Safety Data Sheet
TUTELA TRANSMISSION ZC 75 SINTH
Revision Date: 5/2/2018
version 2

PETRONAS

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. PRODUCT IDENTIFIER

MIXTURE IDENTIFICATION:
TRADE NAME:
TUTELA TRANSMISSION ZC 75 SINTH
Trade code: 1475
Registration Number N/A

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

RECOMMENDED USE:
Lubricant for transmission system.
USES ADVISED AGAINST:
This product should not be used for other purposes than those specified without the advice of an expert.

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

COMPANY:
PETRONAS LUBRICANTS ITALY S.P.A.
Via Santena 1
10029 Villastellone (Torino)
Tel: +39.01196131 Fax : +39.0119613313

COMPETENT PERSON FOR SAFETY DATA OF PRODUCT:
Information on the legislation compliance info-regulation.eu@pli-petronas.com

1.4. EMERGENCY TELEPHONE NUMBER

Pavia Poison Centre - IRCCS Maugeri Foundation, Italy (24/24 h, 7/7 d) +39 0382 24444

SECTION 2: HAZARDS IDENTIFICATION

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Regulation (EC) n. 1272/2008 (CLP)
0 The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
ADVERSE PHYSICOCHEMICAL, HUMAN HEALTH AND ENVIRONMENTAL EFFECTS:
No other hazards

2.2. LABEL ELEMENTS

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Special Provisions:

EUH210 Safety data sheet available on request.

EUH208 Contains Polysulfides, di-tert-Butyl. May produce an allergic reaction.

EUH208 Contains Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl. May produce an allergic reaction.

SPECIAL PROVISIONS ACCORDING TO ANNEX XVII OF REACH AND SUBSEQUENT AMENDMENTS:

None

2.3. OTHER HAZARDS

No PBT Ingredients are present

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. SUBSTANCES

N.A.

3.2. MIXTURES

Severely refined mineral and/or synthetic oils, additives.

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

QUANTITY	NAME	IDENT. NUMB.	CLASSIFICATION	REGISTRATION NUMBER
5.0-<6.25 %	Severely refined paraffinic mineral and synthetic oils, viscosity 40°C <=20.5 cSt (**)	CAS:Mixture EC:Mixture	Asp. Tox. 1, H304, DECLL(*)	
3.0-<4.0 %	Polysulfides, di-tert-Butyl	CAS:68937-96-2 EC:273-103-3	Aquatic Chronic 3, H412; Skin Sens. 1B, H317	01-2119540515-43
1.0-<2.0 %	Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl	EC:931-384-6	Acute Tox. 4, H302; Eye Dam. 1, H318; Skin Sens. 1, H317; Aquatic Chronic 2, H411	01-2119493620-38
70.0-<90.0 %	Not classified oils			

(*)DECLL The mineral base oils contained in this product are severely refined and contain less than 3% DMSO extract according to IP 346 method, and are therefore not classified as carcinogen according to Regulation (EC) No 1272/2008, note L.

The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346 "Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method", Institute of Petroleum, London.

This note applies only to certain complex oil-derived substances in Part 3.
(**) Contains one or more among the following: CAS:64742-65-0; 64742-54-7; 64742-55-8; 101316-72-7; 72623-87-1; 64741-89-5 / EC: 265-169-7; 265-157-1; 265-158-7; 309-877-7; 276-738-4; 265-091-3 / Registration numbers: 01-2119471299-27-XXXX; 01-2119484627-25-XXXX; 01-2119487077-29-XXXX; 01-2119489969-06-XXXX; 01-2119474889-13-XXXX; 01-2119487067-30-XXXX
H-phrases and list of abbreviations: see heading 16.

SECTION 4: FIRST AID MEASURES

4.1. DESCRIPTION OF FIRST AID MEASURES

IN CASE OF INGESTION:
Do not induce vomiting to avoid aspiration into the respiratory tracts. Wash out thoroughly the mouth with water. Obtain immediate medical attention.
IN CASE OF EYES CONTACT:
Rinse thoroughly with plenty of water for at least 10 minutes keeping eyelids open. Remove contact lenses if this can be done easily. Obtain medical attention in case of development and persistence of pain and redness. In case of contact with hot product, rinse thoroughly with plenty of water to dissipate heat. Obtain immediate medical attention to assess eye conditions and the correct treatment to be practiced.
IN CASE OF SKIN CONTACT:
Remove contaminated clothes and shoes and rinse thoroughly with plenty of water and soap.
IN CASE OF INHALATION:
Expose affected person to fresh air and obtain medical attention if necessary.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Refer to section 11.

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Refer to section 4.1.
N.A.

SECTION 5: FIREFIGHTING MEASURES

5.1. EXTINGUISHING MEDIA

This product has no special fire risk. In case of fire use foam, carbon dioxide, dry chemical powder and water mist.
Cool down with water the containers don't get involved in fire to avoid their possible explosion.
Avoid high pressure water jet. Use water jet only to cool down surfaces exposed to fire.
SUITABLE EXTINGUISHING MEDIA:
Water.
Carbon dioxide (CO_2).
EXTINGUISHING MEDIA WHICH MUST NOT BE USED FOR SAFETY REASONS:
None in particular.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Don't breathe combustion fumes: fire can form harmful compounds.
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

Avoid ingestion of product. Avoid contact with skin and eyes by wearing appropriate protective clothing. Avoid to breathe fumes and aereosols.
Surfaces on which the product has been spilled may become slippery.
Wear personal protection equipment.
See protective measures under point 7 and 8.

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.

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Avoid flame and/or spark near leak and produced waste. Do not smoke. In case of large spills dike, absorb and shovel up into suitable containers for disposal. Contain small spills with absorbent material. Put dirty material in suitable container. Dispose of dirty material in accordance with local or national regulations.

6.4. REFERENCE TO OTHER SECTIONS

See also section 8 and 13

SECTION 7: HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

Avoid ingestion. Avoid frequent and prolonged skin contact and contact with eyes. Provide adequate ventilation to avoid mist or aereosol. Don't smoke or use spare flames; avoid contct with spark or other sources of ignition. Don't work near open container to avoid high concentration of vapours. Don't eat or

drink during use.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store under cover in the original container securely closed away from heat and sources of ignition. Do not store in the open air. Assure a correct ventilation of premises and the control of possible leak. Keep out of flame or spark and avoid the accumulation of electrostatic charges. Keep out of reach of children and away from food and drink.

Storage class (TRGS 510, Germany): 10

7.3. SPECIFIC END USE(S)

Refer to the uses listed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. CONTROL PARAMETERS

OEL: oil mists - TLV/TWA (8 h) : 5 mg/m3 - TLV/STEL: 10 mg/m3

No Data Available

8.2. EXPOSURE CONTROLS

TECHNICAL PRECAUTIONS:

Avoid production and diffusion of mist and aerosol with utilization of localized ventilation/aspiration or other required precautions. Adopt all required precaution to avoid product immission in environment (e.g., blasting systems, catch basins, ...).

EYE PROTECTION:

Chemical goggles and face shield in case of oil splashes.

PROTECTION FOR SKIN:

Wear suitable protective clothing (for further information, refer to CEN-EN 14605); change it immediately in case of large contamination and wash it before subsequent use.

Practice reasonable personal cleanliness.

PROTECTION FOR HANDS:

Wear suitable gloves (i.e. neoprene, nitrile). Gloves should be changed when they show wear. The kind of gloves and the term of use must be decided from employer with regard to processing and to allow for DPI legislation and glove producer's indications. Wear gloves only with clean hands.

RESPIRATORY PROTECTION:

None required under normal conditions of use. Use approved full face respirator with organic vapour filter cartridge if the recommended exposure limits are exceeded.

ENVIRONMENTAL EXPOSURE CONTROLS:

Refer to technical precautions and also to sections 6.2, 6.3, 7.2, 12 and 13.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

CHEMICAL-PHYSICAL PROPERTY	VALUE	METHOD
PHYSICAL STATE	LIQUID	
APPEARANCE AND COLOUR	VISCOUS	
ODOUR	NOT RELEVANT	
ODOUR THRESHOLD	NOT RELEVANT	
PH	N.A.	
MELTING POINT / FREEZING POINT	N.A.	
INITIAL BOILING POINT AND BOILING RANGE	>300 °C (572 °F)	(ASTM D1120)
FLASH POINT	214 °C (417 °F)	(ASTM D92)
EVAPORATION RATE	N.A.	
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	N.A.	
VAPOUR DENSITY	N.A.	
VAPOUR PRESSURE	N.A.	
DENSITY	0.884 G/CM3	(ASTM D4052)
SOLUBILITY IN WATER	IMMISCIBLE	
SOLUBILITY IN OIL	N.A.	
PARTITION COEFFICIENT (N-OCTANOL/WATER)	N.A.	
AUTO-IGNITION TEMPERATURE	N.A.	
DECOMPOSITION TEMPERATURE	N.A.	
KINEMATIC VISCOSITY AT 100°C	10.5 CST	ASTM D445
KINEMATIC VISCOSITY AT 40°C	63.75 CST	ASTM D445
EXPLOSIVE PROPERTIES	N.A.	
OXIDIZING PROPERTIES	N.A.	
SOLID/GAS FLAMMABILITY	N.A.	

9.2. OTHER INFORMATION

CHEMICAL-PHYSICAL PROPERTY	VALUE	METHOD
SUBSTANCE GROUPS RELEVANT PROPERTIES	N.A.	
MISCIBILITY	N.A.	
CONDUCTIVITY	N.A.	

SECTION 10: STABILITY AND REACTIVITY

10.1. REACTIVITY

Read carefully all information provided in other sections of heading 10.

10.2. CHEMICAL STABILITY

The product is stable under normal conditions of use.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

Not expected under normal conditions of use.

10.4. CONDITIONS TO AVOID

This product must be kept far from heat sources. In any case, avoid exposing product to temperatures above the flash point.

10.5. INCOMPATIBLE MATERIALS

Strong oxidizing agents, hard acids and bases.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS

Oxides of carbon, compounds of sulphur, phosphorus, nitrogen and hydrogen sulfide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

SKIN CONTACT:

The product contains sensitizing substances, but is not classified in this way. Product is not an irritant, but prolonged or repeated contacts may cause irritations or dermatitis.

In a sensitized individual the allergic dermatitis may not appear until after several days or weeks of frequent and prolonged contact. Therefore, even though the skin irritation potential is slight, skin contact should be avoided.

Once sensitization has occurred, exposure of the skin to very small quantities of the material may cause erythema and edema.

Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl EC n° 931-384-6: our supplier have tested this substance, and the results of this testing show a Specific Concentration Limits (SCL) of 9.39%; these results are also available in the toxicological studies that are part of the REACH registration dossier.

EYE CONTACT:

Contact may cause slight irritations.

Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl EC n° 931-384-6:

Eye Dam. 1 H318, Specific Concentration Limit (SCL) >50 - <=100%;
Eye Irrit. 2 H319, we apply the Bridging principles: the supplier of the raw material - that contains this substance - declares the raw material as Not irritating (measured on rabbit); we use this raw material diluted in a quantity <=6.5% with other components (diluents) which are not classified as Irritant and which do not affect the hazard classification of the ingredient of interest; so, the mixture shall be classified as Not Irritant, in equivalence with the raw material (Diluition principle).

INHALATION:
Inhalation of mists and vapours generated at elevated temperatures may cause respiratory irritation.

INGESTION:
Unlike to cause harm if accidentally swallowed in small doses, though ingestion of large quantities may cause gastro-intestinal effects.

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

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

TOXICITY FOR REPRODUCTION:
Based on available data, the classification criteria are not met.

Toxicological information on main components of the mixture: No Data Available

SECTION 12: ECOLOGICAL INFORMATION

12.1. TOXICITY

Eco-Toxicological Information:
This product is not classified dangerous for the environment.

List of components with eco-toxicological properties

QUANTITY	COMPONENT	IDENT. NUMB.	ECOTOX INFOS
3.0-<4.0 %	Polysulfides, di-tert-Butyl	CAS: 68937-96-2 - EINECS: 273-103-3	a) Aquatic acute toxicity : EC50 Daphnia = 63.00000 mg/L 48h
			a) Aquatic acute toxicity : EC50 Algae > 100.00000 mg/L 72h
1.0-<2.0 %	Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl	EINECS: 931-384-6	a) Aquatic acute toxicity : LC50 Fish = 8.50000 mg/L 96h
			b) Aquatic chronic toxicity : NOEC Fish = 3.20000 mg/L

96h
a) Aquatic acute toxicity : EC50 Daphnia = 91.40000 mg/L 48h
b) Aquatic chronic toxicity : NOEC Daphnia 0.12000 mg/L - 21 d
a) Aquatic acute toxicity : EC50 Daphnia 0.66000 mg/L - 21 d
a) Aquatic acute toxicity : EC50 Algae = 6.40000 mg/L 96h
b) Aquatic chronic toxicity : NOEC Algae = 1.70000 mg/L 96h

12.2. PERSISTENCE AND DEGRADABILITY

Data on biodegradability of product are not available.

12.3. BIOACCUMULATIVE POTENTIAL

Not available.

12.4. MOBILITY IN SOIL

Because the dispersion in the environment may result in contamination of environmental matrix (soil, subsoil, surface water and groundwater), do not release in the environment.

12.5. RESULTS OF PBT AND VPVB ASSESSMENT

Not available.

12.6. OTHER ADVERSE EFFECTS

No effect known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. WASTE TREATMENT METHODS

Prevent contamination of soil, drains and surface waters. Do not discharge in sewers, tunnels or water courses. Dispose in accordance with local or national regulations via authorised person/licensed waste disposal contractor.
The used product is to be considered a special waste to be classified in accordance to Directive 2008/98/EC on wastes and related legislation.
Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: TRANSPORT INFORMATION

14.1. UN NUMBER

N/A

14.2. UN PROPER SHIPPING NAME

ADR-Shipping Name: N/A
IATA-Technical name: N/A
IMDG-Technical name: N/A

14.3. TRANSPORT HAZARD CLASS(ES)

ADR-Class: N/A
IATA-Class: N/A
IMDG-Class: N/A

14.4. PACKING GROUP

ADR-Packing Group: N/A
IATA-Packing group: N/A
IMDG-Packing group: N/A

14.5. ENVIRONMENTAL HAZARDS

Toxic ingredients quantity: 0.00
Very toxic ingredients quantity: 0.00
Marine pollutant: No
Environmental Pollutant: No

14.6. SPECIAL PRECAUTIONS FOR USER

Road and Rail (ADR-RID):
ADR-Label: N/A
ADR - Hazard identification number: N/A
ADR-Special Provisions: N/A
ADR-Transport category (Tunnel restriction code): N/A
Air (IATA):
IATA-Passenger Aircraft: N/A
IATA-Cargo Aircraft: N/A
IATA-Label: N/A
IATA-Subrisk: N/A
IATA-Erg: N/A
IATA-Special Provisions: N/A
Sea (IMDG):
IMDG-Stowage Code: N/A
IMDG-Stowage Note: N/A

IMDG-Subrisk: N/A
IMDG-Special Provisions: N/A
IMDG-Page: N/A
IMDG-Label: N/A
IMDG-EMS: N/A
IMDG-MFAG: N/A

14.7. TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL AND THE IBC CODE

N.A.

SECTION 15: REGULATORY INFORMATION

15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

Regulation (EC) No 1272/2008, with all National and European related legislations - on classification, labelling and packaging of substances and mixtures - and following adjustments to technical and scientific progress.
Regulation (EC) No 790/2009 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
Regulation (EC) No 1907/2006, with all National and European related legislations - concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
Regulation (EU) No 830/2015 amending Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
Directives 89/391/EC, 89/654/EC, 89/655/EC, 89/656/EC, 90/269/EC, 90/270/EC, 90/394/EC, 90/679/EC and all following updates, togeher with its national realization, about improvement of worker safety and health
Directives 98/24/EC and all following updates, together with its national realization, about protection of worker safety and health against chemical agent risks
Directive 1991/156/EC and all following updates, together with national waste legislation
EC directives and national environment protection legislation (air, water and soil)
Regulation 648/2004/EC on detergents
Directive 2012/18/UE, together with its national realization, on the control of major-accident hazards involving dangerous substances.
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. 1221/2015 (ATP 7 CLP)
Regulation (EU) n. 918/2016 (ATP 8 CLP)
Regulation (EU) n. 1179/2016 (ATP 9 CLP)
Regulation (EU) n. 776/2017 (ATP 10 CLP)
PROVISIONS RELATED TO DIRECTIVE EU 2012/18 (SEVESO III):

N.A.

GERMAN WATER HAZARD CLASS.

N.A.

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: 40

RESTRICTIONS RELATED TO THE SUBSTANCES CONTAINED: None

VOLATILE ORGANIC COMPOUNDS - VOCS = N.A.

15.2. CHEMICAL SAFETY ASSESSMENT

This product contains substances for which chemical safety assessments are not yet available.

SECTION 16: OTHER INFORMATION

Sheet complies with the criteria of Regulation (EU) No. 830/2015 as well as with Regulation (EC) No. 1272/2008 and following adjustments.

This document was prepared by a competent person who has received appropriate training.

This product must not be used in applications other than recommended without first seeking the advice of the Technical Department.

This MSDS cancels and replaces any preceding release.

This product must be stored, handled and used according to correct industrial hygienic practices and in compliance with laws in force.

The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be considered as any guarantee of specific properties.

Caption about heading 3, H-statements:

CODE	DESCRIPTION
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

CODE	HAZARD CLASS AND HAZARD CATEGORY	DESCRIPTION
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.10/1	Asp. Tox. 1	Aspiration hazard, Category 1
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.4.2/1B	Skin Sens. 1B	Skin Sensitisation, Category 1B
4.1/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ATE: Acute Toxicity Estimate
BCF: Biological Concentration Factor
BEI: Biological Exposure Index
BOD: Biochemical Oxygen Demand
CAS: Chemical Abstracts Service (division of the American Chemical Society).
CAV: Poison Center
CE: European Community
CLP: Classification, Labeling, Packaging.
CMR: Carcinogenic, Mutagenic and Reprotoxic
COD: Chemical Oxygen Demand
COV: Volatile Organic Compound
CSA: Chemical Safety Assessment
CSR: Chemical Safety Report
DMEL: Derived Minimal Effect Level
DNEL: Derived No Effect Level.
DPD: Dangerous Preparations Directive
DSD: Dangerous Substances Directive
EC50: Half Maximal Effective Concentration
ECHA: European Chemicals Agency
EINECS: European Inventory of Existing Commercial Chemical Substances.
ES: Exposure Scenario
GefStoffVO: Ordinance on Hazardous Substances, Germany.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
IC50: half maximal inhibitory concentration
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.
IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KAFH: Keep away from heat
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available

NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration.
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
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.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 9: Physical and chemical properties
- SECTION 12: Ecological information
- SECTION 14: Transport information
- SECTION 15: Regulatory information
- SECTION 16: Other information