

**SAFETY DATA SHEET****Gazpromneft Reductor CLP 680**Revision  
Revision date  
2**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1. Product Identifier**

Trade name GAZPROMNEFT RUDUCTOR CLP-680

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

Recommended use Industrial gear oil

**1.3. Details of the supplier of the safety data sheet**

<b>Manufacturer</b>	"Gazpromneft - lubricants" LTD, 125A, Profsoyuznaya str., Moscow, 117647, Russia. Email: Lubricants@gazprom-neft.ru Tel.: +7 495 642-99-69 (between 9 AM and 6 PM Moscow time) Fax: +7 495 921-48-63
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<b>Supplier</b>	"Deny Trade" LTD, Office: Stara Zagora 6000, 92 Hristo Botev Str., 4th floor Warehouse: Zagora 6000, Kolyo Ganchev district, Agricultural aviation Tel./Fax: 042 606 899 service@maslagaz.com
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**1.4. Emergency telephone**

National emergency telephone 112

National Toxicological Information Center, MHAT and Emergency Medicine "N. I. Pirogov"  
Emergency telephone / fax: +359 2 9154 409  
Email: poison\_centre@mail.orbitel.bg  
http://www.pirogov.bg**2. HAZARDS IDENTIFICATION****2.1. Classification of the substance or mixture**

Further information For the full text of the hazard statements and EU hazard statements: see SECTION 16

**2.2. Label elements**

<b>Labeling according to Regulation (EC) No. 1272/2008 (CLP)</b>	Skin Sens. 1A May cause an allergic skin reaction. Adverse physicochemical, human health and environmental effects: No other hazards
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**Hazard pictograms**

Signal word Warning

Hazard statements H317 May cause an allergic skin reaction.

<b>Precautionary statements</b>	P261 Avoid breathing vapours. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/protective clothing/eye protection/face protection. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse. P501 Dispose of contents/container in accordance with applicable regulations. Contains: AMINES, C10-14-TERT-ALKYL
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**2.3. Other hazards**Other hazards No PBT, vPvB or endocrine disruptor substances present in concentration  $\geq$  0.1%.**3. COMPOSITION/INFORMATION ON INGREDIENTS****3.1. Substances**

Substances Not applicable

**3.2. Mixtures**

CAS No.	EC No.	Index No.	REACH Registration No.	% [weight]	Substance name	Classification according to Regulation (EC) No 1278/2008 (CLP)
64742-62-7	265-166-0		01-2119480472-38	$\geq$ 90	BASE OIL - UNSPECIFIED RESIDUAL OILS (PETROLEUM), SOLVENT DEWAXED	DECLL(*) - Substance classified in accordance with Note L, Annex VI of EC Regulation (EC) 1272/2008. 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.
64742-54-7			01-2119484627-25	0.1-1	DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC	Substance with a Union workplace exposure limit.
	701-175-2		01-2119456798-18	0.1-1	AMINES, C10-14-TERT-ALKYL	Acute Tox. 2, H330; Acute Tox. 3, H311; Acute Tox. 4, H302; Skin Corr. 1B, H314; Eye Dam. 1, H318; Skin Sens. 1A, H317; STOT SE 3, H335; Aquatic Acute 1, H400; Aquatic Chronic 1, H410, M Chronic:1, M-Acute:1
Conf0618				0.02-0.1	Alkoxylated long-chain alkanol borate	

**4. FIRST AID MEASURES****4.1. Description of first aid measures**

<b>Following inhalation</b>	Remove casualty to fresh air and keep warm and at rest.
<b>Following skin contact</b>	Immediately take off all contaminated clothing. Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. Wash thoroughly the body (shower or bath). Remove contaminated clothing immediately and dispose off safely.
<b>Following eye contact</b>	Wash immediately with water.
<b>Following ingestion</b>	Do not induce vomiting, get medical attention showing the SDS and the label with the hazards.

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

Inhalation acute effects N.A.

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

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

**5. FIREFIGHTING MEASURES****5.1. Extinguishing media**

Suitable extinguishing media Carbon dioxide (CO2).

<b>Unsuitable extinguishing media</b>	None in particular.
<b>5.2. Special hazards arising from the substance or mixture</b>	
<b>Hazards from the substance or mixture</b>	Do not inhale explosion and combustion gases. Burning produces heavy smoke.
<b>5.3. Advice for firefighters</b>	
<b>Special precautions for fire-fighters</b>	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.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

<b>Protective equipment for non-emergency personnel</b>	Wear personal protection equipment. Remove persons to safety. See protective measures under point 7 and 8.
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### 6.2. Environmental precautions

<b>Environmental precautions</b>	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.
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### 6.3. Methods and material for containment and cleaning up

<b>For containment</b>	Suitable material for taking up: absorbing material, organic, sand. Wash with plenty of water.
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### 6.4. Reference to other sections

<b>Reference to other sections</b>	See also section 8 and 13.
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## 7. HANDLING AND STORAGE

### 7.1. Precautions for safe handling

<b>Protective measures</b>	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. Contaminated clothing should be changed before entering eating areas. Do not eat or drink while working. See also section 8 for recommended protective equipment.
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### 7.2. Conditions for safe storage, including any incompatibilities

<b>Requirements for storage rooms and vessels</b>	Adequately ventilated premises.
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### 7.3. Specific end use(s)

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

List of components with OEL value

Component	OEL Type	Long Term mg/m <sup>3</sup>	Long Term ppm	Short Term mg/m <sup>3</sup>	Short Term ppm	Behaviour	Note
BASE OIL - UNSPECIFIED- RESIDUAL OILS (PETROLEUM), SOLVENT DEWAXED	ACGIH	5.400					8H (aerosol)

### Predicted No Effect Concentration (PNEC) values

### Derived No Effect Level (DNEL)

### 8.2. Exposure controls

<b>Substance/mixture related measures to prevent exposure during identified uses</b>	Ensure replacement ventilation or other ventilation systems to maintain concentrations of substances conveyed by air below their respective occupational exposure limits. All activities involving chemicals must be assessed for their health risks in order to ensure that the exposure is adequately monitored. Wear protective clothing. Personal protective equipment must conform to the appropriate standards, suitable for specific use and maintained in good condition.
<b>Eye and face protection</b>	Safety Glasses.
<b>Hand protection</b>	Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.
<b>Respiratory protection</b>	Use in ventilated area. Use respirator with a combination organic vapor and high efficiency filter cartridge just if recommended exposure limit is exceeded. Use self-contained breathing apparatus to enter narrow spaces, in poorly ventilated areas and to clean areas where large quantities of product have been spilled.
<b>Organisational measures to prevent exposure</b>	Wash thoroughly after handling this product. Do not eat, drink or smoke when using this product.
<b>Technical measures to prevent exposure</b>	N.A.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

<b>Physical State</b>	Liquid
<b>Colour</b>	Oily brown
<b>Pour point</b>	< - 15 °C
<b>Boiling point or initial boiling point and boiling range</b>	N.A.
<b>Flammability</b>	N.A.
<b>Lower and upper explosion limit</b>	N.A.
<b>Flash point</b>	>210 °C (410 °F) ( ASTM D92 (Cleveland Open Cup) )
<b>Auto-ignition temperature</b>	> 398.00 °C
<b>Decomposition temperature</b>	N.A.
<b>pH</b>	N.A.
<b>Kinematic viscosity</b>	at 100°C: N.A. at 40°C (mm <sup>2</sup> /s ): 612,0-748,0 ( ASTM D445 )
<b>Solubility</b>	Insoluble
<b>Partition coefficient n-octanol/water (log value)</b>	N.A.
<b>Vapour pressure</b>	N.A.
<b>Density and/or relative density</b>	913.00 kg/m <sup>3</sup> ( ASTM D4052 @ 15°C )
<b>Relative vapour density</b>	N.A.
<b>Dynamic viscosity</b>	N.A.
<b>Oxidizing properties</b>	N.A.
<b>Volatile Organic compounds - VOCs</b>	N.A.

### 9.2. Other information

<b>Formation of explosible dust/air mixtures</b>	N.A.
<b>Evaporation rate</b>	N.A.
<b>Miscibility</b>	N.A.
<b>Conductivity</b>	N.A.

<b>10. STABILITY AND REACTIVITY</b>	
<b>10.1. Reactivity</b>	
Reactivity	Stable under normal conditions.
<b>10.2. Chemical stability</b>	
Chemical stability	Data not Available.
<b>10.3. Possibility of hazardous reactions</b>	
Possibility of hazardous reactions	None.
<b>10.4. Conditions to avoid</b>	
Conditions to avoid	Stable under normal conditions.
<b>10.5. Incompatible materials</b>	
Incompatible materials	None in particular.
<b>10.6. Hazardous decomposition products</b>	
Hazardous decomposition products	None.

## 11. TOXICOLOGICAL INFORMATION

### 11.1. Information on hazard classes as defined in Regulation (EC) No. 1272/2008

Products have not been tested. Evaluation has been made through data of components.

Acute toxicity	N.A.
Skin corrosion/irritation	N.A.
Serious eye damage/irritation	N.A.
Respiratory or skin sensitisation	N.A.
Germ cell mutagenicity	N.A.
Carcinogenicity	N.A.
Reproductive toxicity	N.A.
Summary of evaluation of the CMR properties	N.A.
STOT-single exposure	N.A.
STOT-repeated exposure	N.A.
Aspiration hazard	N.A.
Toxicological information of the mixture	N.A.
Toxicological information on main components of the mixture	N.A.
Toxicological information on main components of the mixture	

Component	Toxicity	Information
BASE OIL - UNSPECIFIED - RESIDUAL OILS (PETROLEUM), SOLVENT DEWAXED	a) acute toxicity	LD50 Oral Rat > 5000.00000 mg/kg LD50 Skin Rabbit > 2000.00000 mg/kg LC50 Inhalation Rat > 5000.00000 mg/m3
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC	a) acute toxicity	LD50 Oral Rat > 5000.00000 mg/kg LD50 Skin Rat > 5000.00000 ml/kg LC50 Inhalation Dust Rat > 5.53000 mg/kg 4h
AMINES, C10-14-TERT-ALKYL	a) acute toxicity	LD50 Oral Rat = 612.00000 mg/kg LD50 Skin Rat = 251.00000 mg/kg LC50 Inhalation Vapour Rat = 1.19000 mg/l 4h
Alkoxyated long-chain alkanol borate	a) acute toxicity	LD50 Oral Rat = 1000.00000 mg/kg LD50 Skin Rat > 2000.00000 mg/kg

## 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

Acute (short-term) toxicity Adopt good working practices, so that the product is not released into the environment.

#### List of components with eco-toxicological properties

Component	Identification number	Ecotoxicological information
BASE OIL - UNSPECIFIED - RESIDUAL OILS (PETROLEUM), SOLVENT DEWAXED	CAS: 64742-62-7 EINECS:265-166-0	a) Aquatic acute toxicity : EL50 Daphnia Daphnia magna, 48hr > 10000.00000 mg/L 48h a) Aquatic acute toxicity : NOELR Algae Algae > 100.00000 mg/L 72h a) Aquatic acute toxicity : LL50 Fish > 100.00000 mg/L 96h b) Aquatic chronic toxicity : NOELR Daphnia Daphnia magna, 21 days = 10.00000 mg/L b) Aquatic chronic toxicity : NOELR Fish = 10.00000 mg/L
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC	CAS: 64742-54-7 EINECS: 265-157-1	b) Aquatic chronic toxicity : NOELR Fish Oncorhynchus mykiss = 21.00000 mg/L - Exposure - 21 days. Based on data for a similar substance. b) Aquatic chronic toxicity : NOELR Daphnia Daphnia magna = 10.00000 mg/L - Exposure - 21 days. Based on data for a similar substance. b) Aquatic chronic toxicity : NOELR Algae Pseudokirchneriella subcapitata >= 100.00000 mg/L 72h - Based on data for a similar substance. a) Aquatic acute toxicity : LL50 Fish Pimephales promelas > 100.00000 mg/L 96h - Based on data for a similar substance. a) Aquatic acute toxicity : EL50 Daphnia Daphnia magna > 10000.00000 mg/L 48h - Based on data for a similar substance.
AMINES, C10-14-TERT-ALKYL	EINECS: 701-175-2	b) Aquatic chronic toxicity : NOELR Algae Pseudokirchneriella subcapitata = 0.50000 mg/L 72h b) Aquatic chronic toxicity : NOEC Fish Oncorhynchus mykiss = 0.07800 mg/L 96h - Exposure - 96 days a) Aquatic acute toxicity : LL50 Fish Oncorhynchus mykiss = 1.30000 mg/L 96h a) Aquatic acute toxicity : EL50 Micro-organism = 63.50000 mg/L -exposure -30 minutes a) Aquatic acute toxicity : EL50 Daphnia Daphnia Magna = 2.50000 mg/L 48h a) Aquatic acute toxicity : EL50 Algae Pseudokirchneriella subcapitata = 0.44000 mg/L 72h
Alkoxyated long-chain alkanol borate	CAS: Conf0618	b) Aquatic chronic toxicity : NOELR Algae Pseudokirchneriella subcapitata = 0.31000 mg/L 72h - Based on data for a similar substance. b) Aquatic chronic toxicity : NOEC Fish Pimephales promelas = 0.16000 mg/L - Exposure - 10 days. Based on data for a similar substance. b) Aquatic chronic toxicity : NOEC Daphnia Daphnia Magna = 0.77000 mg/L - exposure - 21 days. Based on data for a similar substance. a) Aquatic acute toxicity : LC50 Fish Danio rerio = 0.87600 mg/L 96h -Based on data for a similar substance. a) Aquatic acute toxicity : EL50 Micro-organism - Pseudomonas putida > 2.00000 mg/L - exposure - 5 hours. Based on data for a similar substance. a) Aquatic acute toxicity : EL50 Daphnia Daphnia Magna = 0.39000 mg/L 48h - Based on data for a similar substance. a) Aquatic acute toxicity : EL50 Algae Pseudokirchneriella subcapitat = 0.41000 mg/L 72h - Based on data for a similar substance.

### 12.2. Persistence and degradability

Component	Persistence/Degradability	Test	Duration	Value	Notes
BASE OIL - UNSPECIFIED - RESIDUAL OILS (PETROLEUM), SOLVENT DEWAXED	Non-readily biodegradable				
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC	Non-readily biodegradable		28d	31.000	OECD 301F-Ready Biodegradability Manometric Respirometry Test
AMINES, C10-14-TERT-ALKYL	Non-readily biodegradable	Closed Bottle	28d	21.800	Test method - OECD301D
Alkoxyated long-chain alkanol borate	Readily biodegradable		28d	95.000	OECD 301F Ready Biodegradability. Manometric RespirometryTest. Based on data for a similar substance.

### 12.3. Bioaccumulative potential

Component	Test	Duration	Value	Notes
AMINES, C10-14-TERT-ALKYL	Log Kow		2.900	Bioaccumulative Low potential.

<b>12.4. Mobility in soil</b>	
<b>12.5. Results of PBT and vPvB assessment</b>	
<b>12.6. Endocrine disrupting properties</b>	
<b>Endocrine disrupting properties</b>	No PBT Ingredients are present.
<b>12.7. Other adverse effects</b>	
<b>12.8. Additional information</b>	
<b>13. DISPOSAL CONSIDERATIONS</b>	
<b>13.1. Waste treatment methods</b>	
<b>Product/Packaging disposal</b>	Recover if possible. In so doing, comply with the local and national regulations currently in force.
<b>14. TRANSPORT INFORMATION</b>	
<b>14.1. UN number or ID number</b>	
<b>UN number or ID number</b>	N.A.
<b>14.2. UN proper shipping name</b>	
<b>UN proper shipping name</b>	N.A.
<b>14.3. Transport hazard class(es)</b>	
<b>Transport hazard class(es)</b>	N.A.
<b>14.4. Packing group</b>	
<b>Packing group</b>	N.A.
<b>14.5. Environmental hazards</b>	
<b>Environmental hazards</b>	N.A.
<b>14.6. Special precautions for user</b>	
<b>Special precautions for user</b>	N.A.
<b>14.7. Maritime transport in bulk according to IMO instruments</b>	
<b>Maritime transport in bulk according to IMO instruments</b>	N.A.
<b>15. REGULATORY INFORMATION</b>	
<b>15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	
<b>EU regulations</b>	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. 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. 2016/918 (ATP 8 CLP) Regulation (EU) n. 2016/1179 (ATP 9 CLP) Regulation (EU) n. 2015/1221 (ATP 7 CLP) Regulation (EU)2015/830 Provisions related to directive EU 2012/18 (Seveso III): N.A.
<b>Authorisations and/or restrictions on use</b>	
<b>Wassergefährdungsklasse (water hazard class)</b>	German Water Hazard Class. NWG: Not hazardous for water
<b>Other regulations, restrictions and prohibition regulations</b>	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: 3, 40 Restrictions related to the substances contained: None
<b>15.2. Chemical Safety Assessment</b>	
<b>Chemical Safety Assessment</b>	No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.
<b>16. OTHER INFORMATION</b>	

**Other information**

Code Description  
H302 Harmful if swallowed.  
H311 Toxic in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H330 Fatal if inhaled.  
H335 May cause respiratory irritation.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.  
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. 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. 2020/878  
Provisions related to directive EU 2012/18 (Seveso III): N.A.  
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.  
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.  
AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
ATE: Acute Toxicity Estimate  
ATEmix: Acute toxicity Estimate (Mixtures)  
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:  
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