

P3-prevafoam DUO**Section: 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier**

Product name : P3-prevafoam DUO

Product code : 116110E

Use of the
Substance/Mixture : Defoamer

Substance type: : Mixture

For professional users only.

Product dilution information : No dilution information provided.

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

Identified uses : Defoaming product. Automatic process

Recommended restrictions
on use : Reserved for industrial and professional use.**1.3 Details of the supplier of the safety data sheet**Company : Ecolab Export GmbH
Ecolab-Allee 1
40789 Monheim am Rhein, Germany +49 2173 599 1127
DEDUSEXPServices@ecolab.com**1.4 Emergency telephone number**Emergency telephone
number : 0049-2173-5991700 (24/7)Poison Information Centre
telephone number : +49 (0)551 19240Date of Compilation/Revision : 03.12.2015
version : 1.5**Section: 2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**Flammable liquids, Category 3 H226
Serious eye damage, Category 1 H318**Classification (67/548/EEC, 1999/45/EC)**

Xi; IRRITANT R41

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.

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2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H226 Flammable liquid and vapour.
H318 Causes serious eye damage.

Precautionary Statements : **Prevention:**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280e Wear eye protection/face protection.
Response:
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/doctor.

Hazardous components which must be listed on the label:
Nonionic surfactants

2.3 Other hazards

None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

Chemical Name	CAS-No. EC-No. REACH No.	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration: [%]
Nonionic surfactants	52609-19-5 500-116-6	Xi; R41	Serious eye damage Category 1; H318	>= 50 - <= 100
Fattyalcohol ethoxylates > 5EO	146340-16-1	R38-R50	Skin irritation Category 2; H315 Acute aquatic toxicity Category 1; H400	>= 5 - < 10
2-(2- butoxyethoxy)ethano l	112-34-5 203-961-6	Xi; R36	Eye irritation Category 2; H319	>= 3 - < 5
poly(oxy-1,2- ethanediyl), .alpha.- butyl-.omega.- hydroxy-	9004-77-7 01-2119475115-41	R36	Serious eye damage/eye irritation Category 2; H319	>= 1 - < 2.5
Substances with a workplace exposure limit :				

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ethanol	64-17-5 200-578-6 01-2119457610-43	F; R11	Flammable liquids Category 2; H225	>= 10 - < 20
propan-2-ol	67-63-0 200-661-7 01-2119457558-25	F-Xi; R11- R36-R67	Flammable liquids Category 2; H225 Eye irritation Category 2; H319 Specific target organ toxicity - single exposure Category 3; H336	>= 0.5 - < 1

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.

Section: 4. FIRST AID MEASURES

4.1 Description of first aid measures

- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
- In case of skin contact : Rinse with plenty of water.
- If swallowed : Rinse mouth. Get medical attention if symptoms occur.
- If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

4.3 Indication of immediate medical attention and special treatment needed

- Treatment : Treat symptomatically.

Section: 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : Fire Hazard
Keep away from heat and sources of ignition.
Flash back possible over considerable distance.
Beware of vapours accumulating to form explosive concentrations.

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Vapours can accumulate in low areas.

Hazardous combustion products : Decomposition products may include the following materials:
Carbon oxides
nitrogen oxides (NOx)
Sulphur oxides
Oxides of phosphorus

5.3 Advice for firefighters

Special protective equipment for firefighters : Use personal protective equipment.

Further information : Use water spray to cool unopened containers. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Section: 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel : Ensure adequate ventilation. Remove all sources of ignition. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Advice for emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.

6.2 Environmental precautions

Environmental precautions : Do not allow contact with soil, surface or ground water.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Eliminate all ignition sources if safe to do so. Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

6.4 Reference to other sections

See Section 1 for emergency contact information.
For personal protection see section 8.
See Section 13 for additional waste treatment information.

Section: 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling : Do not get in eyes, on skin, or on clothing. Do not breathe

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dust/fume/gas/mist/vapours/spray. Use only with adequate ventilation. Keep away from fire, sparks and heated surfaces. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Wash hands thoroughly after handling. Open drum carefully as content may be under pressure.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep away from heat and sources of ignition. Keep in a cool, well-ventilated place. Keep away from oxidizing agents. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

Storage temperature : 5 °C to 40 °C

7.3 Specific end uses

Specific use(s) : Defoaming product. Automatic process

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
ethanol	64-17-5	AGW	500 ppm 960 mg/m3	TRGS 900
2-(2-butoxyethoxy)ethanol	112-34-5	AGW	100 mg/m3	TRGS 900
		AGW	10 ppm 67 mg/m3	TRGS 900
propan-2-ol	67-63-0	AGW	200 ppm 500 mg/m3	TRGS 900

Biological occupational exposure limits

Substance name	CAS-No.	Control parameters	Sampling time	Basis
propan-2-ol	67-63-0	Acetone: 25 mg/l (Blood)	Immediately after exposition or after working hours	TRGS 903
		Acetone: 25 mg/l (Urine)	Immediately after exposition or after working hours	TRGS 903

DNEL

propan-2-ol	:	End Use: Workers Exposure routes: Dermal Potential health effects: Long-term systemic effects Value: 888 mg/cm2
	:	End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 500 mg/m3

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	End Use: Consumers Exposure routes: Dermal Potential health effects: Long-term systemic effects Value: 319 mg/cm ²
	End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 89 mg/m ³
	End Use: Consumers Exposure routes: Ingestion Potential health effects: Long-term systemic effects Value: 26 ppm

PNEC

propan-2-ol	:	Fresh water Value: 140.9 mg/l
		Marine water Value: 140.9 mg/l
		Intermittent use/release Value: 140.9 mg/l
		Fresh water Value: 552 mg/kg
		Marine sediment Value: 552 mg/kg
		Soil Value: 28 mg/kg
		Sewage treatment plant Value: 2251 mg/l
		Oral Value: 160 mg/kg

8.2 Exposure controls

Appropriate engineering controls

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Individual protection measures

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Eye/face protection (EN 166) : Safety goggles

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Face-shield

Hand protection (EN 374) : No special protective equipment required.

Skin and body protection (EN 14605) : No special protective equipment required.

Respiratory protection (EN 143, 14387) : No special protective equipment required.

Environmental exposure controls

General advice : Consider the provision of containment around storage vessels.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance : liquid
Colour : light yellow
Odour : alcohol-like
pH : 5.5, 100 %
Flash point : 32 °C closed cup, Does not sustain combustion.
Odour Threshold : Not applicable and/or not determined for the mixture
Melting point/freezing point : Not applicable and/or not determined for the mixture
Initial boiling point and boiling range : Not applicable and/or not determined for the mixture
Evaporation rate : Not applicable and/or not determined for the mixture
Flammability (solid, gas) : Not applicable and/or not determined for the mixture
Upper explosion limit : Not applicable and/or not determined for the mixture
Lower explosion limit : Not applicable and/or not determined for the mixture
Vapour pressure : Not applicable and/or not determined for the mixture
Relative vapour density : Not applicable and/or not determined for the mixture
Relative density : 0.9
Water solubility : Not applicable and/or not determined for the mixture
Solubility in other solvents : Not applicable and/or not determined for the mixture
Partition coefficient: n-octanol/water : Not applicable and/or not determined for the mixture
Auto-ignition temperature : Not applicable and/or not determined for the mixture
Thermal decomposition : Not applicable and/or not determined for the mixture
Viscosity, kinematic : Not applicable and/or not determined for the mixture
Explosive properties : Not applicable and/or not determined for the mixture
Oxidizing properties : The substance or mixture is not classified as oxidizing.

9.2 Other information

VOC : 0.66 %VOC content excluding water

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0.66 %VOC content valid only for coating materials used on wood surfaces

Section: 10. STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

Decomposition products may include the following materials:

Carbon oxides
nitrogen oxides (NO_x)
Sulphur oxides
Oxides of phosphorus

Section: 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Toxicity

Acute oral toxicity : There is no data available for this product.

Acute inhalation toxicity : There is no data available for this product.

Acute dermal toxicity : There is no data available for this product.

Skin corrosion/irritation : There is no data available for this product.

Serious eye damage/eye irritation : There is no data available for this product.

Respiratory or skin : There is no data available for this product.

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sensitization

Carcinogenicity : There is no data available for this product.

Reproductive effects : There is no data available for this product.

Germ cell mutagenicity : There is no data available for this product.

Teratogenicity : There is no data available for this product.

STOT - single exposure : There is no data available for this product.

STOT - repeated exposure : There is no data available for this product.

Aspiration toxicity : There is no data available for this product.

Acute oral toxicity : Nonionic surfactants
LD50 rat: > 2,000 mg/kg

Fattyalcohol ethoxylates > 5EO
LD50 rat: > 2,000 mg/kg

2-(2-butoxyethoxy)ethanol
LD50 rat: 3,306 mg/kg

ethanol
LD50 rat: 10,470 mg/kg

propan-2-ol
LD50 rat: 5,840 mg/kg

Acute inhalation toxicity : ethanol
4 h LC50 rat: 117 mg/l

propan-2-ol
4 h LC50 rat: > 30 mg/l

Acute dermal toxicity : Nonionic surfactants
LD50 rabbit: 2,150 mg/kg

2-(2-butoxyethoxy)ethanol
LD50 rabbit: 2,764 mg/kg

ethanol
LD50 rabbit: > 15,800 mg/kg

propan-2-ol
LD50 rabbit: 12,870 mg/kg

Potential Health Effects

Eyes : Causes serious eye damage.

Skin : Health injuries are not known or expected under normal use.

Ingestion : Health injuries are not known or expected under normal use.

Inhalation : Health injuries are not known or expected under normal use.

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Chronic Exposure : Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact : Redness, Pain, Corrosion
Skin contact : No symptoms known or expected.
Ingestion : No symptoms known or expected.
Inhalation : No symptoms known or expected.

Section: 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

Product

Toxicity to fish : no data available
Toxicity to daphnia and other aquatic invertebrates : no data available
Toxicity to algae : no data available

Components

Toxicity to fish : Nonionic surfactants
96 h LC50: 5.5 mg/l

2-(2-butoxyethoxy)ethanol
96 h LC50 Fish: 1,300 mg/l

ethanol
96 h LC50 Fish: 11,000 mg/l

propan-2-ol
96 h LC50 Pimephales promelas (fathead minnow): 9,640 mg/l

Components

Toxicity to daphnia and other aquatic invertebrates : propan-2-ol
LC50 Daphnia magna (Water flea): > 10,000 mg/l

12.2 Persistence and degradability

Product

Biodegradability : The surfactants contained in the product are biodegradable according to the requirements of the detergent regulation 648/2004/EC

Components

Biodegradability : Nonionic surfactants
Result: Readily biodegradable.

Fattyalcohol ethoxylates > 5EO
Result: Readily biodegradable.

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poly(oxy-1,2-ethanediyl), .alpha.-butyl-.omega.-hydroxy-
Result: Poorly biodegradable

ethanol
Result: Readily biodegradable.

propan-2-ol
Result: Readily biodegradable.

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

Product

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

no data available

Section: 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with the European Directives on waste and hazardous waste. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

13.1 Waste treatment methods

Product : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Contaminated packaging : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

European Waste Catalogue : 200129* - detergents containing dangerous substances

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (ADR/ADN/RID)

14.1 UN number : 1170
14.2 UN proper shipping name : ETHANOL SOLUTION

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14.3 Transport hazard : 3
class(es)
14.4 Packing group : III
14.5 Environmental hazards : No
14.6 Special precautions for user : None

Air transport (IATA)

14.1 UN number : 1170
14.2 UN proper shipping name : Ethanol solution
14.3 Transport hazard : 3
class(es)
14.4 Packing group : III
14.5 Environmental hazards : No
14.6 Special precautions for user : None

Sea transport (IMDG/IMO)

14.1 UN number : 1170
14.2 UN proper shipping name : ETHANOL SOLUTION
14.3 Transport hazard : 3
class(es)
14.4 Packing group : III
14.5 Environmental hazards : No
14.6 Special precautions for user : None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not applicable.

Section: 15. REGULATORY INFORMATION

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

according to Detergents Regulation EC 648/2004 : 30 % and more: Non-ionic surfactants

National Regulations

Take note of Dir 94/33/EC on the protection of young people at work.

Hazard class for water : WGK 2
Classification according VwVwS, Annex 4.

German storage class : 3

15.2 Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

Section: 16. OTHER INFORMATION

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R11	Highly flammable.
R36	Irritating to eyes.
R38	Irritating to skin.
R41	Risk of serious damage to eyes.
R50	Very toxic to aquatic organisms.
R67	Vapours may cause drowsiness and dizziness.

Full text of H-Statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.

Full text of other abbreviations

(Q)SAR - (Quantitative) Structure Activity Relationship; ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; DIN - Standard of the German Institute for Standardisation; ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TRGS - Technical Rule for Hazardous Substances; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice

Prepared by : Regulatory Affairs

Numbers quoted in the MSDS are given in the format: 1,000,000 = 1 million and 1,000 = 1 thousand. 0.1 = 1 tenth and 0.001 = 1 thousandth

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REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

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. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

ANNEX: EXPOSURE SCENARIOS

DPD+ Substances:

The following substances are the lead substances that contribute to the mixture Exposure Scenario according to the DPD+ Rule:

Route	Substance	CAS-No.	EINECS-No.
Ingestion	No lead substance		
Inhalation	No lead substance		
Dermal	Fattyalcohol ethoxylates > 5EO	146340-16-1	
Eyes	Nonionic surfactants	52609-19-5	500-116-6
aquatic environment	Fattyalcohol ethoxylates > 5EO	146340-16-1	

To calculate if your downstream Operating Conditions and Risk management Measures are safe, please calculate your risk factor at the website below:

www.ecetoc.org/tra

Short title of Exposure Scenario : **Defoaming product. Automatic process**

Use descriptors

- Main User Groups : Industrial uses: Uses of substances as such or in preparations at industrial sites
- Sectors of end-use : **SU3:** Industrial uses: Uses of substances as such or in preparations at industrial sites
- Process categories : **PROC1:** Use in closed process, no likelihood of exposure
PROC8b: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities
- Product categories : **PC35:** Washing and cleaning products (including solvent based products)
- Environmental Release Categories : **ERC4:** Industrial use of processing aids in processes and products, not becoming part of articles

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