

SAFETY DATA SHEET

according to the Globally Harmonized System and US regulation

PETROS

Version 1 Revision Date 11/23/2017 Print Date 07/24/2018 US / Z8

1. IDENTIFICATION

Product name : PETRO S

Product Use Description : Specific use(s): Surfactant

Company : Akzo Nobel Surface Chemistry LLC

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2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	powder
Color	tan
Odor	stinging
Hazard Summary	Risk of dust explosion.

GHS Classification

Skin irritation, Category 2

Serious eye damage, Category 1 Acute aquatic toxicity, Category 3

GHS label elements

Hazard pictograms :

Signal Word : Danger

Hazard Statements : H315 Causes skin irritation.

H318 Causes serious eye damage. H402 Harmful to aquatic life.

'

Precautionary Statements : **Prevention:**

P264 Wash skin thoroughly after handling. P273 Avoid release to the environment.

P280 Wear protective gloves/ eye protection/ face protection. **Response:**

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse. **Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

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 component of this product present at levels greater than or

equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP : No component of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated

carcinogen by NTP.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Hazardous ingredients

Chemical name	CAS-No.	Classification	Concentration [% W/W]
Sodium alkylnaphthalenesulfonate		Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Acute 3; H402	>= 90 - < 100

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

4. FIRST AID MEASURES

General advice : Immediate medical attention is required.

Move out of dangerous area.

Show this material safety data sheet to the doctor in

attendance.

Inhalation : Remove to fresh air.

Keep patient warm and at rest. Rinse nose and mouth with water.

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.

Get medical attention immediately. Continue to rinse during

transport of patient. Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

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

Never give anything by mouth to an unconscious person.

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.

Causes serious eye damage.

Treatment : Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Specific hazards during fire fighting / Specific hazards arising from the chemical

: Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of

dust, e.g. on floors and ledges.

Combustion products : No hazardous combustion products are known

Special protective equipment

for fire-fighters

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

Further information : Standard procedure for chemical fires.

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

: Use personal protective equipment.

Avoid dust formation.

Avoid breathing dust.

Ensure adequate ventilation.

Emergency measures on

accidental release

Evacuate personnel to safe areas.

Only qualified personnel equipped with suitable protective

equipment may intervene.

Prevent unauthorized persons entering the zone.

Environmental precautions : Try to prevent the material from entering drains or water

courses.

Methods for cleaning up / Methods for containment

: Pick up and arrange disposal without creating dust.

Sweep up and shovel.

Keep in suitable, closed containers for disposal.

Reference to other sections : For disposal considerations see section 13.

For personal protection see section 8.

7. HANDLING AND STORAGE

Handling

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

Avoid creating dust.

Avoid contact with skin, eyes and clothing.

Keep away from heat/sparks/open flames/hot surfaces. No

smoking.

Smoking, eating and drinking should be prohibited in the

application area.

Dispose of rinse water in accordance with local and national

regulations.

Advice on protection against

fire and explosion

Provide appropriate exhaust ventilation at places where dust

is formed.

No sparking tools should be used.

Storage

Requirements for storage : Keep in a dry place.

areas and containers

Store at room temperature in the original container.

Keep container tightly closed.

Other data : No decomposition if stored and applied as directed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Ingredients	CAS-No.	Value	Control parameters	Update	Basis	Form of exposure
Dust		TWA	50 Million particles per cubic foot	2011-07-01	OSHA Z-3	total dust
	Further information	d: A liste sam 1.	a: Based on impinger samples counted by light-field techniques. d: All inert or nuisance dusts, w hether mineral, inorganic, or organic, not listed specifically by substance name are covered by this limit, w hich is the same as the Particulates Not Otherw ise Regulated (PNOR) limit in Table Z-1. mppcf X 35.3 = million particles per cubic meter = particles per c.c			
Dust		TWÁ	15 mg/m3	2011-07-01	OSHA Z-3	total dust
	Further information	liste	il inert or nuisance dus d specifically by subst e as the Particulates N	ance name are co	vered by this limi	t, w hich is the
Dust		TWA	5 mg/m3	2011-07-01	OSHA Z-3	respirable fraction
	Further information	liste	d: All inert or nuisance dusts, w hether mineral, inorganic, or organic, not listed specifically by substance name are covered by this limit, w hich is the same as the Particulates Not Otherw ise Regulated (PNOR) limit in Table Z 1.			
Dust		TWA	15 Million particles per cubic foot	2011-07-01	OSHA Z-3	respirable fraction
	Further information	d: A liste sam 1.	ased on impinger sam Il inert or nuisance dus d specifically by subst e as the Particulates N cf X 35.3 = million pari	its, w hether miner ance name are co lot Otherw ise Rec	al, inorganic, or overed by this limit gulated (PNOR)	organic, not t, which is the imit in Table Z-

ACGIH: American Conference of Governmental Industrial Hygienists

BEI: Biological Exposure Index

MAC: Maximum Allowable Concentration

NIOSH: National Institute for Occupational Safety and Health

OEL: Occupational exposure limit.

STEL: Short term exposure limit TWA: Time Weighted Average

Appropriate engineering controls

Provide appropriate exhaust ventilation at places where dust is formed.

Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection : Tightly fitting safety goggles

Hand protection : Glove material: Neoprene

: Glove material: Nitrile rubber

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Skin and body protection : Protective suit

Respiratory protection : Half mask with a particle filter P2 (EN 143)

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

practice.

Wash hands before breaks and at the end of workday.

Environmental exposure controls

General advice : Try to prevent the material from entering drains or water

courses.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : powder

Color : tan

Odor : stinging

Odor Threshold : No data available

Safety data

pH : 7.5 - 10 at 50 % solution

Melting point/range : No data available

Boiling point/boiling range : Decomposes

Flash point : > 100 °C

Method: Pensky-Martens closed cup

Ignition temperature : > 100 °C

Evaporation rate : No data available

Flammability (solid, gas) : The product is not flammable.

Flammability (liquids) : Not applicable

Lower explosion limit : Not applicable

Upper explosion limit : Not applicable

Vapor pressure : Not applicable

Relative vapor density : Not applicable

Relative density : No data available

Water solubility : soluble

Solubility in other solvents : Acetone

Methanol

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soluble

Partition coefficient: n-

octanol/water

: No data available

Autoignition temperature : No data available

: No data available Decomposition temperature

: at 20 °C Viscosity, dynamic

Not applicable

: at 20 °C Viscosity, kinematic

Not applicable

Explosive properties : Not explosive

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

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 : None known.

Materials to avoid : None known.

Hazardous decomposition

products

: No hazardous decomposition products are known.

Thermal decomposition : No data available

Reactivity Stable under normal conditions.

Chemical stability Stable under recommended storage conditions.

Hazardous reactions : Dust may form explosive mixture in air.

11. TOXICOLOGICAL INFORMATION

PRODUCT INFORMATION:

Hazard Summary

Acute toxicity Not classified based on available information.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory or skin

information.

sensitization

Skin sensitization: Not classified based on available

Respiratory sensitization: Not classified based on available

information.

Not classified based on available information. Germ cell mutagenicity

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Carcinogenicity : Not classified based on available information.

Reproductive toxicity : Not classified based on available information.

STOT-single exposure : Not classified based on available information.

STOT-repeated exposure : Not classified based on available information.

Aspiration hazard : Not classified based on available information.

Potential Health Effects

Inhalation : Thermal decomposition can lead to release of irritating gases

and vapors.

Product dust may be irritating to respiratory system.

Skin : Product dust may be irritating to skin.

Causes skin irritation.

Eyes : Causes serious eye damage.

Ingestion : May be harmful if swallowed.

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.

Toxicology Assessment

Further information : No further data available.

Test result

Acute oral toxicity : Acute toxicity estimate: 2,551 mg/kg

Method: Calculation method

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 component of this product present at levels greater than or

equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP : No component of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated

carcinogen by NTP.

TOXICOLOGY DATA FOR THE INGREDIENTS:

Test result

Component: Sodium alkylnaphthalenesulfonate

Acute oral toxicity : LD50: > 2,000 - 5,000 mg/kg

Species: Rat

Method: OECD Test Guideline 401

Skin irritation : Species: Rabbit

Result: Irritating to skin.

Method: OECD Test Guideline 404

Eye irritation : Result: Risk of serious damage to eyes.

Method: OECD Test Guideline 437

Sensitization : Buehler Test

Species: Guinea pig

Result: Does not cause skin sensitization. Method: OECD Test Guideline 406

12. ECOLOGICAL INFORMATION

PRODUCT INFORMATION:

Ecotoxicology Assessment

Additional ecological

information

: An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Harmful to aquatic life.

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).

INGREDIENTS:

Ecotoxicology Assessment

Component: Sodium alkylnaphthalenesulfonate

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

Test result

Component: Sodium alkylnaphthalenesulfonate

Ecotoxicity effects

Toxicity to fish : LC50: > 10 - 100 mg/l

Exposure time: 96 h

Species: Danio rerio (zebra fish) Method: OECD Test Guideline 203

Toxicity to daphnia and other

aquatic invertebrates

: EC50: > 100 mg/l Exposure time: 48 h

> Species: Daphnia magna (Water flea) Method: OECD Test Guideline 202

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Toxicity to daphnia and other : EC10: > 1 - 10 mg/l

aquatic invertebrates (Chronic toxicity)

Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

Elimination information (persistence and degradability)

Bioaccumulation : Bioaccumulation is unlikely.

Mobility : No data available

Biodegradability : Result: Inherently biodegradable.

Method: OECD Test Guideline 301D

Further information on ecology

Biochemical Oxygen

Demand (BOD)

: No data available

13. DISPOSAL CONSIDERATIONS

Product The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

Hazardous waste

Dispose of contents/container in accordance with local

regulation.

Waste must be disposed of in accordance with federal, state

and local environmental control regulations.

: Empty remaining contents. Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

International Regulations

ADR

Not regulated as a dangerous good

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

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

Not applicable for product as supplied.

Further information for transport

Not classified as dangerous in the meaning of transport regulations.

Domestic regulation

49 CFR

Not regulated as a dangerous good

TDG

Not regulated as a dangerous good

NOM-002-SCT

Not regulated as a dangerous good

15. REGULATORY INFORMATION

Notification status

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. Not in compliance with the inventory

ENCS : YES. On the inventory, or 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 : NO. Not in compliance with the inventory

IECSC : YES. On the inventory, or in compliance with the inventory TCSI : YES. On the inventory, or in compliance with the inventory

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

TSCA Inventory or in compliance with a TSCA Inventory exemption.

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

Ingredients	CAS-No.	Component RQ (lbs)
Naphthalene	91-20-3	100 lbs

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

SARA 311/312 Hazards : Skin corrosion or irritation

Serious eye damage or eye irritation

SARA 302 : This material does not contain any components with a section

302 EHS TPQ.

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

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Naphthalene 91-20-3 0 - 0.1 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Naphthalene 91-20-3 0 - 0.1 %

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



WARNING:

This product can expose you to chemicals including Naphthalene, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

16. OTHER INFORMATION

Full text of H-Statements

H315 : Causes skin irritation.

H318 : Causes serious eye damage. H402 : Harmful to aquatic life.

Full text of other abbreviations

OSHA Z-3 : USA. Occupational Exposure Limits (OSHA) - Table Z-3

Mineral Dusts

OSHA Z-3 / TWA : 8-hour time weighted average

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

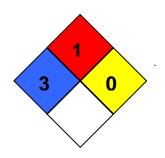
Further information

HMIS Classification : Health Hazard: 3

Flammability: 1 Physical hazards: 0

NFPA Classification : Health Hazard: 3

Fire Hazard: 1 Reactivity Hazard: 0



Notification status explanation

REACH 1907/2006 (EU)

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)

TCSI Taiwan Chemical Substance Inventory (TCSI)

TSCA United States TSCA Inventory

Further information

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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.

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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.