

SIERRA-68

Date of last issue: -Version **Revision Date:**

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SECTION 1. IDENTIFICATION

Product name SIERRA-68

Article-No. 340197

Manufacturer or supplier's details

Company name of supplier Klüber Lubrication NA LP

> 9010 County Road 2120 Tyler, Texas 75707

USA

Phone: +1 903 534-8021 Fax: +1 903 581-4376

32 Industrial Drive Londonderry, NH 03053

USA

Phone: +1 603 647-4104 Fax: +1 603 647-4106

E-mail address of person

mcm@us.kluber.com

responsible for the SDS

Material Compliance Management

Emergency telephone num-

ber

+1-517-545-7070 NCEC

Recommended use of the chemical and restrictions on use

Recommended use Lubricating oil

Restrictions on use Restricted to professional users.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Reproductive toxicity Category 2

GHS label elements

Hazard pictograms

Signal word Warning

Hazard statements Suspected of damaging fertility.



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Precautionary statements : Prevention:

Obtain special instructions before use.

Do not handle until all safety precautions have been read and

understood.

Wear protective gloves/ protective clothing/ eye protection/ face

protection.

Response:

IF exposed or concerned: Get medical advice/ attention.

Storage:

Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal

plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : ester oil

Synthetic hydrocarbon oil

Mineral oil.

Components

Chemical name	CAS-No.	Concentration (% w/w)
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	Trade secret (>= 30 - < 60)
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	68411-46-1	Trade secret (>= 1 - < 5)

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

If inhaled : Obtain medical attention.

Remove person to fresh air. If signs/symptoms continue, get

medical attention.

Keep patient warm and at rest.

If unconscious, place in recovery position and seek medical

advice.

Keep respiratory tract clear.

If breathing is irregular or stopped, administer artificial respira-



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tion.

In case of skin contact : Remove contaminated clothing. If irritation develops, get med-

ical attention.

In case of contact, immediately flush skin with plenty of water.

Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 10 minutes.

If eye irritation persists, consult a specialist.

If swallowed : Move the victim to fresh air.

If unconscious, place in recovery position and seek medical

advice.

Keep respiratory tract clear. Do NOT induce vomiting. Rinse mouth with water.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and

delayed

No information available.

None known.

Notes to physician : No information available.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or car-

bon dioxide.

Unsuitable extinguishing

media

High volume water jet

Hazardous combustion prod: :

ucts

Carbon oxides

Nitrogen oxides (NOx)

Further information : Standard procedure for chemical fires.

Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

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.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- : Evacuate personnel to safe areas.



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tive equipment and emer-

gency procedures

Use personal protective equipment.

Ensure adequate ventilation.

Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow contact with soil, surface or ground water.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local

/ national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid inhalation of vapour or mist.

Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the ap-

plication area.

Wash hands and face before breaks and immediately after

handling the product.

Do not get in eyes or mouth or on skin.

Do not get on skin or clothing.

Do not ingest. Do not repack.

Do not re-use empty containers.

These safety instructions also apply to empty packaging which

may still contain product residues. Keep container closed when not in use.

Conditions for safe storage : Store in original container.

Keep container closed when not in use. Keep in a dry, cool and well-ventilated place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

Store in accordance with the particular national regulations.

Keep in properly labelled containers.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Distillates (petroleum), hy- drotreated heavy paraffinic	64742-54-7	TWA (Inhal- able particu-	5 mg/m3	ACGIH (2013-03-01)



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late matter)		
TWA (Mist)	5 mg/m3	OSHA Z-1 (2018-03-15)
TWA (Mist)	5 mg/m3	OSHA P0
, ,		(1989-01-19)
TWA (Mist)	5 mg/m3	NIOSH REL (2019-10-04)
ST (Mist)	10 mg/m3	NIOSH REL (2019-10-04)

Engineering measures : Handle only in a place equipped with local exhaust (or other

appropriate exhaust).

Personal protective equipment

Respiratory protection : Not required; except in case of aerosol formation.

Filter type : Filter type A-P

Hand protection

Material : Nitrile rubber
Break through time : > 10 min
Protective index : Class 1

Remarks : Wear protective gloves. The break through time depends

amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each

case.

Eye protection : Safety glasses with side-shields

Skin and body protection : Choose body protection in relation to its type, to the concen-

tration and amount of dangerous substances, and to the spe-

cific work-place.

Protective measures : The type of protective equipment must be selected according

to the concentration and amount of the dangerous substance

at the specific workplace.

Hygiene measures : Wash face, hands and any exposed skin thoroughly after

handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : colourless

Odour : characteristic



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No data available Odour Threshold

pΗ Not applicable

Melting point/range No data available

Boiling point/boiling range No data available

550 °F / 288 °C Flash point

Method: open cup

Evaporation rate No data available

Flammability (solid, gas) Not applicable

Self-ignition No data available

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

< 0.001 hPa (68 °F / 20 °C) Vapour pressure

Relative vapour density No data available

0.869 (68 °F / 20 °C) Relative density

> Reference substance: Water The value is calculated

Bulk density No data available

Solubility(ies)

insoluble Water solubility

Solubility in other solvents No data available

Partition coefficient: n-

octanol/water

No data available

Auto-ignition temperature No data available

Decomposition temperature No data available

Viscosity



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Viscosity, dynamic : No data available

Viscosity, kinematic : 68 mm2/s (104 °F / 40 °C)

Explosive properties : Not explosive

Oxidizing properties : No data available

Sublimation point : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No hazards to be specially mentioned.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

No dangerous reaction known under conditions of normal use.

Conditions to avoid : No conditions to be specially mentioned.

Incompatible materials : No materials to be especially mentioned.

Hazardous decomposition

products

No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity : Remarks: This information is not available.

Acute inhalation toxicity : Remarks: This information is not available.

Acute dermal toxicity : Remarks: This information is not available.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 401

GLP: yes

Acute inhalation toxicity : LC50 (Rat): > 5.53 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403



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Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

Method: OECD Test Guideline 402

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Skin corrosion/irritation

Product:

Remarks : This information is not available.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : yes

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

Serious eye damage/eye irritation

Product:

Remarks : This information is not available.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Species : Rabbit

Result : No eye irritation
Assessment : No eye irritation

Method : OECD Test Guideline 405

GLP : yes



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Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Species : Rabbit

Result : No eye irritation
Assessment : No eye irritation

Method : OECD Test Guideline 405

Respiratory or skin sensitisation

Product:

Remarks : This information is not available.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

GLP : yes

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Species : Guinea pig

Assessment : Did not cause sensitisation on laboratory animals.

Method : OECD Test Guideline 406

Result : Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Carcinogenicity

Product:

Remarks : No data available

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Carcinogenicity - Assess- : Not classifiable as a human carcinogen.

ment

IARC No component of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

IARC

OSHANo component of this product present at levels greater than or equal to 0.1% is



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on OSHA's list of regulated carcinogens.

NTP No component of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available

Effects on foetal develop-

ment

Remarks: No data available

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Reproductive toxicity - As- : - Fertility -

sessment No toxicity to reproduction

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Reproductive toxicity - As-

sessment

- Fertility -

Some evidence of adverse effects on sexual function and

fertility, based on animal experiments.

Repeated dose toxicity

Product:

Remarks : This information is not available.

Aspiration toxicity

Product:

This information is not available.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

No aspiration toxicity classification

Further information

Product:

Remarks : Information given is based on data on the components and

the toxicology of similar products.



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SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish

Remarks: Harmful to aquatic organisms, may cause long-term

adverse effects in the aquatic environment.

Toxicity to daphnia and other :

aquatic invertebrates

Remarks: No data available

Toxicity to algae/aquatic

plants

Remarks: No data available

Toxicity to microorganisms : Remarks: No data available

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 10,000 mg/l

Exposure time: 48 h Test Type: Immobilization

Method: OECD Test Guideline 202

GLP: yes

Toxicity to daphnia and other

aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 10 mg/l

Exposure time: 21 d

Test Type: semi-static test

Method: OECD Test Guideline 211

GLP: yes

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 100 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203



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Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 51 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l

Exposure time: 72 h

Test Type: static test

Method: OECD Test Guideline 201

Persistence and degradability

Product:

Biodegradability Remarks: No data available

ity

Physico-chemical removabil- : Remarks: No data available

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Biodegradability aerobic

Inoculum: activated sludge Result: Not rapidly biodegradable

Biodegradation: 3 % Exposure time: 28 d

Method: OECD Test Guideline 301B

GLP: yes

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Biodegradability aerobic

> Inoculum: activated sludge Result: Not rapidly biodegradable

Biodegradation: 1 % Exposure time: 28 d

Method: OECD Test Guideline 301B

GLP: yes

Bioaccumulative potential

Product:

Bioaccumulation Remarks: This mixture contains no substance considered to

be persistent, bioaccumulating and toxic (PBT).

This mixture contains no substance considered to be very



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persistent and very bioaccumulating (vPvB).

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Partition coefficient: n-

octanol/water

: log Pow: > 2

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:

Partition coefficient: n-

octanol/water

: $\log Pow: > 5$

Mobility in soil

Product:

Mobility : Remarks: No data available

Distribution among environ-

mental compartments

Remarks: No data available

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Pro-

tection of Stratospheric Ozone - CAA Section 602 Class I

Substances

Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological infor-

mation

Harmful to aquatic life with long lasting effects.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Results of PBT and vPvB

assessment

Non-classified vPvB substance Non-classified PBT substance

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water

courses or the soil.

Do not dispose of with domestic refuse.

Dispose of as hazardous waste in compliance with local and

national regulations.



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Contaminated packaging : Packaging that is not properly emptied must be disposed of as

the unused product.

Dispose of waste product or used containers according to

local regulations.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

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

Not applicable for product as supplied.

National Regulations

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Reproductive toxicity

SARA 313 : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).



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This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product contains the following toxic pollutants listed under the U.S. Clean Water Act Section 307

1,2-Benzenedicarboxylic 68515-49-1 >= 5 - < 10 % acid, di-C9-11-branched alkyl esters, C10-rich

This product does not contain any priority pollutants related to the U.S. Clean Water Act

US State Regulations

Massachusetts Right To Know

Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7
Benzenamine, N-phenyl-, reaction products with 2,4,4-	68411-46-1
trimethylpentene	

Pennsylvania Right To Know

Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7
1-Dodecene, homopolymer, hydrogenated	151006-63-2
1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters,	68515-49-1
C10-rich	
1,2-Benzenedicarboxylic acid, di-C11-14-branched alkyl es-	68515-47-9
ters, C13-rich	

Maine Chemicals of High Concern

Benzenamine, N-phenyl-, reaction products with 2,4,4-	68411-46-1
trimethylpentene	

Vermont Chemicals of High Concern

Benzenamine, N-phenyl-, reaction products with 2,4,4-	68411-46-1
trimethylpentene	
Triphenyl phosphate	115-86-6
tris(methylphenyl) phosphate	1330-78-5

Washington Chemicals of High Concern

Benzenamine, N-phenyl-, reaction products with 2,4,4-	68411-46-1
trimethylpentene	
Triphenyl phosphate	115-86-6
tris(methylphenyl) phosphate	1330-78-5

New York City Hazardous Substances

1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich	68515-49-1
White mineral oil (petroleum) Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-	8042-47-5 72623-86-0
based Triphenyl phosphate	115-86-6



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Distillates (petroleum), hydrotreated middle 64742-46-7 Distillates (petroleum), hydrotreated light paraffinic 64742-55-8

California Prop. 65

WARNING: This product can expose you to chemicals including 1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California List of Hazardous Substances

1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, 68515-49-1 C10-rich

California Permissible Exposure Limits for Chemical Contaminants

Distillates (petroleum), hydrotreated heavy paraffinic 64742-54-7

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Further information

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL : USA. NIOSH Recommended Exposure Limits

OSHA PO : USA. Table Z-1-A Limits for Air Contaminants (1989 vacated

values)

OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim-

its for Air Contaminants

ACGIH / TWA : 8-hour, time-weighted average

NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour

workday during a 40-hour workweek

NIOSH REL / ST : STEL - 15-minute TWA exposure that should not be exceeded

at any time during a workday

OSHA P0 / TWA : 8-hour time weighted average OSHA Z-1 / TWA : 8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dan-



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gerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI -Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ -Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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