability 98 % - 28 d Method: OECD Test Guideline 302 Unpublished internal reports Ultimate aerobic biodegradability 71 % - 28 d Method: OECD Test Guideline 301 Unpublished internal reports

Bioaccumulation

Partition coefficient: n-octanol/water	:	Not applicable Surface-Active

Mobility

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

Other adverse effects

Environment assessment	:	Toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Product Disposal

Interdiction	:	Should not be released into the environment.
Advice on Disposal	:	Dispose of as hazardous waste in compliance with local and national regulations.

Advice on cleaning and disposal of packaging

Measures for waste avoidance.	:	Do not dispose of the product at a rubbish tip.
Advice	:	Completely empty the packaging prior to decontamination. Carefully drain and then steam clean.
Reason for waste disposal	:	Recycle following cleaning. Dispose of contents/ container to an approved waste disposal plant.
Other data	:	In accordance with RID/ADR regulations containers or tankers, which have not been cleaned or deodorized and which previously contained a hazardous product, must either be labelled or have hazard signs. Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

ADR

UN number	: 3265
Dangerous Good Description	: UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (contains POLYOXYETHYLENE ALKYL ETHERS PHOSPHATES), 8, III, (E)
Labels	: 8
Packing group	: III
Tunnel restriction code	: (E)
Class	: 8
Classification Code	: C3
Environmentally hazardous mark	: NO
Hazard identification No	: 80

RID

UN number	: 3265
Dangerous Good Description	: UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (contains POLYOXYETHYLENE ALKYL ETHERS PHOSPHATES), 8, III
Labels	: 8
Packing group	: III
Class	: 8
Classification Code	: C3
Environmentally hazardous mark	: NO
Hazard identification No	: 80

IMDG

UN number	: 3265
Dangerous Good Description	: UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (contains POLYOXYETHYLENE ALKYL ETHERS PHOSPHATES), 8, III, IMDG Code Segregation group 1 - Acids
Labels	: 8
Packing group	: III
Class	: 8
IMDG Code segregation group	: 1 Acids
Marine pollutant (environmentally hazardous)	: NO
EmS	: F-A , S-B

IATA

UN number	: 3265
Dangerous Good Description	: UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (contains POLYOXYETHYLENE ALKYL ETHERS PHOSPHATES), 8, III
Labels	: 8
Packing group	: III
Class	: 8
Environmentally hazardous mark	: NO
Packing instruction (cargo aircraft)	: 820
Max net qty/pkg	: 60.00 L
Packing instruction (passenger aircraft)	: 818
Max net qty/pkg	: 5.00 L

ADNR

UN number	:	3265
Dangerous Good Description	:	UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (contains POLYOXYETHYLENE ALKYL ETHERS PHOSPHATES), 8, III
Labels	:	8
Packing group	:	III
Class	:	8
Classification Code	:	C3
Environmentally hazardous mark	:	NO

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

Other regulations	:	This surfactant complies with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

16. OTHER INFORMATION

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

R11	Highly flammable.
R19	May form explosive peroxides.
R34	Causes burns.
R36/37	Irritating to eyes and respiratory system.
R40	Limited evidence of a carcinogenic effect.
R41	Risk of serious damage to eyes.
R66	Repeated exposure may cause skin dryness or cracking.

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

H225	Highly flammable liquid and vapour.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.

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

P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308	IF exposed or concerned:
P310	Immediately call a POISON CENTER or doctor/ physician.

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.