

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Date of issue: 7/5/2018 Revision date: 7/5/2018 Supersedes: 5/18/2018 Version: 2.0

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

1.1. Product identifier

Product form : Mixture
Trade name : UNREINFORCED FLAME RETARDANT
Other means of identification : B15U, B30U, B30P2U0, B40 P2 U0

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial
Use of the substance/mixture : Suitable for general extrusion applications

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Nurel, S.A.
Ctra, Barcelona km329
50016 Zaragoza - España
T 976 465 579
tecnico.nurel@samca.com - <http://www.nurel.com>

1.4. Emergency telephone number

Emergency number : 976 465 579
8:30 - 16:00h
Technical department

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

STOT RE 2 H373

Full text of hazard classes and H-statements : see section 16

Adverse physicochemical, human health and environmental effects

May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS08

Signal word (CLP) : Warning
Hazardous ingredients : 1,3,5-triazine-2,4,6(1H,3H,5H)-trione, compound with 1,3,5-triazine-2,4,6-triamine (1:1)
Hazard statements (CLP) : H373 - May cause damage to organs through prolonged or repeated exposure.
Precautionary statements (CLP) : P260 - Do not breathe dust, fume.
P314 - Get medical advice/attention if you feel unwell.
P501 - Dispose of contents and container to an authorised waste collection point.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,3,5-triazine-2,4,6(1H,3H,5H)-trione, compound with 1,3,5-triazine-2,4,6-triamine (1:1)	(CAS-No.) 37640-57-6 (EC-No.) 253-575-7 (REACH-no) 01-2119510711-53	10-15	STOT RE 2, H373

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ε-caprolactam substance with a Community workplace exposure limit	(CAS-No.) 105-60-2 (EC-No.) 203-313-2 (EC Index-No.) 613-069-00-2 (REACH-no) 01-2119457029-36	0.3 - 0.5	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
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Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Call a poison center or a doctor if you feel unwell. Assure fresh air breathing.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/effects : Causes damage to organs.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions	: Fight fire from safe distance and protected location. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Heading 8. Exposure controls/personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from: Heat sources. Keep container closed when not in use.
Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

See section 1.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ε-caprolactam (105-60-2)

EU	Local name	e-Caprolactam, (dust and vapour)
EU	IOELV TWA (mg/m ³)	10 mg/m ³
EU	IOELV STEL (mg/m ³)	40 mg/m ³
EU	Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
United Kingdom	Local name	1,6-Hexanolactam
United Kingdom	WEL TWA (mg/m ³)	10 mg/m ³ dust and vapour 1 mg/m ³ dust only
United Kingdom	WEL STEL (mg/m ³)	20 mg/m ³ dust and vapour 3 mg/m ³ dust only
United Kingdom	Regulatory reference	EH40. HSE

8.2. Exposure controls

Hand protection:

In case of repeated or prolonged contact wear gloves

Eye protection:

Use splash goggles when eye contact due to splashing is possible

Respiratory protection:

Wear appropriate mask

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: No data available
Odour	: Characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour Pressure 20°C	: No data available
Vapour density	: No data available
Relative density	: No data available
Density	: 1.13 - 1.18 g/cm ³
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Fumes. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

ε-caprolactam (105-60-2)

LD50 oral rat	1475 mg/kg bodyweight (Dir 84/449/CEE, B1)
LD50 dermal rat	> 2000 mg/kg (Dir 92/69/CEE, B3)
LC50 inhalation rat (Dust/Mist - mg/l/4h)	8.16 mg/l/4h

Skin corrosion/irritation : Not classified

Additional information : Based on available data, the classification criteria are not met.

Serious eye damage/irritation : Not classified

Additional information : Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation : Not classified

Additional information : Based on available data, the classification criteria are not met.

Germ cell mutagenicity : Not classified

Additional information : Based on available data, the classification criteria are not met.

Carcinogenicity : Not classified

Additional information : Based on available data, the classification criteria are not met.

Reproductive toxicity : Not classified

Additional information : Based on available data, the classification criteria are not met.

STOT-single exposure : Not classified

Additional information : Based on available data, the classification criteria are not met.

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met.

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

ε-caprolactam (105-60-2)

LC50 fishes	707.1 mg/l (96 h - <i>Salmo gairdneri</i> - OECD 203; ISO 7346; 84/449/EEC, C.1, static)
EC50 Daphnia	> 1000 mg/l (48 h - <i>Daphnia magna</i> - OECD 202, part 1, static)
ErC50 (algae)	> 1000 mg/l (72 h - <i>Selenastrum capricornutum</i> - OECD 201, static)
EC50, <i>Pseudomonas putida</i>	4240 mg/l (17 Hours)
LC0, <i>Oryzias latipes</i>	100 mg/l (96 Hours, OECD 203, semi-static)

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12.2. Persistence and degradability

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Persistence and degradability	Not established.
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ε-caprolactam (105-60-2)

Persistence and degradability	Readily biodegradable.
Biodegradation	82 % (14 days) (OECD 301C method)

12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

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This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

No supplementary information available

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	ε-caprolactam
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Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Directive 2012/18/EU (SEVESO III)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

For the following substances of this mixture a chemical safety assessment has been carried out

ε-caprolactam
1,3,5-triazine-2,4,6-(1H,3H,5H)-trione, compound with 1,3,5-triazine-2,4,6-triamine (1:1)

SECTION 16: Other information

Indication of changes:

Composition/information on ingredients.

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

STOT RE 2	H373	Calculation method
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SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product