

Safety Data Sheet

Identification of the substance/mixture and of the company

Product Name Reference Material of Sulfur in Fuel Oil Certified by The Japan

Petroleum Institute, Sulfur Content 0mass% level

Product Code 3200044015

· SDS No 412

SDS Drawing No. | 12005344000

· Identified Uses An analytical standard for determining sulfur in fuel oil

· Company Information HORIBA, Ltd.

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SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

Revision number: 8 Revision date: 07/23/2015

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

1.1 Product identifiers

Reference Material of Sulfur in Fuel Oil Certified by The Japan Petroleum Institute, Sulfur Content 0mass% Product name:

level

S0316 Product code:

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

Identified uses: Reagents

1.3 Details of the supplier of the safety data sheet

Supplier:

TCI EUROPE N.V. Boerenveldseweg 6 Haven 1063 B-2070 Zwijndrecht

Telephone: +32(0)3 735 07 00 E-mail: sales-eu@tcichemicals.com

+32(0)70 245 245 1.4 Emergency telephone number:

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

PHYSICAL HAZARDS

Flammable liquids

HEALTH HAZARDS

Aspiration hazard

ENVIRONMENTAL HAZARDS

Category 3

Category 1 Not classified

2.2 Label elements

Pictograms or hazard symbols





Signal word

Hazard statements

Danger

H226-Flammable liquid and vapour.

H304-May be fatal if swallowed and enters airways.

Precautionary statements

[Prevention]

P210-Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P233-Keep container tightly closed.

P241+P242+P243-Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking

tools. Take precautionary measures against ignition by the static discharge and the spark.

P280-Wear protective gloves/eye protection/face protection.

P301+P310-IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. [Response]

P331-Do NOT induce vomiting

P303+P361+P353-IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse

skin with water/shower.

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

P405-Store locked up.

[Disposal] P501-Dispose of contents/container through a waste management company authorized by the local government

SECTION 3: Composition/information on ingredients

3.1 Substances

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SECTION 3: Composition/information on ingredients

Reference Material of Sulfur in Fuel Oil Certified by The Japan Petroleum Institute, Sulfur Content Components:

0mass% level

Percent: **CAS Number:** NA **Chemical Formula:**

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical

advice/attention if you feel unwell.

Skin contact: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or

rash occurs: Get medical advice/attention.

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Eye contact:

Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.

Protection of first-aiders: A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

4.2 Most important symptoms and effects, both acute and delayed

Headache, Dizziness, Vomiting

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Dry chemical, foam, water spray, carbon dioxide. Suitable extinguishing media:

5.2 Special hazards arising from the

substance or mixture

Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume. No

information available

5.3 Advice for firefighters

Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Keep containers cool by spraying with water. Eliminate all ignition sources if safe to do

so. When extinguishing fire, be sure to wear personal protective equipment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Use extra personal protective equipment (self-contained breathing apparatus). Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled

around the leakage area by roping off, etc.

6.2 Environmental precautions

Prevent product from entering drains.

6.3 Methods and materials for containment and cleaning up

Absorb spilled material in dry sand or inert absorbent before recovering it into an airtight container. In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Remove all sources of ignition. Fireextinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof

equipment.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated. Avoid contact with skin, eyes and clothing. Shake well before use.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a cool and dark place. Store locked up. Store away from incompatible materials such as oxidizing agents.

No further relevant information available. 7.3 Specific end use(s)

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters No data available

8.2 Exposure controls Install a closed system or local exhaust. Also install safety shower and eye bath.

Respiratory protection: Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc.

Use respirators approved under appropriate government standards and follow local and national

regulations.

Hand protection: Impervious gloves.

Eye protection: Safety goggles. A face-shield, if the situation requires.

Skin and body protection: Impervious protective clothing. Protective boots, if the situation requires.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state (20°C): Liquid

Odour:

pH:

No data available

42.5°C

Evaporation rate(Butyl Acetate=1): No data available **Flammability(solid, gas):** No data available

Flammability or explosive limits:

Lower: No data available
Upper: No data available
Vapour pressure: No data available.
Vapour density: No data available
Relative density: 0.7363g/cm³ (15°C)

Solubility(ies):

[Water] Insoluble
[Other solvents] No data available
Partition coefficient: noctanol/water:
Autoignition temperature: No data available
Decomposition temperature: No data available
Dynamic Viscosity: No data available
Kinematic viscosity: 1.061 mm²/s (30°C)

9.2 Other safety information Information on the description concerns Lot.No.150042. The physical properties value etc. might change

greatly according to "Lot.No." and note it, please.

SECTION 10: Stability and reactivity

10.1 Reactivity No data available

10.2 Chemical stability Stable under proper conditions.

10.3 Possibility of hazardous reactions No special reactivity has been reported.

10.4 Conditions to avoid Spark, Open flame, Static discharge

10.5 Incompatible materials Oxidizing agents, Acids, Bases, Halogens

10.6 Hazardous decomposition products No information available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute Toxicity:
Skin corrosion/irritation:
Serious eye damage/irritation:
Respiratory or skin sensitization:
Germ cell mutagenicity:
No data available
No data available
No data available

IARC = No data available
NTP = No data available

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SECTION 11: Toxicological information

Reproductive toxicity: No data available STOT-single exposure: No data available STOT-repeated exposure: No data available Aspiration hazard: No data available

SECTION 12: Ecological information

12.1 Toxicity

Fish:
Crustacea:
Algae:
No data available
No data available
No data available
No data available

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12.3 Bioaccumulative potential No data available

12.4 Mobility in soil

Log Pow: No data available
Soil adsorption (Koc): No data available
Henry's Law No data available

constant(PaM3/mol):

12.5 Results of PBT and vPvB assessment

PBT: Not applicable vPvB: Not applicable

SECTION 13: Disposal considerations

13.1 Waste treatment methods

12.6 Other adverse effects

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

SECTION 14: Transport information

14.1 UN number 1268

14.2 UN proper shipping name

ADR/RID Petroleum distillates, n.o.s. IMDG/IMO Petroleum distillates, n.o.s. ICAO/IATA Petroleum distillates, n.o.s.

14.3 Transport hazard class(es)

ADR/RID 3: Flammable liquid. IMDG/IMO 3: Flammable liquid. ICAO/IATA 3: Flammable liquid.

14.4 Packaging group

ADR/RID III
IMDG/IMO III
ICAO/IATA III

14.5 Environmental hazards

Marine pollutant -

14.6 Special precautions for userNo data available

SECTION 15: Regulatory information

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

No data available

Substance of Very High Concern (SVHC) according to the

REACH Regulations (EC) No.1907/2006

Not listed

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

Prepared by: TCI EUROPE N.V. Issue date: 07/23/2015

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This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority.

The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

End of Safety Data Sheet

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