

SAFETY DATA SHEET

according to the Global Harmonized System and US regulation

TRIGONOX 101

Version 1 Revision Date 08/25/2016 Print Date 08/02/2017 US / Z8

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : TRIGONOX 101

Product Use Description : Specific use(s): Polymerization initiator

Cross-linking agent

Company : Akzo Nobel Functional Chemicals LLC

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国家化学事故应急响应中心+86 532 8388 9090

2. HAZARDS IDENTIFICATION

Emergency Overview

| Appearance | liquid | |
|------------|---------------------|--|
| Color | light yellow, clear | |
| Odor | characteristic | |

GHS Classification

Flammable liquids, Category 4 Organic peroxides, Type C Skin irritation, Category 2

GHS label elements

Hazard pictograms



Signal Word : Danger

Hazard Statements : H227 Combustible liquid.

H242 Heating may cause a fire. H315 Causes skin irritation.

Precautionary Statements : Prevention:

P210 Keep away from heat/sparks/open flames/hot surfaces.

No smoking.

P220 Keep away from dirt, rust, chemicals in particular.

P234 Keep only in original container. P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ eye protection/ face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P332 + P313 If skin irritation occurs: Get medical advice/

attention.

P362 Take off contaminated clothing and wash before reuse. P370 + P378 In case of fire: Use water spray, alcohol-resistant

foam, dry chemical or carbon dioxide to extinguish.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

P410 Protect from sunlight.

P420 Store away from other materials.

Disposal:

P501 Dispose of contents/container in accordance with local

regulation.

Potential Health Effects

Inhalation : Inhalation of aerosols may cause irritation to mucous

membranes.

Thermal decomposition can lead to release of irritating gases

and vapors.

Skin : Causes skin irritation.

Eyes : May cause eye irritation.

Ingestion : May cause irritation of the mucous membranes.

Aggravated Medical

Condition

: None known.

Symptoms of Overexposure

: The symptoms and effects are as expected from the hazards

as shown in section 2. No specific product related symptoms

are known.

Carcinogenicity:

IARC : No ingredient of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

OSHA : No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by OSHA.

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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients

| Chemical name | CAS-No. | Classification | Concentration [%] |
|----------------------------|---------|---------------------|-------------------|
| 2,5-DIMETHYL-2,5-DI-(tert- | 78-63-7 | Flam. Liq. 4; H227 | 92 - 100 |
| BUTYLPEROXY)HEXANE | | Org. Perox. C; H242 | |
| | | Skin Irrit. 2; H315 | |
| | | | |

2,5-Dimethyl-2,5-di(2-ethylhexanoylperoxy)hexane, neat

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Consult a physician.

Show this material safety data sheet to the doctor in

attendance.

Inhalation : If breathed in, move person into fresh air.

Consult a physician after significant exposure.

Skin contact : Take off contaminated clothing and shoes immediately.

Rinse immediately with plenty of water. If skin irritation persists, call a physician.

Eye contact : Rinse with plenty of water.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

Ingestion : Clean mouth with water and drink afterwards plenty of water.

Never give anything by mouth to an unconscious person.

Obtain medical attention.

Notes to physician

Symptoms : The symptoms and effects are as expected from the hazards

as shown in section 2. No specific product related symptoms

are known.

Risks : Causes skin irritation.

Treatment : Treat symptomatically.

5. FIRE-FIGHTING MEASURES

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

carbon dioxide.

Unsuitable extinguishing

media

: High volume water jet

Specific hazards during fire fighting / Specific hazards

g / Specific hazards Supports combustion.

arising from the chemical Do not use a solid water stream as it may scatter and spread

: CAUTION: reignition may occur.

fire.

Water spray may be ineffective unless used by experienced

firefighters.

Heating may cause decomposition with release of toxic fumes.

Combustion products : Fire will produce smoke containing hazardous combustion

products (see section 10).

Special protective equipment

for fire-fighters

: In the event of fire, wear self-contained breathing apparatus.

Further information : Use water spray to cool unopened containers.

See also Section 9. Physical and chemical properties: Safety data

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Use personal protective equipment.

Ensure adequate ventilation. Remove all sources of ignition.

Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions : Prevent product from entering drains.

Methods for cleaning up / Methods for containment

: Keep wetted with water.

Soak up with inert absorbent material and dispose of as

hazardous waste.

Confinement must be avoided.

Never return spills in original containers for re-use.

Additional advice : For personal protection see section 8.

7. HANDLING AND STORAGE

Handling

Advice on safe handling : For personal protection see section 8.

Avoid contact with skin, eyes and clothing.

Smoking, eating and drinking should be prohibited in the

application area.

Open drum carefully as content may be under pressure.

Advice on protection against

fire and explosion

: Use explosion protected equipment.

Avoid formation of aerosol.

Keep away from sources of ignition - No smoking.

No sparking tools should be used.

Keep away from reducing agents (e.g. amines), acids, alkalies and heavy metal compounds (e.g. accelerators, driers, metal

soaps).

Do not cut or weld on or near this container even when empty. Take measures to prevent the build up of electrostatic charge.

Keep away from combustible material.

Temperature class : It is recommended to use electrical equipment of temperature

group T3. However, autoignition can never be excluded.

Storage

Requirements for storage areas and containers

: No smoking.

Keep in a well-ventilated place.

Electrical installations / working materials must comply with

the technological safety standards. Keep only in original container. Store away from other materials.

Minimum storage

: Avoid temperatures below:

temperature:

10 °C (50 °F)

Maximum storage

: 40 °C (104 °F)

temperature:

Other data

: If product freezes or separates, contact Akzo Nobel

No decomposition if stored and applied as directed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Contains no substances with occupational exposure limit values.

Occupational exposure limits of decomposition products

| Decomposition products | CAS-No. | Value | Control parameters | Update | Basis | Form of exposure | | |
|------------------------|------------------------|---|---|------------|-----------|------------------|--|--|
| Acetone | 67-64-1, 67- 64-1 | TWA | 250 ppm | 2015-04-10 | ACGIH | | | |
| | Further information | : CNS impair: Central Nervous Systemimpairment URT irr: Upper Respiratory Tract irritation eye irr: Eye irritation *: 2015 Adoption BEI: Substances for which there is a Biological Exposure Index or Indices (see BEI® section) A4: Not classifiable as a human carcinogen | | | | | | |
| | | STEL | 500 ppm | 2015-04-10 | ACGIH | | | |
| | Further information | UR eye *: 2 BEI (se A4 | CNS impair: Central Nervous Systemimpairment URT irr: Upper Respiratory Tract irritation eye irr: Eye irritation *: 2015 Adoption BEI: Substances for which there is a Biological Exposure Index or Indices (see BEI® section) A4: Not classifiable as a human carcinogen | | | | | |
| | | TWA | 250 ppm 590 mg/m3 | 2013-10-08 | NIOSH REL | | | |
| | | TWA | 1,000 ppm | 1997-08-04 | OSHA Z-1 | | | |

| | | | | 2,400 mg/m3 | 1 | 1 | 1 |
|--------------|----------------------|-----|------|---|-----------------|-------------------|--------------------|
| | Further information | : | (b): | The value in mg/m3 | is approximate. | | |
| | | TWA | | 750 ppm 1,800 mg/m3 | 1989-01-19 | OSHA P0 | |
| | | STE | L | 1,000 ppm 2,400 mg/m3 | 1989-01-19 | OSHA P0 | |
| | Further information | | | ne acetone STEL do effect for all other se | | cellulose acetate | fiber industry. It |
| | | STE | Ĺ | 750 ppm 1,780 mg/m3 | 2014-11-26 | CAL PEL | |
| | | С | | 3,000 ppm | 2014-11-26 | CAL PEL | |
| | | PEL | | 500 ppm 1,200 mg/m3 | 2014-11-26 | CAL PEL | |
| tert-Butanol | 75-65-0, 75- 65-0 | TWA | | 100 ppm | 2007-01-01 | ACGIH | |
| | Further information | : | A4: | S impair: Central Nervous System impairment Not classifiable as a human carcinogen | | | |
| | | TWA | | 100 ppm 300 mg/m3 | 2013-10-08 | NIOSH REL | |
| | | ST | | 150 ppm 450 mg/m3 | 2013-10-08 | NIOSH REL | |
| | | TWA | 4 | 100 ppm 300 mg/m3 | 1997-08-04 | OSHA Z-1 | |
| | Further information | : | \ | The value in mg/m3 | • • | | |
| | | TWA | | 100 ppm 300 mg/m3 | 1989-01-19 | OSHA P0 | |
| | | STE | L | 150 ppm 450 mg/m3 | 1989-01-19 | OSHA P0 | |
| | | PEL | | 100 ppm 300 mg/m3 | 2014-11-26 | CAL PEL | |
| | | STE | L | 150 ppm 450 mg/m3 | 2014-11-26 | CAL PEL | |

Engineering measures

Explosion proof ventilation recommended.

Effective exhaust ventilation system

Personal protective equipment

Eye/face protection : Tightly fitting safety goggles

Hand protection : Glove material: butyl-rubber

: Glove material: Neoprene

Skin and body protection : Protective suit

Respiratory protection : In the case of vapor or aerosol formation use a respirator with

an approved filter.

Filter A

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice.

When using do not eat or drink. When using do not smoke.

Wash hands before breaks and at the end of workday.

Environmental exposure controls

General advice : Prevent product from entering drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : liquid

Color : light yellow

clear

Odor : characteristic

Odor Threshold : No data available

Safety data

pH : No data available

Melting point : 1 - 10 °C

Boiling point/boiling range : Decomposes below the boiling point.

Flash point : 68 °C

at 1,013 hPa

Evaporation rate : Not applicable

Flammability (solid, gas) : Not applicable

Flammability (liquids) : Combustible liquid.

Lower explosion limit : Not applicable

Upper explosion limit : Not applicable

Vapor pressure : < 0.01 hPa at 20 °C

Relative vapor density : No data available

Relative density : 0.872 at 20 °C

Water solubility : immiscible

Solubility in other solvents : organic solvent

soluble

Partition coefficient: n-

octanol/water

: log Pow: 7.34 at 20 °C

Autoignition temperature : Test method not applicable

Decomposition temperature : SADT - (Self accelerating decomposition temperature) is the

lowest temperature at which self accelerating decomposition may occur with a substance in the packaging as used in transport. A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the SADT. Contact with incompatible substances can cause

decomposition below the SADT.

Self-Accelerating

Viscosity, dynamic

decomposition temperature

(SADT)

,

Viscosity, kinematic : 8.54 mm2/s at 20 °C

: 80 °C

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

: 7.35 mPa.s at 20 °C

Active Oxygen Content : 10.14 %

Organic peroxides : > 92 %

This material safety datasheet only contains information relating to safety and does not replace any product information or product specification.

10. STABILITY AND REACTIVITY

Conditions to avoid : Confinement must be avoided.

Heat, flames and sparks.

Materials to avoid : Contact with the following incompatible materials will result in

hazardous decomposition:

Acids and bases

Iron Copper

Reducing agents Heavy metals

Rust

Do not mix with peroxide accelerators, unless under controlled

processing.

Use only stainless steel 316, PP, polyethylene or glass-lined

equipment.

For queries regarding the suitability of other materials please

contact the supplier.

Hazardous decomposition

products

Acetone tert-Butanol Methane

tert-Amyl alcohol

Ethane

Carbon oxides

Thermal decomposition : SADT - (Self accelerating decomposition temperature) is the

lowest temperature at which self accelerating decomposition may occur with a substance in the packaging as used in transport. A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the SADT. Contact with incompatible substances can cause

decomposition below the SADT.

Reactivity : Stable under normal conditions.

Chemical stability : Stable under recommended storage conditions.

Hazardous reactions : No dangerous reaction known under conditions of normal use.

Self-Accelerating

decomposition temperature

(SADT)

: 80 °C (176 °F)

11. TOXICOLOGICAL INFORMATION

PRODUCT INFORMATION:

Toxicology Assessment

Acute effects : Causes skin irritation.

Further information : No further data available.

Test result

Acute inhalation toxicity : Assessment: The substance or mixture has no acute

inhalation toxicity

Carcinogenicity:

IARC : No ingredient of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

OSHA : No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by OSHA.

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.

Component: 2,5-DIMETHYL-2,5-DI-(tert-BUTYLPEROXY)HEXANE

Acute effects : Causes skin irritation.

Further information : No further data available.

Component: 2,5-DIMETHYL-2,5-DI-(tert-BUTYLPEROXY)HEXANE

Acute oral toxicity : LD50: > 2,000 mg/kg

Species: Rat

Method: OECD Test Guideline 401

Acute inhalation toxicity : Assessment: The substance or mixture has no acute

inhalation toxicity

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

Species: Rat

Method: OECD Test Guideline 402

Skin irritation : Result: Irritating to skin.

Classification: Irritating to skin.

Repeated dose toxicity : Species: Rat, male and female

Application Route: Oral Exposure time: 90 d () NOEL: 150 mg/kg

Method: OECD Test Guideline 408

Germ cell mutagenicity

Genotoxicity in vitro : Ames test

Result: negative

Method: OECD Test Guideline 471

Chromosome aberration test in vitro

Result: negative

Method: OECD Test Guideline 476

Genotoxicity in vivo : Micronucleus test

Method: OECD Test Guideline 474

Result: negative

Reproductive

toxicity/Development/Teratog

enicity

Species: Rat

Strain: Sprague-Dawley Application Route: Oral

General Toxicity Maternal: NOAEL (No observed adverse

effect level): 300 mg/kg body weight/day

Developmental Toxicity: No observed adverse effect level F1:

300 mg/kg body weight/day

Method: OECD Test Guideline 414

Target Organ Systemic

Toxicant - Repeated

exposure

Routes of exposure: Oral

The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

12. ECOLOGICAL INFORMATION

PRODUCT INFORMATION:

Ecotoxicology Assessment

Additional ecological

information

: None known.

Further information on ecology

Hazardous to the ozone layer

Regulation : 40 CFR Protection of Environment; Part 82 Protection 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).

Component: 2,5-DIMETHYL-2,5-DI-(tert-BUTYLPEROXY)HEXANE

Acute aquatic toxicity : No toxicity at the limit of solubility.

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Additional ecological

information

: None known.

Component: 2,5-DIMETHYL-2,5-DI-(tert-BUTYLPEROXY)HEXANE

Ecotoxicity effects

Toxicity to fish : LC50: 4.5 mg/l

Exposure time: 96 h Species: Fish

No toxicity at the limit of solubility.

Toxicity to algae : IC50: > 0.236 mg/l

Exposure time: 72 h Species: algae

No toxicity at the limit of solubility.

Toxicity to daphnia and other

aquatic invertebrates (Chronic toxicity)

EC50: > 0.0065 mg/l Exposure time: 21 d Species: Daphnia

No toxicity at the limit of solubility.

Elimination information (persistence and degradability)

Biodegradability : The product is not classified as dangerous to the environment,

but contains substances not readily biodegradable.

13. DISPOSAL CONSIDERATIONS

Product : Do not dispose of waste into sewer.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

Hazardous waste

Dispose of contents/container in accordance with local

regulation.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product.

Do not burn, or use a cutting torch on, the empty drum. Due to the high risk of contamination recycling/recovery is not

recommended.

Follow all warnings even after the container is emptied.

14. TRANSPORT INFORMATION

International Regulation

IATA-DGR

UN/ID No. : UN 3103

Proper shipping name : Organic peroxide type C, liquid

(2,5-Dimethyl-2,5-di(tert-butylperoxy)hexane)

Class : 5.2 Subsidiary risk : HEAT Packing group : Not Assigned

Labels : 5.2 (HEAT)
Packing instruction (cargo : 570

aircraft)

Packing instruction : 570

(passenger aircraft)

Environmentally hazardous : no

IMDG-Code

UN number : UN 3103

Proper shipping name : ORGANIC PEROXIDE TYPE C, LIQUID

(2,5-Dimethyl-2,5-di(tert-butylperoxy)hexane)

Class : 5.2

Packing group : Not Assigned

Labels : 5.2 EmS Code : F-J, S-R Marine pollutant : no

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

Not applicable for product as supplied.

Domestic regulation

49 CFR

UN/ID/NA number : UN 3103

Proper shipping name : Organic peroxide type C, liquid

(2,5-Dimethyl-2,5-di(tert-butylperoxy)hexane, >92%)

Class : 5.2
Packing group : II
Labels : 5.2
ERG Code : 146
Marine pollutant : no

Reportable Quantity : This product does not contain an environmentally hazardous

substance per 49 CFR 172.101, Appendix A.

15. REGULATORY INFORMATION

Notification status

TSCA: YES. All chemical substances in this product are either listed on the

TSCA Inventory or in compliance with a TSCA Inventory exemption.

DSL : YES. All components of this product are on the Canadian DSL AICS : YES. On the inventory, or in compliance with the inventory NZIoC : NO. On the inventory, or in compliance with the inventory

ENCS : NO. Not in compliance with the inventory

ISHL : YES. On the inventory, or in compliance with the inventory KECI : YES. On the inventory, or in compliance with the inventory PICCS : YES. On the inventory, or in compliance with the inventory IECSC : YES. On the inventory, or in compliance with the inventory

For explanation of abbreviations, see section 16.

TSCA list

TSCA 5(a)(2) : No substances are subject to a Significant New Use Rule. TSCA 12(b) : No substances are subject to TSCA 12(b) export notification

requirements.

EPCRA - Emergency Planning and Community Right-to-Know

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 311/312 Hazards : Fire Hazard

Reactivity Hazard Acute Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

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

This product does not contain any chemicals subject to disclosure and 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 does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

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California Prop. 65

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

16. OTHER INFORMATION

Full text of H-Statements

H227 : Combustible liquid. H242 : Heating may cause a fire. H315 : Causes skin irritation.

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; 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; 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; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals: SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; 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; WHMIS - Workplace Hazardous Materials Information System

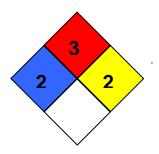
Further information

HMIS Classification : Health Hazard: 2

Flammability: 3 Physical hazards: 2

NFPA Classification : Health Hazard: 2

Fire Hazard: 3 Reactivity Hazard: 2



Notification status explanation

REACH 1907/2006 (EU)

TSCA United States TSCA Inventory

DSL Canadian Domestic Substances List (DSL)

AICS Australia Inventory of Chemical Substances (AICS)
NZIOC New Zealand. Inventory of Chemical Substances

ENCS Japan. ENCS - Existing and New Chemical Substances Inventory

ISHL Japan. ISHL - Inventory of Chemical Substances
KECI Korea. Korean Existing Chemicals Inventory (KECI)

PICCS Philippines Inventory of Chemicals and Chemical Substances

(PICCS)

IECSC China. Inventory of Existing Chemical Substances in China (IECSC)

Further information

Revision Date 08/25/2016

The information in this material safety data sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. The user must determine the appropriate measures that need to be implemented for the use and handling of this product in the c ontext of the user's operations and use of this product. The information contained herein supersedes all previously issued bulletins on the subject matter covered. If the date on this document is more than three years old, call to make certain that this sheet is current. No warranty is made as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. User must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes, including mixing with other products. Nothing contained herein shall be construed as granting or extending any license under any patent.

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. 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 a 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.