

1. SUBSTANCE/PRODUCT AND COMPANY IDENTIFICATION

Trade name PLUREX C5

Product type and purpose: Foaming agent for foam markers

Distributed by: ARAG S.r.l. 42048 RUBIERA (Reggio Emilia) ITALY
Via Palladio, 5/A
Tel. 0522.622011

Emergency telephone number : ARAG S.r.l.: 0522.622011
National or Regional Emergency Poison Call Center

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical type (preparation):
Surfactant in aqueous solution.

Hazardous ingredients

| EC No. | CAS No. | Chemical name | Quantity | Classification |
|-----------|----------|---|----------|------------------------------|
| | | Alkylethoxysulfate Sodium Salt | 5 - 10 % | Xi R36-38 |
| 203-473-3 | 107-21-1 | Ethylene glycol | <30 % | Xn R22 |
| 203-905-0 | 111-76-2 | 2-Butoxyethanol, Butyl Glycol, Monobutyl Ether Of Ethylene Glycol | 5 - 10 % | Xn, Xi R20/21/22-36/38 |
| 205-568-5 | 142-87-0 | Sodium Monodecylsulfate | 1 - 5 % | Xn, Xi R22-38-41 |
| 205-788-1 | 151-21-3 | Sodium Dodecyl Sulfate (Dodecyl Sulfate Sodium Salt) | 1 - 5 % | F, Xn, Xi R11-21/22-36/37/38 |
| 203-905-0 | 111-76-2 | 2-Butoxyethanol, Butyl Glycol, Ethylene Glycol Monobutyl Ether | 1 - 5 % | Xn, Xi R20/21/22-36/38 |
| 203-961-6 | 112-34-5 | 2-(2-Butoxyethoxy)Ethanol, Diethylene Glycol Monobutyl Ether | 1 - 5 % | Xi R36 |

For the full text of relevant R phrases, please refer to Section 16.

3. HAZARD IDENTIFICATION

Xi - Irritant

Classification

Indications of danger : Irritant
"R" phrases :
Irritating to eyes and skin.

Information pertaining to particular dangers for man and environment

Harmful if swallowed. Repeated or prolonged contact with skin may cause skin irritation and/or dermatitis and sensitization in susceptible persons.
Breathing in the product foam is impossible. Danger of suffocation!

4. FIRST AID MEASURES**General information:**

Remove from the danger zone.
Remove contaminated clothing and shoes immediately. Wash contaminated clothing before use.
If you feel unwell seek medical advice (show the label where possible). If symptoms persist, seek immediate medical assistance or contact an Emergency Poison Center.

After inhalation

It has been established that intentional, foreseeable application does not generate inhalable mist.
Avoid aerosol formation. Do not inhale aerosol. Vapors may be irritating to mucous membranes if inhaled.
Remove to fresh air. If breathing is difficult, give oxygen.

After skin contact

In the event of contact with skin: wash with soap and plenty of water. If skin irritation persists, seek medical advice.

After contact with eyes

Flush immediately with plenty of water in case of contact with eyes and get medical attention.

After swallowing

If product has been swallowed, seek immediate medical attention (show product container or label).
DO NOT induce vomiting. Inducing vomiting after swallowing may cause product to enter lungs.
Do not give artificial respiration by mouth-to-mouth. Use suitable rescue breathing equipment.

Notes for physician

May cause gastrointestinal irritation, nausea, vomiting and diarrhea if swallowed.

5. FIRE FIGHTING MEASURES

Suitable extinguishing agents

Product is not flammable.
Use fire-extinguishing methods suitable to surrounding conditions and environment.

For safety reasons, unsuitable extinguishing agents

Not known.

Special hazards caused by the material, its products of combustion or resulting gases

Not known.

Special protective equipment for firefighters

Not required

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Solvent-resistant gloves (butyl rubber); safety glasses with side shields.

Environmental precautions

Do not allow runoff from flushing to reach sanitary sewage system or any watercourse. Avoid penetration of the product in the ground.

Cleanup procedures

Methods of cleaning up - minor spills:

Wipe up with absorbent material (e.g. mop, cloth). Clean up the area and any contaminated objects thoroughly and in compliance with environmental protection rules. After cleaning flush away traces with water.

Methods of cleaning up - large spills:

Avoid additional spills or leaks. Avoid penetration of the product in the ground. If spillage cannot be contained, inform local authorities. Soak up with inert absorbent material and dispose of contaminated material as waste in accordance with Section 13. Suitable absorbent material Absorbent, organic material (e.g. universal binder, peat, sawdust)

Additional information

Spilled material may make surfaces slippery.
Do not pack recovered material into original containers for reuse.

7. HANDLING AND STORAGE

Handling

Information for safe handling

Wear suitable gloves and eye/face protection.
When using, do not eat, drink or smoke.
Use only clean equipment.
Do not inhale vapors or aerosol.

Information about fire and explosion protection

No special measures required for handling.

Additional information

Exposure to heat when stored in a sealed container may cause the pressure inside the container to rise.

Storage

Requirements to be met by storerooms and receptacles

Store in a place accessible by authorized persons only.
Suitable container and packaging material for safe storage: Stainless steel, polypropylene, HDPE container
Not suitable: Aluminum, Zinc, Mild steel

Information about storage in one common storage facility

No incompatible products have been identified that should be mentioned specifically.

Additional information

Keep container tightly closed. Avoid direct light.
Recommended storage temperature: Do not store at temperatures above 50° C.

8. PERSONAL PROTECTION/EXPOSURE CONTROLS

EXPOSURE LIMITS

Threshold limit values

10. STABILITY AND REACTIVITY

Conditions to be avoided:

Direct heat source.
Intense sunlight for prolonged periods of time.
Do not expose to temperatures exceeding 50 °C.
Protect from contamination.

Materials to be avoided:

Strong acids and strong bases; Strong oxidizing agents; Reacts violently with peroxides.

Hazardous decomposition products:

Carbon oxides, nitrogen oxides (NOx)

Additional information

No dangerous reactions known under normal usage conditions.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not known.

Corrosive and irritant effects

Irritating to eyes and respiratory tract. Ingestion may cause irritation of mucous surfaces. May cause skin irritation in susceptible persons.

Sensitizing effects

None during normal processing.

Severe effects after repeated or prolonged exposure

Repeated or prolonged exposure may cause skin irritation and dermatitis due to the degreasing properties of the product.

Carcinogenic and mutagenic effects, reproductive toxicity

Not known.

12. ECOLOGICAL INFORMATION

Toxicity to the environment

Readily biodegradable.

Persistence and degradability

Contains surfactant that is over 90% biodegradable. Readily biodegradable in accordance with specific OECD test.

Chemical Oxygen Demand (COD)=10,000mg O₂/l

Biochemical Oxygen Demand (BOD)=570,000mg O₂/l

Waste water from subsequent processing must be treated in accordance with local regulations.

Potential bioaccumulation data

No bioaccumulation potential.

Other adverse effects

None during normal processing.

13. DISPOSAL CONSIDERATIONS

Information on disposal

Do not flush into sewer system.

If recycling is not feasible, dispose of in accordance with local regulations. Dispose of non-recyclable solution or excess product through a licensed contractor.

Waste codes listed below are just suggestions:

161000 - aqueous liquid waste designated for off-site treatment.

Contaminated packaging and recommended detergents

Soak up with inert absorbent material and dispose of contaminated material as waste in accordance with Section 13.

If leak cannot be contained, inform local authorities.

See also Section 6.

14. TRANSPORT INFORMATION

Land transport ADR/RID

Proper shipping name

Non dangerous goods in terms of ADR/RID, ADNR, IMDG-Code, ICAO/IATA-DGR

River transport

Proper shipping name

Non dangerous goods

Maritime transport

Proper shipping name

Non dangerous goods

Air transport

Proper shipping name

Non dangerous goods

15. REGULATORY INFORMATION

Labeling according to EC regulations

Hazards Xi - Irritant



Xi - Irritant

"R" phrases:

R36/38 Irritating to eyes and skin

"S" phrases:

03 Keep in a cool place.

15 Keep away from heat.

21 When using do not smoke.

25 Avoid contact with eyes.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

35 This material and its container must be disposed of in a safe way.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Additional information

Classification according to European Directive 1999/45/EC relating to the classification of dangerous preparations.

National regulations

Water contaminant-class

2 - dangerous to water

16. OTHER INFORMATION

List of relevant R phrases

11 Highly flammable.

22 Harmful if swallowed.

36 Irritating to eyes.

38 Irritating to skin.

41 Risk of serious damage to eyes.

21/22 Harmful in contact with skin and if swallowed.

20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

36/38 Irritating to eyes and skin.

36/37/38 Irritating to eyes, respiratory system and skin.

Further information

The information reported in this Safety Data Sheet is correct to our best knowledge at the time of publishing. Such information is provided for the sole purpose of allowing correct and safe use, storage, transport and disposal of the product. Such information does not imply any warranty or promise in terms of product quality. The information provided herein is only valid for the specified product and is not applicable to the product when used in combination with other materials or processes unless expressly stated in the Material Safety Data Sheet.