SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : REDUCER ® F121

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

Use of the Substance/Mixture : Thinner

1.3 Details of the supplier of the safety data sheet

Company : ELANTAS Europe S.r.l.
Strada Antolini 1
43044 Collecchio
Italy

Telephone : +3907363081
Telefax : +390736402746
E-mail address : msds.elantas.europe@altana.com

1.4 Emergency telephone number

+39 0736 3081 (8-17 h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids , Category 3	H226: Flammable liquid and vapour.
Skin irritation , Category 2	H315: Causes skin irritation.
Eye irritation , Category 2	H319: Causes serious eye irritation.
Specific target organ toxicity - single exposure , Category 3, Central nervous system	H336: May cause drowsiness or dizziness.
Specific target organ toxicity - single exposure , Category 3, Respiratory system	H335: May cause respiratory irritation.
Specific target organ toxicity - repeated exposure , Category 2	H373: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard , Category 1	H304: May be fatal if swallowed and enters airways.
Chronic aquatic toxicity , Category 2	H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word : Danger

Hazard statements :

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements :

Prevention:	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P273	Avoid release to the environment.
Response:	
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Hazardous components which must be listed on the label:
aromatic hydrocarbons, C9-12, benzene distn.

Xylene, mixture of isomers

2.3 Other hazards

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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Mixture of solvents

Hazardous components

Chemical name	CAS-No.	Classification	Concentration

	EC-No. Registration number	(REGULATION (EC) No 1272/2008)	(%)
aromatic hydrocarbons, C9-12, benzene distn.	92062-36-7 295-551-9 01-2119555277-32	Flam. Liq.3; H226 STOT SE3; H335, H336 Asp. Tox.1; H304 Aquatic Chronic2; H411	>= 30 - < 50
Hydrocarbons, C9, aromatics	Not Assigned 01-2119455851-35	Flam. Liq.3; H226 STOT SE3; H335, H336 Asp. Tox.1; H304 Aquatic Chronic2; H411	>= 30 - < 50
Xylene, mixture of isomers	1330-20-7 215-535-7 01-2119488216-32	Flam. Liq.3; H226 Acute Tox.4; H332 Acute Tox.4; H312 Skin Irrit.2; H315 Eye Irrit.2; H319 STOT SE3; H335 STOT RE2; H373 Asp. Tox.1; H304	>= 10 - < 12,5
Reaction mass of ethyl benzene and xylene	Not Assigned 01-2119539452-40	Flam. Liq.3; H226 Acute Tox.4; H332 Acute Tox.4; H312 Skin Irrit.2; H315 Eye Irrit.2; H319 STOT SE3; H335 STOT RE2; H373 Asp. Tox.1; H304	>= 10 - < 12,5
4-hydroxy-4-methylpentan-2-one	123-42-2 204-626-7 01-2119473975-21	Eye Irrit.2; H319 STOT SE3; H335 Flam. Liq.3; H226	>= 1 - < 3

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Show this safety data sheet to the doctor in attendance.
Treat symptomatically.
Consult a physician.
Do not leave the victim unattended.

Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.
Avoid inhalation, ingestion and contact with skin and eyes.

If inhaled : Move to fresh air.
Oxygen or artificial respiration if needed.
If symptoms persist, call a physician.

If unconscious, place in recovery position and seek medical advice.

In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off immediately with plenty of water for at least 15 minutes.
Use a mild soap if available.
Wash contaminated clothing before re-use.

In case of eye contact : Immediately flush eye(s) with plenty of water.
Consult a physician.
Keep eye wide open while rinsing.
Protect unharmed eye.
If eye irritation persists, consult a specialist.

If swallowed : Call a physician immediately.
Gently wipe or rinse the inside of the mouth with water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Drowsiness
Nausea
Central nervous system depression

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Warning: water promotes the spread of fire.
Burning produces irritant fumes.
The pressure in sealed containers can increase under the influence of heat.
Exposure to decomposition products may be a hazard to health.

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment. Exposure to

decomposition products may be a hazard to health.

Further information : Cool containers/tanks with water spray.
Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Keep people away from and upwind of spill/leak.
Refer to protective measures listed in sections 7 and 8.
Ensure adequate ventilation.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Remove all sources of ignition.
Make sure that there is a sufficient amount of neutralizing/ absorbent material near the storage area.
Mark the contaminated area with signs and prevent access to unauthorized personnel.

6.2 Environmental precautions

Environmental precautions : Do not allow contact with soil, surface or ground water.
Local authorities should be advised if significant spillages cannot be contained.
Prevent spreading over a wide area (e.g. by containment or oil barriers).
Retain and dispose of contaminated wash water.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : 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).
Sweep up and shovel into suitable containers for disposal.
Clean contaminated surface thoroughly.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.
Ensure all equipment is electrically grounded before beginning transfer operations.
Avoid inhalation, ingestion and contact with skin and eyes.
Keep away from fire, sparks and heated surfaces.
Keep container closed when not in use.

Advice on protection against : Take necessary action to avoid static electricity discharge

fire and explosion (which might cause ignition of organic vapours). Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Keep away from heat and sources of ignition.

Hygiene measures : Store personal protection equipment in a clean location away from the work area. Keep working clothes separately.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Do not store together with explosives, gases, oxidizing solids, products which form flammable gases in contact with water, oxidizing products, infectious products and radioactive products.

Advice on common storage : Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

7.3 Specific end use(s)

Specific use(s) : Consult the technical guidelines for the use of this substance/mixture.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Xylene, mixture of isomers	1330-20-7	TWA	50 ppm 220 mg/m3	GB EH40
Further information	Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
		STEL	100 ppm 441 mg/m3	GB EH40
Further information	Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
		TWA	50 ppm 221 mg/m3	2000/39/EC
Further information	Identifies the possibility of significant uptake through the skin, Indicative			
		STEL	100 ppm 442 mg/m3	2000/39/EC
Further information	Identifies the possibility of significant uptake through the skin, Indicative			
4-hydroxy-4-methylpentan-2-one	123-42-2	TWA	50 ppm 241 mg/m3	GB EH40
		STEL	75 ppm 362 mg/m3	GB EH40

Biological occupational exposure limits

Substance name	CAS-No.	Control parameters	Sampling time	Basis

Xylene	1330-20-7	methyl hippuric acid: 650 mmol/mol creatinine (Urine)	After shift	GB EH40 BAT

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

aromatic hydrocarbons, C9-12, benzene distn. : End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 25 mg/kg
End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 150 mg/m3
End Use: Consumers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 11 mg/kg
End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 32 mg/m3
End Use: Consumers
Exposure routes: Ingestion
Potential health effects: Long-term systemic effects
Value: 11 mg/kg

Hydrocarbons, C9, aromatics : End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 25 mg/kg
End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 150 mg/m3
End Use: Consumers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 11 mg/kg
End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 32 mg/m3

Xylene, mixture of isomers : End Use: Workers
Exposure routes: Inhalation
Potential health effects: Acute effects, Short-term exposure, Systemic effects
Value: 289 mg/m3
End Use: Workers
Exposure routes: Inhalation
Potential health effects: Acute effects, Short-term exposure, Local effects
Value: 289 mg/m3
End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term exposure, Systemic effects
Value: 180 mg/kg

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term exposure, Systemic effects
Value: 77 mg/m3
End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Short-term exposure, Systemic effects
Value: 174 mg/m3
End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Short-term exposure, Local effects
Value: 174 mg/m3
End Use: Consumers
Exposure routes: Skin contact
Potential health effects: Long-term exposure, Systemic effects
Value: 108 mg/kg
End Use: Consumers
Exposure routes: Ingestion
Potential health effects: Long-term exposure, Systemic effects
Value: 1,6 mg/kg
End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Long-term exposure, Systemic effects
Value: 14,8 mg/m3

4-hydroxy-4-methylpentan-2-one : End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 9,4 mg/kg
End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 66,4 mg/m3
End Use: Consumers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 3,4 mg/kg
End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 11,8 mg/m3
End Use: Consumers
Exposure routes: Ingestion
Potential health effects: Long-term systemic effects
Value: 3,4 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Xylene, mixture of isomers : Fresh water
Value: 0,327 mg/l
Marine water
Value: 0,327 mg/l
Fresh water sediment
Value: 12,46 mg/kg
Marine sediment
Value: 12,46 mg/kg
Soil
Value: 2,31 mg/kg

		Sewage treatment plant Value: 6,58 mg/l Intermittent releases Value: 0,327 mg/l
4-hydroxy-4-methylpentan-2-one	:	Fresh water sediment Value: 9,06 mg/kg Marine sediment Value: 0,91 mg/kg Soil Value: 0,63 mg/kg Fresh water Value: 2 mg/l Marine water Value: 0,2 mg/l Intermittent releases Value: 1 mg/l Sewage treatment plant Value: 82 mg/l

8.2 Exposure controls

Engineering measures

Use only appropriately classified electrical equipment and powered industrial trucks.

Personal protective equipment

Eye protection	:	Safety glasses with side-shields conforming to EN166 Ensure that eyewash stations and safety showers are close to the workstation location. Do not wear contact lenses.
Hand protection		
Material	:	Protective gloves complying with EN 374.
Remarks	:	Follow the instructions for use issued by the producer.
Material	:	Polyvinyl alcohol or nitrile- butyl-rubber gloves
Remarks	:	Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Skin and body protection	:	Workers should wear antistatic footwear. Remove and wash contaminated clothing before re-use. Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Respiratory protection	:	In the case of vapour formation use a respirator with an approved filter. Respirator with a vapour filter (EN 141)
Filter type	:	Organic vapour type (A)
Protective measures	:	Do not wear contact lenses. Ensure that eye flushing systems and safety showers are located close to the working place.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	liquid
Colour	:	colourless
Odour	:	characteristic
pH	:	Not applicable
Melting point/range	:	lower -15 °C
Boiling point/boiling range	:	137 - 143 °C
Flash point	:	27 °C
Evaporation rate	:	not determined
Upper explosion limit	:	7 %(V)
Lower explosion limit	:	0,8 %(V)
Vapour pressure	:	No data available
Relative vapour density	:	lower 1(Air = 1.0)
Density	:	860 g/l (20 °C)
Bulk density	:	Not applicable

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions	:	Stable under recommended storage conditions. No decomposition if stored and applied as directed. No decomposition if used as directed.

10.4 Conditions to avoid

Conditions to avoid	:	Keep away from open flames, hot surfaces and sources of ignition.

Protect from frost, heat and sunlight.
No decomposition if used as directed.

10.5 Incompatible materials

Materials to avoid : Alkaline earth metals
Strong acids and strong bases
Strong oxidizing agents
Strong reducing agents

10.6 Hazardous decomposition products

Hazardous decomposition products : Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Acute toxicity estimate : > 20 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : > 2.000 mg/kg
Method: Calculation method

Components:

Xylene, mixture of isomers:

Acute oral toxicity : LD50 (Rat, male): 3.523 mg/kg
Method: Directive 67/548/EEC, Annex V, B.1.

Reaction mass of ethyl benzene and xylene:

Acute oral toxicity : LD50 (Rat, male): 3.523 mg/kg
Method: Directive 67/548/EEC, Annex V, B.1.

Skin corrosion/irritation

Product:

Remarks: No data available

Serious eye damage/eye irritation

Product:

Remarks: No data available

Respiratory or skin sensitisation

Product:
Remarks: No data available

Components:
Reaction mass of ethyl benzene and xylene:
Test Type: Mouse Local Lymph Node assay (LLNA)
Exposure routes: Dermal
Species: Mouse
Method: OECD Test Guideline 429
Result: Does not cause skin sensitisation.

Germ cell mutagenicity

Carcinogenicity

Reproductive toxicity

STOT - single exposure

STOT - repeated exposure

Repeated dose toxicity

Product:
Remarks: No data available

Aspiration toxicity

Components:
Reaction mass of ethyl benzene and xylene:
The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Further information

Product:
Remarks: No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish	:	Remarks: No data available
Toxicity to daphnia and other aquatic invertebrates	:	Remarks: No data available

Components:

Xylene, mixture of isomers:

Toxicity to algae : EC50 (Selenastrum capricornutum (green algae)): 2,2 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201
GLP: yes

Reaction mass of ethyl benzene and xylene:

Toxicity to algae : ErC50 (Selenastrum capricornutum (green algae)): 2,2 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201
GLP: yes

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Components:

Xylene, mixture of isomers:

Biodegradability : Test Type: aerobic
Result: Readily biodegradable.
Method: OECD Test Guideline 301F
GLP: yes

Reaction mass of ethyl benzene and xylene:

Biodegradability : Test Type: aerobic
Result: Readily biodegradable.
Method: OECD Test Guideline 301F
GLP: yes

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: 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

13.1 Waste treatment methods

Product	:	Do not dispose of with domestic refuse. The product should not be allowed to enter drains, water courses or the soil. Dispose of as hazardous waste in compliance with local and national regulations. Container hazardous when empty. Can be incinerated, when in compliance with local regulations.
Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

14.1 UN number

ADR/RID/ADN	:	UN 1263
IMDG	:	UN 1263
IATA	:	UN 1263

14.2 UN proper shipping name

ADR/RID/ADN	:	PAINT RELATED MATERIAL
IMDG	:	PAINT RELATED MATERIAL
IATA	:	Paint related material

14.3 Transport hazard class(es)

ADR/RID/ADN	:	3
IMDG	:	3
IATA	:	3

14.4 Packing group

ADR/RID/ADN

Packing group	:	III
Classification Code	:	F1
Hazard Identification Number	:	30
Labels	:	3

IMDG

Packing group	:	III
Labels	:	3
EmS Code	:	F-E, S-E

IATA

Packing instruction (cargo aircraft)	:	366
Packing instruction (passenger aircraft)	:	355

Packing group : III
Labels : 3

14.5 Environmental hazards

ADR/RID/ADN
Environmentally hazardous : yes

IMDG
Marine pollutant : yes

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Xylene, mixture of isomers

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		Quantity 1	Quantity 2
E2	ENVIRONMENTAL HAZARDS	200 t	500 t
P5c	FLAMMABLE LIQUIDS	5.000 t	50.000 t

15.2 Chemical safety assessment

Not applicable

SECTION 16: Other information

Full text of H-Statements

H226 : Flammable liquid and vapour.
H304 : May be fatal if swallowed and enters airways.
H312 : Harmful in contact with skin.
H315 : Causes skin irritation.

H319	:	Causes serious eye irritation.
H332	:	Harmful if inhaled.
H335	:	May cause respiratory irritation.
H336	:	May cause drowsiness or dizziness.
H373	:	May cause damage to organs through prolonged or repeated exposure.
H411	:	Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Chronic	:	Chronic aquatic toxicity
Asp. Tox.	:	Aspiration hazard
Eye Irrit.	:	Eye irritation
Flam. Liq.	:	Flammable liquids
Skin Irrit.	:	Skin irritation
STOT RE	:	Specific target organ toxicity - repeated exposure
STOT SE	:	Specific target organ toxicity - single exposure

Further information

Training advice	:	Provide adequate information, instruction and training for operators.

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.