according to Regulation (EC) No. 1907/2006



OLIO PROTETTIVO PER ACCIAIO INOX 400ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 29.03.2016

 1.1
 16.06.2016
 587826-00002
 Date of first issue: 29.03.2016

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : OLIO PROTETTIVO PER ACCIAIO INOX 400ML

Product code : 0893 121 0

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

Use of the Sub- : Care product

stance/Mixture

1.3 Details of the supplier of the safety data sheet

Company : Würth S.r.l

Via Stazione

39044 EGNA (BZ)

Telephone : +39 0471 828 111

Telefax : +39 0471 828 600

E-mail address of person

responsible for the SDS

: prodsafe@wuerth.com

1.4 Emergency telephone number

Centro Antiveleni di Bergamo (CAV Ospedali Riuniti): 800 883300 Centro Antiveleni di

Roma (CAV Policlinico Gemelli): +39 06 3054343

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Aerosols, Category 1 H222: Extremely flammable aerosol.

H229: Pressurised container: May burst if heated.

Specific target organ toxicity - single ex-

posure, Category 3

H336: May cause drowsiness or dizziness.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms





Signal word : Danger

according to Regulation (EC) No. 1907/2006



OLIO PROTETTIVO PER ACCIAIO INOX 400ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 29.03.2016

 1.1
 16.06.2016
 587826-00002
 Date of first issue: 29.03.2016

Hazard statements : H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

H336 May cause drowsiness or dizziness.

Supplemental Hazard

Statements

EUH066

Repeated exposure may cause skin dryness or

cracking.

Precautionary statements : Prevention:

P210 Keep away from heat, hot surfaces, sparks, open

flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P261 Avoid breathing spray.

Response:

P304 + P340 + P312 IF INHALED: Remove person to fresh

air and keep comfortable for breathing. Call a POISON

CENTER/doctor if you feel unwell.

Storage:

P410 + P412 Protect from sunlight. Do not expose to tem-

peratures exceeding 50 °C/ 122 °F.

Hazardous components which must be listed on the label:

Isobutane

2.3 Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

| Chemical name | CAS-No. | Classification | Concentration |
|------------------------------------|---------------------|-------------------|---------------|
| | EC-No. | | (% w/w) |
| | Registration number | | |
| Hydrocarbons, C12-C15, n- | 64742-47-8 | Asp. Tox. 1; H304 | >= 30 - < 50 |
| alkanes, isoalkanes, cyclics, < 2% | 265-149-8 | | |
| aromatics | 01-2119453414-43 | | |
| | | | |

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : In the case of accident or if you feel unwell, seek medical ad-

vice immediately.

When symptoms persist or in all cases of doubt seek medical

according to Regulation (EC) No. 1907/2006



OLIO PROTETTIVO PER ACCIAIO INOX 400ML

Version Revision Date: SDS Number: Date of last issue: 29.03.2016 1.1 16.06.2016 587826-00002 Date of first issue: 29.03.2016

advice.

Protection of first-aiders : First Aid responders should pay attention to self-protection,

and use the recommended personal protective equipment

when the potential for exposure exists.

If inhaled : If inhaled, remove to fresh air.

Get medical attention if symptoms occur.

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

Get medical attention if symptoms occur.

In case of eye contact : Flush eyes with water as a precaution.

Get medical attention if irritation develops and persists.

If swallowed, DO NOT induce vomiting.

Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

4.2 Most important symptoms and effects, both acute and delayed

Risks : May cause drowsiness or dizziness.

Repeated exposure may cause skin dryness or cracking.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water spray

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

: Flash back possible over considerable distance. Vapours may form explosive mixtures with air.

Exposure to combustion products may be a hazard to health.

If the temperature rises there is danger of the vessels bursting

due to the high vapor pressure.

Hazardous combustion prod: :

ucts

Carbon oxides

5.3 Advice for firefighters

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

according to Regulation (EC) No. 1907/2006



OLIO PROTETTIVO PER ACCIAIO INOX 400ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 29.03.2016

 1.1
 16.06.2016
 587826-00002
 Date of first issue: 29.03.2016

for firefighters

Use personal protective equipment.

Specific extinguishing meth-

ahc

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

SO.

Evacuate area.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Remove all sources of ignition.

Use personal protective equipment.

Follow safe handling advice and personal protective equip-

ment recommendations.

6.2 Environmental precautions

Environmental precautions : Discharge into the environment must be avoided.

Prevent further leakage or spillage if safe to do so.

Prevent spreading over a wide area (e.g. by containment or oil

barriers).

Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Non-sparking tools should be used.

Soak up with inert absorbent material.

Suppress (knock down) gases/vapours/mists with a water

spray jet.

For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absor-

bent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to deter-

mine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

according to Regulation (EC) No. 1907/2006



OLIO PROTETTIVO PER ACCIAIO INOX 400ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 29.03.2016

 1.1
 16.06.2016
 587826-00002
 Date of first issue: 29.03.2016

Technical measures : See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : Use with local exhaust ventilation.

Use only in an area equipped with explosion proof exhaust

ventilation.

Advice on safe handling : Do not get on skin or clothing.

Do not breathe vapours or spray mist.

Do not swallow.

Avoid contact with eyes.

Handle in accordance with good industrial hygiene and safety

practice.

Keep away from heat and sources of ignition.

Take precautionary measures against static discharges.

Take care to prevent spills, waste and minimize release to the

environment.

Hygiene measures : Ensure that eye flushing systems and safety showers are

located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: Keep in properly labelled containers. Store locked up. Keep in a cool, well-ventilated place. Store in accordance with the

particular national regulations. Do not pierce or burn, even

after use. Keep cool. Protect from sunlight.

Advice on common storage : Do not store with the following product types:

Self-reactive substances and mixtures

Organic peroxides Oxidizing agents Flammable solids Pyrophoric liquids Pyrophoric solids

Self-heating substances and mixtures

Substances and mixtures, which in contact with water, emit

flammable gases

Explosives

Recommended storage tem- :

perature

< 50 °C

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

according to Regulation (EC) No. 1907/2006



OLIO PROTETTIVO PER ACCIAIO INOX 400ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 29.03.2016

 1.1
 16.06.2016
 587826-00002
 Date of first issue: 29.03.2016

| Components | CAS-No. | Value type (Form | Control parameters | Basis |
|-------------------|-----------|------------------|--------------------|-------|
| | | of exposure) | | |
| Isobutane | 75-28-5 | STEL | 1.000 ppm | ACGIH |
| White mineral oil | 8042-47-5 | TWA (Inhalable | 5 mg/m3 | ACGIH |
| (petroleum) | | fraction) | _ | |
| Butane | 106-97-8 | STEL | 1.000 ppm | ACGIH |

8.2 Exposure controls

Engineering measures

Minimize workplace exposure concentrations.

Use only in an area equipped with explosion proof exhaust ventilation.

Use with local exhaust ventilation.

Personal protective equipment

Eye protection : Wear the following personal protective equipment:

Safety glasses

Hand protection

Material : Nitrile rubber
Break through time : 480 min
Glove thickness : 0,45 mm

Remarks : Choose gloves to protect hands against chemicals depending

on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Skin and body protection : Wear the following personal protective equipment:

Flame retardant antistatic protective clothing.

Respiratory protection : Use respiratory protection unless adequate local exhaust ven-

tilation is provided or exposure assessment demonstrates that

exposures are within recommended exposure guidelines.

Filter type : Self-contained breathing apparatus

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : Aerosol containing a liquefied gas

Propellant : Isobutane, Propane, Butane

Colour : colourless

Odour : solvent-like

Odour Threshold : No data available

according to Regulation (EC) No. 1907/2006



OLIO PROTETTIVO PER ACCIAIO INOX 400ML

Version Revision Date: SDS Number: Date of last issue: 29.03.2016
1.1 16.06.2016 587826-00002 Date of first issue: 29.03.2016

pH : No data available

Melting point/freezing point : No data available

Initial boiling point and boiling

range

-42 °C

Flash point : 102 °C

Evaporation rate : Not applicable

Flammability (solid, gas) : Extremely flammable aerosol.

Upper explosion limit : 9,4 %(V)

Lower explosion limit : 0,5 %(V)

Vapour pressure : Not applicable

Relative vapour density : Not applicable

Density : 0,816 g/cm3 (20 °C)

Solubility(ies)

Water solubility : insoluble

Partition coefficient: n-

octanol/water

Not applicable

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, kinematic : No data available

Explosive properties : Not explosive

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

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Not classified as a reactivity hazard.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Extremely flammable aerosol.

according to Regulation (EC) No. 1907/2006



OLIO PROTETTIVO PER ACCIAIO INOX 400ML

Version Revision Date: SDS Number: Date of last issue: 29.03.2016
1.1 16.06.2016 587826-00002 Date of first issue: 29.03.2016

Vapours may form explosive mixture with air.

If the temperature rises there is danger of the vessels bursting

due to the high vapor pressure.

Can react with strong oxidizing agents.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of:

exposure

Inhalation Skin contact Ingestion

Eye contact

Acute toxicity

Not classified based on available information.

Components:

Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg

Remarks: Based on data from similar materials

Acute inhalation toxicity : LC50 (Rat): > 5,6 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rabbit): > 2.000 mg/kg

Remarks: Based on data from similar materials

Skin corrosion/irritation

Repeated exposure may cause skin dryness or cracking.

Components:

Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Species: Rabbit

Result: No skin irritation

Remarks: Based on data from similar materials

Assessment: Repeated exposure may cause skin dryness or cracking.

according to Regulation (EC) No. 1907/2006



OLIO PROTETTIVO PER ACCIAIO INOX 400ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 29.03.2016

 1.1
 16.06.2016
 587826-00002
 Date of first issue: 29.03.2016

Serious eye damage/eye irritation

Not classified based on available information.

Components:

Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Species: Rabbit

Result: No eye irritation

Remarks: Based on data from similar materials

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Test Type: Maximisation Test Exposure routes: Skin contact

Species: Guinea pig Result: negative

Remarks: Based on data from similar materials

Germ cell mutagenicity

Not classified based on available information.

Components:

Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Method: OECD Test Guideline 471

Result: negative

Remarks: Based on data from similar materials

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

May cause drowsiness or dizziness.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

according to Regulation (EC) No. 1907/2006



OLIO PROTETTIVO PER ACCIAIO INOX 400ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 29.03.2016

 1.1
 16.06.2016
 587826-00002
 Date of first issue: 29.03.2016

Components:

Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): > 1.000 mg/l

Exposure time: 96 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

EL50 (Daphnia magna (Water flea)): > 1.000 mg/l

Exposure time: 48 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

Toxicity to algae : EL50 (Pseudokirchneriella subcapitata (green algae)): > 1.000

mg/l

Exposure time: 72 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

NOELR (Pseudokirchneriella subcapitata (green algae)):

1.000 mg/l

Exposure time: 72 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

12.2 Persistence and degradability

Components:

Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 67,6 % Exposure time: 28 d

Method: OECD Test Guideline 301F

Remarks: Based on data from similar materials

12.3 Bioaccumulative potential

No data available

according to Regulation (EC) No. 1907/2006



OLIO PROTETTIVO PER ACCIAIO INOX 400ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 29.03.2016

 1.1
 16.06.2016
 587826-00002
 Date of first issue: 29.03.2016

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations.

According to the European Waste Catalogue, Waste Codes

are not product specific, but application specific.

Waste codes should be assigned by the user, preferably in

discussion with the waste disposal authorities.

Contaminated packaging : Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

Empty containers retain residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death. If not otherwise specified: Dispose of as unused product. Please ensure aerosol cans are sprayed completely empty

(including propellant)

Waste Code : The following Waste Codes are only suggestions:

used product

160504, gases in pressure containers (including halons) con-

taining dangerous substances

unused product

160504, gases in pressure containers (including halons) con-

taining dangerous substances

uncleaned packagings 150104, metallic packaging

SECTION 14: Transport information

14.1 UN number

ADN : UN 1950
ADR : UN 1950
RID : UN 1950
IMDG : UN 1950
IATA : UN 1950

according to Regulation (EC) No. 1907/2006



OLIO PROTETTIVO PER ACCIAIO INOX 400ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 29.03.2016

 1.1
 16.06.2016
 587826-00002
 Date of first issue: 29.03.2016

14.2 UN proper shipping name

ADN : AEROSOLS
ADR : AEROSOLS
RID : AEROSOLS
IMDG : AEROSOLS

IATA : Aerosols, flammable

14.3 Transport hazard class(es)

ADN : 2.1
ADR : 2.1
RID : 2.1
IMDG : 2.1
IATA : 2.1

14.4 Packing group

ADN

Packing group : Not assigned by regulation

Classification Code : 5F Labels : 2.1

ADR

Packing group : Not assigned by regulation

Classification Code : 5F Labels : 2.1 Tunnel restriction code : (D)

RID

Packing group : Not assigned by regulation

Classification Code : 5F Hazard Identification Number : 23 Labels : 2.1

IMDG

Packing group : Not assigned by regulation

Labels : 2.1 EmS Code : F-D, S-U

IATA (Cargo)

Packing instruction (cargo : 203

aircraft)

Packing instruction (LQ) : Y203

Packing group : Not assigned by regulation

Labels : Flammable Gas

IATA (Passenger)

Packing instruction (passen- : 203

ger aircraft)

Packing instruction (LQ) : Y203

Packing group : Not assigned by regulation

Labels : Flammable Gas

according to Regulation (EC) No. 1907/2006



OLIO PROTETTIVO PER ACCIAIO INOX 400ML

Version **Revision Date:** SDS Number: Date of last issue: 29.03.2016 16.06.2016 587826-00002 Date of first issue: 29.03.2016 1.1

14.5 Environmental hazards

Environmentally hazardous no

Environmentally hazardous no

Environmentally hazardous

IMDG

Marine pollutant no

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Remarks Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import

of dangerous chemicals

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

plete the ozone layer

Regulation (EC) No 1005/2009 on substances that de-

Regulation (EC) No 850/2004 on persistent organic pol-

lutants

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of

major-accident hazards involving dangerous substances.

Quantity 1

Quantity 2

FLAMMABLE AEROSOLS P3a 150 t 500 t

34 Petroleum products: (a) 2.500 t

Not applicable

Not applicable

Not applicable

Not applicable

25.000 t

gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams),(d)

heavy fuel oils (e) alternative fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the

13 / 15

products referred to in

according to Regulation (EC) No. 1907/2006



OLIO PROTETTIVO PER ACCIAIO INOX 400ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 29.03.2016

 1.1
 16.06.2016
 587826-00002
 Date of first issue: 29.03.2016

points (a) to (d)

18 Liquefied extremely flam- 50 t 200 t

mable gases (including LPG) and natural gas

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial

emissions (integrated pollution prevention and control)
Volatile organic compounds (VOC) content: 50,18 %, 610 g/l

Other regulations : Take note of Directive 94/33/EC on the protection of young

people at work or stricter national regulations, where applica-

ble.

Legislative Decree February 3, 1997, 52 (Implementation of Directive 92/32/EEC concerning the classification, packaging and labeling of dangerous substances.) and subsequent

amendments

Legislative Decree March 14, 2003, 65 (Implementation of Directives 1999/45/EC and 2001/60/EC relating to the classification, packaging and labeling of dangerous preparation) and

subsequent amendments

Legislative Decree April 9,2008, 81 (Implementation of Article 1 of the Law of 3 August 2007, n. 123, concerning the protection of health and safety in the workplace.) and subsequent

amendments

Legislative Decree April 3, 2006, n.152, (Environmental

standards) and subsequent amendments

Legislative Decree February 6, 2009, 21 (Regulations for the execution of the provisions laid down in Regulation (EC) no.

648/2004 on detergents)

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Full text of H-Statements

H304 : May be fatal if swallowed and enters airways.

Full text of other abbreviations

Asp. Tox. : Aspiration hazard

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

ACGIH / TWA : 8-hour, time-weighted average ACGIH / STEL : Short-term exposure limit

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Cana-

according to Regulation (EC) No. 1907/2006



OLIO PROTETTIVO PER ACCIAIO INOX 400ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 29.03.2016

 1.1
 16.06.2016
 587826-00002
 Date of first issue: 29.03.2016

da); ECHA - European Chemicals Agency; EC-Number - European Community number; 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; 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Sources of key data used to compile the Safety Data Sheet

Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

cy, http://echa.europa.eu/

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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