

EXTERIOR AIRCRAFT CLEANER - A4423

SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 453/2010)

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : EXTERIOR AIRCRAFT CLEANER
Product code : A4423.

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

Cleaner
Professional use

1.3. Details of the supplier of the safety data sheet

Registered company name : ORAPI.
Address : PARC INDUSTRIEL DE LA PLAINE DE L'AIN - 225 ALLEE DES CEDRES.01150.SAINT-VULBAS.FRANCE.
Telephone : 33-(0)4-74-40-20-20. Fax : 33-(0)4-74-40-20-21.
fds@orapi.com

1.4. Emergency telephone number : 33-(0)1-45-42-59-59.

Association/Organisation : INRS .

Other emergency numbers

Emergency Action: In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Substance that is corrosive to metals, Category 1 (Met. Corr. 1, H290).
Skin corrosion, Category 1A (Skin Corr. 1A, H314).
Hazardous to the aquatic environment - Chronic hazard, Category 3 (Aquatic Chronic 3, H412).

In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.

Corrosive (C, R 35).
This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.
This mixture does not present a health hazard with the exception of possible occupational exposure thresholds (see paragraphs 3 and 8).
This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

Detergent mixture (see section 15).

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



GHS05

Signal Word :
DANGER

Product identifiers :
EC 287-494-3 BENZENESULFONIC ACID, 4-C10-13-SEC-ALKYL DERIVS.
EC 229-912-9 SODIUM METASILICATE PENTAHYDRATE

Hazard statements :

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements - Prevention :

P260 Do not breathe mist/vapours.
P273 Avoid release to the environment.

EXTERIOR AIRCRAFT CLEANER - A4423

P280	Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statements - Response :	
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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.
P310	Immediately call a POISON CENTER or doctor/physician.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) $\geq 0.1\%$ published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	(EC) 1272/2008	67/548/EEC	Note	%
CAS: 85536-14-7 EC: 287-494-3 REACH: 01-2119490234-40 BENZENESULFONIC ACID, 4-C10-13-SEC-ALKYL DERIVS.	GHS07, GHS05 Dgr Acute Tox. 4, H302 Skin Corr. 1C, H314 Aquatic Chronic 3, H412	C C;R34 Xn;R22		2.5 \leq x % < 10
INDEX: 603-096-00-8 CAS: 112-34-5 EC: 203-961-6 REACH: 01-2119475104-44 2-(2-BUTOXYETHOXY)ETHANOL	GHS07 Wng Eye Irrit. 2, H319	Xi Xi;R36	[1]	2.5 \leq x % < 10
CAS: 10213-79-3 EC: 229-912-9 REACH: 01-2119449811-37 SODIUM METASILICATE PENTAHYDRATE	GHS05, GHS07 Dgr Met. Corr. 1, H290 Skin Corr. 1B, H314 STOT SE 3, H335	C C;R34 Xi;R37		2.5 \leq x % < 10
CAS: 68155-07-7 EC: 931-329-6 REACH: 01-2119490100-53 AMIDES, C8-18 (PAIRES) ET C18-INSATURÉS., N, N-BIS(HYDROXYETHYL)	GHS05, GHS09 Dgr Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411	Xi Xi;R41-R38		2.5 \leq x % < 10
CAS: 68439-46-3 ALCOHOLS C9-11 ETHOXYLATED	GHS07, GHS05 Dgr Acute Tox. 4, H302 Eye Dam. 1, H318	Xn Xn;R22 Xi;R41		0 \leq x % < 2.5

Information on ingredients :

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.
NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation :

Bring to the fresh air.
Consult a physician in case of disorder.

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.
Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

EXTERIOR AIRCRAFT CLEANER - A4423

In the event of splashes or contact with skin :

Remove any soiled or splashed clothing immediately.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

rinse thoroughly with water for at least 15 minutes

Consult a doctor in the event of irritation.

In the event of swallowing :

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention immediately, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO₂)

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO₂)

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid any contact with the skin and eyes.

Do not breathe gas/fumes/vapour/spray.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures

Use drums to dispose of collected waste in compliance with current regulations (see section 13).

EXTERIOR AIRCRAFT CLEANER - A4423

6.3. Methods and material for containment and cleaning up

Neutralise with an acidic decontaminant.

If the ground is contaminated, once the product has been recovered by sponging with an inert and non-combustible absorbent material, wash the contaminated area in plenty of water.

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Remove contaminated clothing and protective equipment before entering eating areas.

Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly.

Avoid contact with skin, eyes and clothings.

Do not breathe vapours, fumes and mist.

Fire prevention :

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

Never open the packages under pressure.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep the container tightly closed in a dry, well-ventilated place.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Keep the container away from heat, bad weather, dampness and freezing.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- European Union (2009/161/EU, 2006/15/EC, 2000/39/EC, 98/24/EC)

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Notes :
112-34-5	67.5	10	101.2	15	-

- Germany - AGW (BAuA - TRGS 900, 21/06/2010) :

CAS	VME :	VME :	Excess	Notes
112-34-5		10 ppm 67 mg/m3		1,5 (I)

- France (INRS - ED984 :2012) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
112-34-5	10	67.5	15	101.2	-	-

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

2-(2-BUTOXYETHOXY)ETHANOL (CAS: 112-34-5)

EXTERIOR AIRCRAFT CLEANER - A4423

Final use:

Exposure method:
Potential health effects:
DNEL :

Workers.

Dermal contact.
Long term systemic effects.
20 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Short term local effects.
14 ppm

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
10 ppm

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term local effects.
10 mg of substance/m3

Final use:

Exposure method:
Potential health effects:
DNEL :

Consumers.

Ingestion.
Long term systemic effects.
1.3 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Dermal contact.
Long term systemic effects.
10 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
5 mg of substance/m3

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Short term local effects.
7.5 mg of substance/m3

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term local effects.
5 mg of substance/m3

Predicted no effect concentration (PNEC):

2-(2-BUTOXYETHOXY)ETHANOL (CAS: 112-34-5)

Environmental compartment:
PNEC : Soil.
0.4 mg/l

Environmental compartment:
PNEC : Fresh water.
1 mg/l

Environmental compartment:
PNEC : Sea water.
0.1 mg/l

Environmental compartment:
PNEC : Fresh water sediment.
4 mg/l

Environmental compartment:
PNEC : Marine sediment.
0.4 mg/l

Environmental compartment:
PNEC : Waste water treatment plant.
200 mg/l

EXTERIOR AIRCRAFT CLEANER - A4423

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Natural latex

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

- PVC (polyvinyl chloride)

Recommended properties :

- Impervious gloves in accordance with standard EN374

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing :

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.

Wear suitable protective clothing, in particular overalls and boots. These items must be kept in good condition and cleaned after use.

Suitable type of protective boots :

In the event of minor spatter, wear protective boots or half-boots against chemical risks in accordance with standard EN13832-2.

In the event of prolonged contact, wear boots or half-boots with liquid-chemical-resistant and waterproof soles and uppers in accordance with standard EN13832-3.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

In the event of insufficient ventilation, wear a respiratory apparatus of protection.

Respiratory protection in the presence of aerosol or of fog of product.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information :

Physical state : Fluid liquid.

Important health, safety and environmental information

pH : 12.00 .
Strongly basic.

Flash point interval : Not relevant.

Vapour pressure (50°C) : Not relevant.

Density : 1.05

Water solubility : Dilutable.

Melting point/melting range : Not specified.

EXTERIOR AIRCRAFT CLEANER - A4423

Decomposition point/decomposition range : Not specified.

9.2. Other information

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

Mixture which by chemical action can corrode and even destroy metals.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

Avoid :

- frost

10.5. Incompatible materials

Keep away from :

- acids

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO₂)

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

May cause irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis, following exposure for up to three minutes.

Corrosive reactions are typified by ulcers, bleeding, bloody scabs, and, by the end of observation at 14 days, by discolouration due to blanching of the skin, complete areas of alopecia, and scars.

11.1.1. Substances

Acute toxicity :

BENZENESULFONIC ACID, 4-C10-13-SEC-ALKYL DERIVS. (CAS: 85536-14-7)

Oral route : LD50 = 1470 mg/kg
Species : Rat
OECD Guideline 401 (Acute Oral Toxicity)

Skin corrosion/skin irritation :

BENZENESULFONIC ACID, 4-C10-13-SEC-ALKYL DERIVS. (CAS: 85536-14-7)

Corrosivity : Causes severe skin burns.

11.1.2. Mixture

Skin corrosion/skin irritation :

Corrosive classification is based on an extreme pH value.

SECTION 12 : ECOLOGICAL INFORMATION

Harmful to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

12.1.1. Substances

AMIDES, C8-18 (PAIRES) ET C18-INSATURÉS., N, N-BIS(HYDROXYETHYL) (CAS: 68155-07-7)

Crustacean toxicity : 0,01 < NOEC <= 0,1 mg/l

BENZENESULFONIC ACID, 4-C10-13-SEC-ALKYL DERIVS. (CAS: 85536-14-7)

Fish toxicity : NOEC = 1 mg/l
Species : Lepomis macrochirus

EXTERIOR AIRCRAFT CLEANER - A4423

Duration of exposure : 28 days

ALCOHOLS C9-11 ETHOXYLATED (CAS: 68439-46-3)

Fish toxicity : LC50 = 12 mg/l
Duration of exposure : 96 h

Crustacean toxicity : EC50 = 5.4 mg/l
Duration of exposure : 48 h

NOEC = 2.58 mg/l
Duration of exposure : 21 days

Algae toxicity : ECr50 > 8.9 mg/l
Duration of exposure : 72 h

NOEC = 8.9 mg/l
Duration of exposure : 72 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

ALCOHOLS C9-11 ETHOXYLATED (CAS: 68439-46-3)

Biodegradability : Rapidly degradable.

AMIDES, C8-18 (PAIRES) ET C18-INSATURÉS., N, N-BIS(HYDROXYETHYL) (CAS: 68155-07-7)

Biodegradability : Rapidly degradable.

BENZENESULFONIC ACID, 4-C10-13-SEC-ALKYL DERIVS. (CAS: 85536-14-7)

Biodegradability : Rapidly degradable.

12.3. Bioaccumulative potential

12.3.1. Substances

ALCOHOLS C9-11 ETHOXYLATED (CAS: 68439-46-3)

Bioaccumulation : BCF < 800

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

EXTERIOR AIRCRAFT CLEANER - A4423

SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2013 - IMDG 2012 - ICAO/IATA 2014).

14.1. UN number

3267

14.2. UN proper shipping name

UN3267=CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.

(benzenesulfonic acid, 4-c10-13-sec-alkyl derivs., sodium metasilicate pentahydrate)

14.3. Transport hazard class(es)

- Classification :



8

14.4. Packing group

II

14.5. Environmental hazards

-

14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	8	C7	II	8	80	1 L	274	E2	2	E

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ
	8	-	II	1 L	F-A,S-B	274	E2

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	8	-	II	851	1 L	855	30 L	A3 A803	E2
	8	-	II	Y840	0.5 L	-	-	A3 A803	E2

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

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

No data available.

SECTION 15 : REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.

- Container information:

No data available.

- Particular provisions :

No data available.

- Labelling for detergents (EC Regulation No. 648/2004,907/2006) :

- less than 5 % : phosphates
- less than 5 % : anionic surfactants
- less than 5 % : nonionic surfactants

15.2. Chemical safety assessment

No data available.

EXTERIOR AIRCRAFT CLEANER - A4423

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
R 22	Harmful if swallowed.
R 34	Causes burns.
R 36	Irritating to eyes.
R 37	Irritating to respiratory system.
R 38	Irritating to skin.
R 41	Risk of serious damage to eyes.

Abbreviations :

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefährdungsklasse (Water Hazard Class).

GHS05 : Corrosion