

Safety Data Sheet dated 25/7/2022, version 3.0 This version cancels and substitutes any previous version

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

1.1. Product identifier

Mixture identification:

Trade name: ANTIOXIDANT ULTRA

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

Recommended use:

Anti-corrosive and anti-oxidant treatment for internal use in AC/R systems

1.3. Details of the supplier of the safety data sheet

Company:

ERRECÓM SPA

Via Industriale, 14

Corzano (BS) Italy

Tel. +39 030/9719096

Competent person responsible for the safety data sheet:

lab@errecom.it

1.4. Emergency telephone number

+39 02-6610-1029 Poison Control Center Niguarda Ca' Granda - Milano - ITALY

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)



Warning, Eye Irrit. 2, Causes serious eye irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

H319 Causes serious eye irritation.

Precautionary statements:

P280 Wear eye protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Special Provisions:

None

Contains

3-methoxypropylamine: May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

ANTIOXIDANT ULT/3.0

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Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb		Classification
>= 1% - < 3%	polyoxyethylene isotridecyl phosphate	CAS:	9046-01-9	3.2/2 Skin Irrit. 2 H315
1070	ester			3.3/1 Eye Dam. 1 H318
>= 0.5% - < 1%	butan-1-ol	Index number: CAS: EC: REACH No.:	603-004-00-6 71-36-3 200-751-6 01-21194846 30-38-XXXX	 2.6/3 Flam. Liq. 3 H226 3.1/4/Oral Acute Tox. 4 H302 3.2/2 Skin Irrit. 2 H315 3.3/1 Eye Dam. 1 H318 3.8/3 STOT SE 3 H335 3.8/3 STOT SE 3 H336
>= 0.25% - < 0.5%	3-methoxypropylamine	CAS: EC: REACH No.:	5332-73-0 226-241-3 01-21199722 98-23-XXXX	 2.6/3 Flam. Liq. 3 H226 3.1/4/Oral Acute Tox. 4 H302 3.2/1 Skin Corr. 1 H314 3.4.2/1B Skin Sens. 1B H317
>= 0.1% - < 0.25%	sodium hydroxide	Index number: CAS: EC: REACH No.:	011-002-00-6 1310-73-2 215-185-5 01-21194578 92-27-XXXX	2.16/1 Met. Corr. 1 H290 3.2/1A Skin Corr. 1A H314 3.3/1 Eye Dam. 1 H318 Specific Concentration Limits: C >= 5%: Skin Corr. 1A H314 2% <= C < 5%: Skin Corr. 1B H314 0,5% <= C < 2%: Skin Irrit. 2 H315 0,5% <= C < 2%: Eye Irrit. 2 H319
>= 0.1% - < 0.25%	2,6-di-tert-butyl-p-cres ol	CAS: EC: REACH No.:	128-37-0 204-881-4 01-21194804 33-40-XXXX	4.1/A1 Aquatic Acute 1 H400 4.1/C1 Aquatic Chronic 1 H410

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:



Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

If breathing is difficult, seek medical attention.

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

No information available.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

For emergency responders:

Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Advice on general occupational hygiene:



Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed. To maintain product quality, do not store in heat or direct sunlight. Keep in a dry, cool and well-ventilated place.

Keep away from food, drink and feed.

Incompatible materials:

See subsection 10.5

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Information not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

butan-1-ol - CAS: 71-36-3

ACGIH - TWA(8h): 20 ppm - Notes: Eye and URT irr

sodium hydroxide - CAS: 1310-73-2

ACGIH - STEL: Ceiling 2 mg/m3 - Notes: URT, eye, and skin irr

2,6-di-tert-butyl-p-cresol - CAS: 128-37-0

ACGIH - TWA(8h): 2 mg/m3 - Notes: (IFV), A4 - URT irr

DNEL Exposure Limit Values

butan-1-ol - CAS: 71-36-3

Worker Professional: 310 mg/m³ - Consumer: 55 mg/m³ - Exposure: Human Inhalation

- Frequency: Long Term (repeated)

Consumer: 3125 mg/kg - Exposure: Human Oral - Frequency: Long Term (repeated)

3-methoxypropylamine - CAS: 5332-73-0

Worker Professional: 3.52 mg/m³ - Consumer: 0.87 mg/m³ - Exposure: Human

Inhalation - Frequency: Long Term, systemic effects

Worker Professional: 1 mg/kg - Consumer: 0.5 mg/kg - Exposure: Human Dermal -

Frequency: Long Term, systemic effects

sodium hydroxide - CAS: 1310-73-2

Worker Professional: 1 mg/m³ - Consumer: 1 mg/m³ - Exposure: Human Inhalation -

Frequency: Long Term, local effects

2,6-di-tert-butyl-p-cresol - CAS: 128-37-0

Worker Industry: 5.80 mg/m³ - Consumer: 1.74 mg/m³ - Exposure: Human Inhalation -

Frequency: Long Term, systemic effects - Endpoint: Repeated dose toxicity - Notes:

ECHA

Worker Industry: 8.30 mg/kg - Consumer: 5 mg/kg - Exposure: Human Dermal -

Frequency: Long Term, systemic effects - Endpoint: Repeated dose toxicity - Notes:

ECHA

Consumer: 0.25 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic

effects - Endpoint: Repeated dose toxicity - Notes: ECHA

PNEC Exposure Limit Values

butan-1-ol - CAS: 71-36-3

Target: Fresh Water - Value: 0.08 mg/L

Target: Aquatic, periodic release - Value: 2.25 mg/L

Target: Marine water - Value: 0.008 mg/L

Target: Freshwater sediments - Value: 0.324 mg/kg

Target: Microorganisms in sewage treatments - Value: 2476 mg/L

Target: Marine water sediments - Value: 0.032 mg/kg

Target: Soil (agricultural) - Value: 0.01 mg/kg

3-methoxypropylamine - CAS: 5332-73-0



Target: Fresh Water - Value: 0.044 mg/L
Target: Marine water - Value: 0.0044 mg/L
Target: Occasional emission - Value: 0.44 mg/L

Target: Microorganisms in sewage treatments - Value: 83.3 mg/L

Target: Freshwater sediments - Value: 0.273 mg/kg Target: Marine water sediments - Value: 0.0273 mg/kg

Target: Soil (agricultural) - Value: 0.0287 mg/kg

8.2. Exposure controls

Eye protection:

Protective airtight goggles (ref. Standard EN 166).

Protection for skin:

Not needed for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

In the case of vapour formation use a respirator with an approved filter.

Mask with filter "AX", brown colour

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Physical state:	Liquid		
Colour:	Green		
Odour:	characteristic		
Melting point/freezing	N.A.		
point:			
Boiling point or initial	N.A.		
boiling point and boiling			
range:			
Flammability:	N.A.		
Lower and upper explosion	N.A.		
limit:	_		
Flash point:	>66 ° C		
Auto-ignition temperature:	N.A.		
Decomposition	N.A.		
temperature:			
pH:	N.A.		
Kinematic viscosity:	> 20,5		
	mm2/sec (40		
	°C)		
Solubility in water:	insoluble		
Solubility in oil:	total		
Partition coefficient	N.A.		
n-octanol/water (log value):			
Vapour pressure:	N.A.		
Density and/or relative	0.87 g/mL	ASTM-D4052	
density:	(+20°C/+68°F		



)		
Relative vapour density:	N.A.		
Particle characteristics:			
Particle size:	N.A.		

9.2. Other information

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

It may catch fire on contact with powerful oxidising agents.

10.4. Conditions to avoid

Avoid extreme heat and high-energy ignition sources.

Store away from heat.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

When heated or in the event of fire may release gases and vapors potentially dangerous to health.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 Toxicological information of the product:

a) acute toxicity

Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation

Not classified

Based on available data, the classification criteria are not met

c) serious eye damage/irritation

The product is classified: Eye Irrit. 2 H319

d) respiratory or skin sensitisation

Not classified

Based on available data, the classification criteria are not met

e) germ cell mutagenicity

Not classified

Based on available data, the classification criteria are not met

f) carcinogenicity

Not classified

Based on available data, the classification criteria are not met

g) reproductive toxicity

Not classified

Based on available data, the classification criteria are not met

h) STOT-single exposure

Not classified

Based on available data, the classification criteria are not met

i) STOT-repeated exposure

Not classified

Based on available data, the classification criteria are not met



j) aspiration hazard

Not classified

Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

butan-1-ol - CAS: 71-36-3

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 2292 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit 3430 mg/kg

Test: LC0 - Route: Inhalation - Species: Rat > 17.76 mg/L - Duration: 4h Test: NOAEL - Route: Oral - Species: Rat 125 mg/kg - Notes: bw/day

b) skin corrosion/irritation:

Test: Skin Irritant Positive

c) serious eye damage/irritation:

Test: Eye Irritant Positive

e) germ cell mutagenicity:

Test: Ames test Negative

Test: chromosomal aberration test Negative

g) reproductive toxicity:

Test: NOAEL - Route: Oral - Species: Rat 1454 mg/kg - Notes: bw/day

h) STOT-single exposure:

Test: Respiratory Tract Irritant Positive

3-methoxypropylamine - CAS: 5332-73-0

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 688.1 mg/kg - Source: OECD 401

Test: LD50 - Route: Skin - Species: Rat 2000 mg/kg - Source: OECD 402

b) skin corrosion/irritation:

Test: Skin Corrosive - Route: Skin - Species: Rabbit Positive - Source: OECD 404

c) serious eye damage/irritation:

Test: Eye Corrosive - Route: Eyes - Species: Rabbit Positive - Source: OECD 405

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: Skin - Species: Guinea pig Positive - Source: Buehler test similar to OECD 406

e) germ cell mutagenicity:

Test: Mutagenesis - Species: mammalian cells Negative

h) STOT-single exposure:

Test: STOT - single exposure Negative - Notes: Apart from the lethal effects, no organ-specific toxicity in experimental studie

i) STOT-repeated exposure:

Test: STOT - repeated exposure - Route: Oral Positive - Notes: The substance can damage the liver. The indications are derived from substances

j) aspiration hazard:

Negative

sodium hydroxide - CAS: 1310-73-2

b) skin corrosion/irritation:

Test: Skin Corrosive - Route: Skin - Species: Rabbit Positive

c) serious eye damage/irritation:

Test: Eye Irritant - Species: Rabbit Positive - Source: OECD TG 405

d) respiratory or skin sensitisation:

Test: Respiratory Sensitization - Route: In vitro Negative - Notes: ECHA

Test: Skin Sensitization - Route: In vitro Negative - Notes: ECHA

e) germ cell mutagenicity:

Test: Ames test - Species: Salmonella Typhimurium Negative

2,6-di-tert-butyl-p-cresol - CAS: 128-37-0

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg



Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin - Species: Rabbit Negative

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Not classified for environmental hazards

Based on available data, the classification criteria are not met

butan-1-ol

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 1376 mg/L - Duration h: 96 - Notes: Species:

Pimephales promelas

Endpoint: EC50 - Species: Daphnia = 1328 mg/L - Duration h: 48 - Notes: Species:

Daphnia magna

Endpoint: EC50 - Species: Algae = 225 mg/L - Duration h: 96 - Notes: Species:

Selenastrum capricornutum

3-methoxypropylamine

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 146.6 mg/L - Duration h: 96 - Notes: Species:

Leuciscus idus (DIN 38412 part 15, static)

Endpoint: EC50 - Species: Daphnia 65 mg/L - Duration h: 48 - Notes: Species: Daphnia

magna (OECD -guideline 202, part 1, static)

Endpoint: EC50 - Species: Algae 44 mg/L - Duration h: 72 - Notes: Species: Algae

(OECD -guideline 201, part 1, static)

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Daphnia 3.7 mg/L - Notes: Species: Daphnia magna The product has not been tested. The information derives from the structure of the substance.

e) Plant toxicity:

Endpoint: EC10 - Species: Algae 29 mg/L - Duration h: 72 - Notes: Species: Algae (OECD -quideline 201, part 1, static)

f) Effects in sewage plants:

Endpoint: EC10 - Species: Bacteria 83.3 mg/L - Duration h: 17 - Notes: Species:

Pseudomonas putida (DIN 38412 part 8)

sodium hydroxide

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 189 mg/L - Duration h: 48

Endpoint: EC0 - Species: Daphnia = 40.4 mg/L - Duration h: 48 - Notes: Species:

Ceriodaphnia dubia

Endpoint: LC50 - Species: Fish 125 mg/L - Duration h: 96 - Notes: Species: Gambusia

affinis

Endpoint: LC50 - Species: Fish 45.4 mg/L - Duration h: 96 - Notes: Species

Oncorhynchus mykiss

c) Bacteria toxicity:

Endpoint: ÉC50 - Species: Bacteria 22 mg/L - Duration h: 0.25 - Notes: Species:

Photobacterium phosphoreum

2,6-di-tert-butyl-p-cresol

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 1.4 mg/L - Duration h: 96



Endpoint: EC50 - Species: Daphnia 1.25 mg/L - Duration h: 48

12.2. Persistence and degradability

3-methoxypropylamine - CAS: 5332-73-0

Biodegradability: Not readily biodegradable - Test: Biochemical oxigen demand -

Duration: 28 d - %: 3

12.3. Bioaccumulative potential

3-methoxypropylamine - CAS: 5332-73-0

Bioaccumulation: Not bioaccumulative - Test: BCF - Bioconcentrantion factor -

Duration: 42 d - Notes: Value: 2,7 - 3,6 Species: Cyprinus carpio Method: OECD 305 C

12.4. Mobility in soil

3-methoxypropylamine - CAS: 5332-73-0

Mobility in soil: Not mobile - Notes: The data refer to the substance in its ionic form.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number or ID number

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

ADR-Enviromental Pollutant: No IMDG-Marine pollutant: No

14.6. Special precautions for user

Ν.Α.

14.7. Maritime transport in bulk according to IMO instruments

N.A.

SECTION 15: Regulatory information

 Safety, health and environmental regulations/legislation specific for the substance or mixture Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 2020/878

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)



Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP) Regulation (EU) n. 2021/643 (ATP 16 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restriction 40

Restrictions related to the substances contained:

Restriction 75

Where applicable, refer to the following regulatory provisions:

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H315 Causes skin irritation.

H318 Causes serious eve damage.

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H290 May be corrosive to metals.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Hazard class and hazard category	Code	Description
Met. Corr. 1	2.16/1	Substance or mixture corrosive to metals, Category 1
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4



Skin Corr. 1	3.2/1	Skin corrosion, Category 1
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1B	3.4.2/1B	Skin Sensitisation, Category 1B
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification

SECTION 3: Composition/information on ingredients SECTION 8: Exposure controls/personal protection SECTION 9: Physical and chemical properties

SECTION 11: Toxicological information SECTION 12: Ecological information SECTION 13: Disposal considerations SECTION 16: Other information

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

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Eye Irrit. 2, H319	Calculation method

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

CAS: Chemical Abstracts Service (division of the American Chemical

Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.



IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"

(ICAO).

IMDG: International Maritime Code for Dangerous Goods. INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.

STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWA: Time-weighted average
WGK: German Water Hazard Class.

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