ROYCO 581



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SECTION 1. IDENTIFICATION

Product name : ROYCO 581

000000000058322961 Product code

Manufacturer or supplier's details

: LANXESS Corporation Company

Product Safety & Regulatory Affairs

111 RIDC Park West Drive

Pittsburgh, Pennsylvania 15275-1112

Responsible Department (800) LANXESS

(412) 809-1000

lanxesshes@lanxess.com

Emergency telephone number : CHEMTREC (800) 424-9300 or

(703) 527-3887 (Outside U.S.A) and mention CCN12916.

Recommended use of the chemical and restrictions on use

Recommended use : Lubricant

SECTION 2. HAZARDS IDENTIFICATION

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

- single exposure

Specific target organ toxicity : Category 3 (Respiratory system)

GHS label elements

Hazard pictograms



Signal word Warning

Hazard statements May cause respiratory irritation.

Precautionary statements Prevention:

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

Use only outdoors or in a well-ventilated area.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel un-

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well.

Storage:

Store in a well-ventilated place. Keep container tightly closed.

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

Components

Chemical name	CAS-No.	Concentration (% w/w)
Residual oils (petroleum), solvent-	64742-01-4	>= 70 - < 90
refined		
Distillates (petroleum), hydrotreated	64742-54-7	>= 5 - < 10
heavy paraffinic		
Distillates (petroleum), solvent-	64741-88-4	>= 0.1 - < 1
refined heavy paraffinic		

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4. FIRST AID MEASURES

If inhaled Get medical attention immediately.

Remove victim to fresh air and keep at rest in a position com-

fortable for breathing.

If unconscious, place in recovery position and get medical

attention immediately. Maintain open airway.

If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained per-

sonnel.

In case of skin contact : Wash off with soap and water.

Get medical attention if symptoms occur.

In case of eye contact : Immediately flush eye(s) with plenty of water.

Remove contact lenses.

Get medical attention if symptoms appear.

If swallowed Rinse mouth with water.

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Do not induce vomiting unless directed to do by medical per-

sonnel.

Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed

Symptoms : None known.

Effects May cause respiratory irritation.

Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific

personal protective equipment.

Notes to physician : Treat symptomatically.

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

Specific hazards during fire-

fighting

Burning produces noxious and toxic fumes.

Further information In the event of fire, cool tanks with water spray.

Promptly isolate the scene by removing all persons from the

vicinity of the incident if there is a fire.

No action shall be taken involving any personal risk or without

suitable training.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- : tive equipment and emer-

gency procedures

No action shall be taken involving any personal risk or without

suitable training.

Put on appropriate personal protection equipment.

Do not touch or walk through spilled material.

Evacuate personnel to safe areas.

Keep unnecessary and unprotected personnel from entering.

Provide adequate ventilation. Do not breathe vapours, aerosols.

Environmental precautions Prevent product from entering drains.

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

Stop leak if safe to do so. containment and cleaning up Move containers from spill area.

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Wash spillages into an effluent treatment plant or proceed as follows.

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Dispose of wastes in an approved waste disposal facility. Do not allow into the sewerage system, surface waters or

groundwater or into the soil.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Remove contaminated clothing and protective equipment be-

fore entering eating areas.

Workers should wash hands and face before eating, drinking

and smoking.

Put on appropriate personal protection equipment.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Conditions for safe storage : Store in accordance with local regulations.

Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible

materials (see Section 10) and food and drink.

Keep container closed when not in use.

Containers that have been opened must be carefully resealed

and kept upright to prevent leakage. Do not store in unlabeled containers.

Use appropriate container to avoid environmental contamina-

tion.

Empty containers retain residue and can be dangerous.

Do not reuse container.

Further information on stor-

age stability

: Stable under recommended storage conditions.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Residual oils (petroleum), solvent-refined	64742-01-4	TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Inhal- able particu- late matter)	5 mg/m3	ACGIH
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	TWA (Mist)	5 mg/m3	OSHA Z-1

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		TWA (Inhal- able particu- late matter)	5 mg/m3	ACGIH
Distillates (petroleum), solvent- refined heavy paraffinic	64741-88-4	TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Inhal- able particu- late matter)	5 mg/m3	ACGIH

Engineering measures : If user operations generate dust, fumes or mist, use ventila-

tion to keep exposure to airborne contaminants below the

exposure limit.

Personal protective equipment

Respiratory protection : In the case of vapour formation use a respirator with an ap-

proved filter.

Hand protection

Material : Neoprene

Remarks : Gloves should be discarded and replaced if there is any indi-

cation of degradation or chemical breakthrough.

Eye protection : Safety glasses with side-shields

Skin and body protection : Impervious clothing

Hygiene measures : Wash hands, forearms and face thoroughly after handling

chemical products, before eating, smoking and using the

lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially

contaminated clothing.

Wash contaminated clothing before reusing.

Ensure that eyewash stations and safety showers are close

to the workstation location.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : amber

Odour : slight, hydrocarbon-like

Odour Threshold : No data available

pH : No data available

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Melting point/range : Not applicable

Boiling point/boiling range : No data available

Flash point : 543 °F / 284 °C

Method: open cup

Evaporation rate : No data available

Self-ignition : No data available

Burning number : No data available

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower :

flammability limit

No data available

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : 0.89

Density : No data available

Solubility(ies)

Water solubility : slightly soluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Decomposition temperature : No data available

Self-Accelerating decomposi-

tion temperature (SADT)

Method: No information available.

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Explosive properties : No data available

Oxidizing properties : No data available

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SECTION 10. STABILITY AND REACTIVITY

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

Under normal conditions of storage and use, hazardous reac-

tions will not occur.

Conditions to avoid : Contamination

Heat, flames and sparks.

Incompatible materials : Strong acids and strong bases

Hazardous decomposition

products

: Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

The most important known symptoms and effects are described in Section 2 and/or Section 4.

Acute toxicity

Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

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

Method: OECD Test Guideline 401

GLP: yes

Remarks: Test results on an analogous product

Acute inhalation toxicity : LC50 (Rat, male and female): > 5.53 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403 GLP: No information available.

Remarks: Test results on an analogous product

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

Method: OECD Test Guideline 402

GLP: yes

Remarks: Test results on an analogous product

Distillates (petroleum), solvent-refined heavy paraffinic:

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

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

Exposure time: 4 h

Test atmosphere: dust/mist

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Skin corrosion/irritation

Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Species : Rabbit
Method : Draize Test
Result : No skin irritation

GLP : yes

Remarks : Test results on an analogous product

Serious eye damage/eye irritation

Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Species : Rabbit

Result : No eye irritation

Method : OECD Test Guideline 405

GLP : yes

Remarks : Test results on an analogous product

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Test Type : Buehler Test Exposure routes : Skin contact Species : Guinea pig

Method : OECD Test Guideline 406

Result : Did not cause sensitisation on laboratory animals.

GLP : yes

Remarks : Test results on an analogous product

Distillates (petroleum), solvent-refined heavy paraffinic:

Exposure routes : Skin contact Species : Guinea pig

Result : Did not cause sensitisation on laboratory animals.

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Germ cell mutagenicity

Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Genotoxicity in vitro : Test Type: Ames test

Test system: TA98

Metabolic activation: with metabolic activation

Method: OECD Test Guideline 471

Result: negative

GLP: No information available.

Remarks: Test results on an analogous product

Test Type: Chromosome aberration test in vitro Test system: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

GLP: no

Remarks: Test results on an analogous product

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

GLP: yes

Remarks: Test results on an analogous product

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: positive GLP: yes

Remarks: Test results on an analogous product

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Mouse (male and female)

Cell type: Bone marrow

Application Route: Intraperitoneal Method: OECD Test Guideline 474

Result: negative

GLP: No information available.

Remarks: Test results on an analogous product

Distillates (petroleum), solvent-refined heavy paraffinic:

Genotoxicity in vitro : Test system: Bacteria

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

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Result: negative

Carcinogenicity

Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Species : Mouse, female Application Route : Dermal

Exposure time : 18 month(s)
Method : OECD Test Guideline 451

Result : negative

GLP : No information available.

Remarks : Test results on an analogous product

Species : Mouse, male
Application Route : Dermal
Exposure time : 24 month(s)

Method : OECD Test Guideline 453

Result : positive

GLP : No information available.

Remarks : Test results on an analogous product

Carcinogenicity - Assess- : Classified based on DMSO extract content < 3% (Regulation

ment (EC) 1272/2008, Annex VI, Part 3, Note L)

Distillates (petroleum), solvent-refined heavy paraffinic:

Carcinogenicity - Assess- : Classified based on DMSO extract content < 3% (Regulation

ment (EC) 1272/2008, Annex VI, Part 3, Note L)

IARC

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

on OSHA's list of regulated carcinogens.

NTP

Reproductive toxicity

Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Effects on fertility : Test Type: Fertility/early embryonic development

Species: Rat, male and female

Application Route: Oral

Dose: 0 - 1000 milligram per kilogram

General Toxicity - Parent: NOAEL: >= 1,000 mg/kg body

weiaht

Fertility: NOAEL: >= 1,000 mg/kg body weight

Early Embryonic Development: NOAEL: >= 1,000 mg/kg body

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weight

Method: OECD Test Guideline 421

Result: Animal testing did not show any effects on fertility.

GLP: yes

Remarks: Test results on an analogous product

Effects on foetal develop-

ment

Test Type: Embryo-foetal development

Species: Rat, female Application Route: Dermal

Dose: 0 - 125 - 500 milligram per kilogram

General Toxicity Maternal: NOAEL: >= 2,000 mg/kg body

weight

Teratogenicity: NOAEL: >= 2,000 mg/kg body weight

Developmental Toxicity: NOAEL: >= 2,000 mg/kg body weight Embryo-foetal toxicity: NOAEL: >= 2,000 mg/kg body weight

Method: OECD Test Guideline 414

Result: negative

GLP: No information available.

Remarks: Test results on an analogous product

STOT - single exposure

May cause respiratory irritation.

Components:

Residual oils (petroleum), solvent-refined:

Assessment : May cause respiratory irritation.

Distillates (petroleum), hydrotreated heavy paraffinic:

Assessment : May cause respiratory irritation.

Distillates (petroleum), solvent-refined heavy paraffinic:

Assessment : May cause respiratory irritation.

STOT - repeated exposure

Not classified based on available information.

Repeated dose toxicity

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Species : Rat, male LOAEL : 125 mg/kg Application Route : Oral Exposure time : 90 d

Number of exposures : 5 days/week

Dose : 0 - 125 - 500 mg/kg bw/d
Method : OECD Test Guideline 408

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GLP : No information available.

Remarks : Subchronic toxicity

Test results on an analogous product

Species : Rat, male and female

NOAEC : >= 1 mg/l

Application Route : inhalation (dust/mist/fume)

Exposure time : 20 d

Number of exposures : 6 hours/day
Dose : 0 - 0.05 - 0,22

Method : OECD Test Guideline 412 GLP : No information available.

Remarks : Subacute toxicity

Test results on an analogous product

Species : Rat, male and female NOAEL : >= 2000 mg/kg

Application Route : Skin contact Exposure time : 90 d

Number of exposures : 5 days/week

Dose : 0 - 2000 mg/kg bw/d

Method : OECD Test Guideline 411

GLP : No information available.

Remarks : Subchronic toxicity

Test results on an analogous product

Distillates (petroleum), solvent-refined heavy paraffinic:

Species : Rabbit, male and female

NOAEL : > 1,000 mg/kg Application Route : Skin contact

Exposure time : 28 d

Number of exposures : 5 days/week Remarks : Chronic toxicity

Species : Rat, male and female

NOAEL : 0.21 mg/l Application Route : Inhalation Exposure time : 28 d

Remarks : Chronic toxicity

Aspiration toxicity

Not classified based on available information.

Product:

No aspiration toxicity classification

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SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l

Exposure time: 96 h Analytical monitoring: yes

Method: OECD Test Guideline 203

GLP: yes

Remarks: nominal concentration
Test results on an analogous product

water extractable fraction

Toxicity to daphnia and other :

aquatic invertebrates

EL50 (Daphnia magna (Water flea)): > 10,000 mg/l

Exposure time: 48 h Analytical monitoring: no

Method: OECD Test Guideline 202 GLP: No information available. Remarks: nominal concentration Test results on an analogous product

water extractable fraction

Toxicity to algae/aquatic

plants

EL50 (Pseudokirchneriella subcapitata (green algae)): > 100

mg/l

Exposure time: 72 h Analytical monitoring: no

Method: OECD Test Guideline 201 GLP: No information available. Remarks: nominal concentration Test results on an analogous product

water extractable fraction

NOELR (Pseudokirchneriella subcapitata (green algae)): >=

100 mg/l

Exposure time: 72 h Analytical monitoring: no

Method: OECD Test Guideline 201 GLP: No information available. Remarks: nominal concentration Test results on an analogous product

water extractable fraction

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

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

End point: Reproduction Exposure time: 21 d Analytical monitoring: no

Method: OECD Test Guideline 211

GLP: yes

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Remarks: nominal concentration
Test results on an analogous product

water extractable fraction

Distillates (petroleum), solvent-refined heavy paraffinic:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 5,000 mg/l

Exposure time: 96 h

Toxicity to daphnia and other:

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 1,000 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

: EC50 (Desmodesmus subspicatus (green algae)): > 1,000

mg/

Exposure time: 96 h

Persistence and degradability

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 31 % Exposure time: 28 d

Method: OECD Test Guideline 301F

GLP: yes

Remarks: Test results on an analogous product

Distillates (petroleum), solvent-refined heavy paraffinic:

Biodegradability : Result: Not readily biodegradable.

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

RCRA - Resource Conservation and Recovery Authorization

tion Act

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classi-

fied as a hazardous waste. (40 CFR 261.20-24)

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Waste from residues : The generation of waste should be avoided or minimized

wherever possible.

This material and its container must be disposed of in a safe

way.

Empty containers retain product residue; observe all precau-

tions for product.

Avoid dispersal of spilled material and runoff and contact with

soil, waterways, drains and sewers.

Waste disposal should be in accordance with existing federal,

state, provincial and/or local environmental controls.

SECTION 14. TRANSPORT INFORMATION

International Regulations

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

Remarks : Not dangerous cargo, Keep separated from foodstuffs

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA 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 : Specific target organ toxicity (single or repeated exposure)

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.

US State Regulations

Massachusetts Right To Know

Residual oils (petroleum), solvent-refined 64742-01-4 70 - 90 Distillates (petroleum), hydrotreated heavy paraf- 64742-54-7 5 - 10

finic

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Pennsylvania Right To Know

Residual oils (petroleum), solvent-refined	64742-01-4	70 - 90
Glycerides, tall-oil mono-	61789-12-6	> 1
Distillates (petroleum), hydrotreated heavy paraf-	64742-54-7	5 - 10
finic		
Distillates (petroleum), solvent-refined heavy paraf-	64741-88-4	0.1 - 1
finic		
zinc bis(dipentyldithiocarbamate)	15337-18-5	< 0.01

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

TSCA inventory

TSCA : All substances listed as active on the TSCA inventory

TSCA list

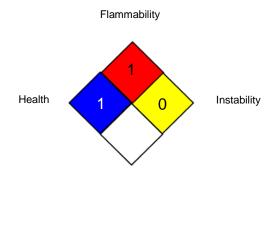
No substances are subject to a Significant New Use Rule.

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

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



Special hazard

HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

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

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its for Air Contaminants

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

AICS - Australian Inventory of Chemical Substances; 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 Dangerous 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; 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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The data contained in this Safety Data Sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered to be a guidance for processing and does not contain any warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. It is the responsibility of the recipient of the product to ensure that any proprietary rights and existing laws and legislation are observed.