Version: 3.0

Effective Date: Apr-16-2019 Previous Date: Jan-19-2018



SAFETY DATA SHEET NOVUS* CE2655

1. Identification

Product identifier NOVUS CE2655

Other means of identification None.

Recommended use Flocculant

Recommended restrictions None known.

Company/undertaking identification

SUEZ WTS USA, Inc. 4636 Somerton Road Trevose, PA 19053

T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

Specific target organ toxicity, single exposure Category 3 narcotic effects

OSHA defined hazards

Label elements



Not classified.

Signal word Warning

Hazard statement Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause

drowsiness or dizziness.

Precautionary statement

Prevention Avoid breathing mist or vapor. Use only outdoors or in a well-ventilated area. Wash thoroughly

after handling. Wear protective gloves. Wear eye/face protection.

Response IF ON SKIN: Wash with plenty of soap and water. If inhaled: Remove person to fresh air and keep

comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER or doctor/physician if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before

reuse

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

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

None.

3. Composition/information on ingredients

Mixtures

Components	CAS#	Percent
Distillates (petroleum), hydrotreated light	64742-47-8	20 - 40
ALCOHOLS,C11-C14-ISO,C13-RICH,ETHOXYLATED	78330-21-9	1 - 2.5

Composition comments

Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON

CENTER or doctor/physician if you feel unwell.

Skin contact Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin

irritation occurs: Get medical advice/attention.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Keep eyelids apart.

Ingestion Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs,

keep head low so that stomach content doesn't get into the lungs. Get medical attention if

symptoms occur.

Most important

symptoms/effects, acute and

delayed

Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. May cause respiratory irritation. May cause redness and pain.

Indication of immediate medical attention and special treatment needed

treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

Water fog. Alcohol resistant foam. Dry chemical powder. Dry chemicals. Carbon dioxide (CO2).

Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to

Do not use water jet as an extinguisher, as this will spread the fire.

protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing

media

During fire, gases hazardous to health may be formed.

Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters

Fire fighting equipment/instructions

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers / tanks with water spray.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up

Use water spray to reduce vapors or divert vapor cloud drift. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Following product recovery, flush area with water.

Never return spills to original containers for re-use.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Avoid contact with eyes. Avoid contact with skin. Avoid prolonged or repeated contact with skin. Avoid contact with clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

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Conditions for safe storage, including any incompatibilities Store locked up. Keep containers tightly closed in a cool, well-ventilated place.

8. Exposure controls/personal protection

Occupational exposure limits

US. NIOSH: Pocket Guide to Chemical Hazards

Value Components Type Distillates (petroleum), **TWA** 100 mg/m3

hydrotreated light (CAS

64742-47-8)

No biological exposure limits noted for the ingredient(s). **Biological limit values**

Appropriate engineering

controls

Eye wash facilities and emergency shower must be available when handling this product. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Splash proof chemical goggles.

Skin protection

Chemical resistant gloves. The choice of an appropriate glove does not only depend on its material **Hand protection**

but also on other quality features and is different from one producer to the other. Glove selection

must take into account any solvents and other hazards present.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

If engineering controls do not maintain airborne concentrations below recommended exposure Respiratory protection

> limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective

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equipment to remove contaminants.

9. Physical and chemical properties

Appearance

White to off-white Color

Physical state **Emulsion**

Odor Slight hydrocarbon

Not available. **Odor threshold**

4.1 (0.5% Solution) pH in aqueous solution

< 23 °F (< -5 °C) Melting point/freezing point Initial boiling point and boiling 219 °F (104 °C)

range

Flash point > 199 °F (> 93 °C) P-M(CC)

Evaporation rate Slower than Ether Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

Not available.

(%)

Explosive limit - lower (%) Not available. Not available. Explosive limit - upper (%)

Vapor pressure 18 mmHg 70 °F (21 °C) Vapor pressure temp.

> 1 Vapor density 1.05 Relative density

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Relative density temperature

Solubility(ies)

70 °F (21 °C)

Not available. Solubility (water) **Partition coefficient** Not available.

(n-octanol/water) **Auto-ignition temperature**

Decomposition temperature

Not available. Not available.

Viscosity temperature

2015 mPa.s 70 °F (21 °C)

Other information

Viscosity

< 28 °F (< -2 °C) Pour point

Specific gravity 1.046

24 % ESTIMATED VOC

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Material is stable under normal conditions. **Chemical stability** Possibility of hazardous Hazardous polymerization does not occur.

reactions

Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Strong oxidizing agents. Incompatible materials

Hazardous decomposition

Conditions to avoid

products

Oxides of carbon, nitrogen and sulfur; and hydrogen chloride

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful. May cause irritation to the respiratory system. May cause

drowsiness and dizziness.

Skin contact Causes skin irritation.

Causes serious eye irritation. Eye contact

Ingestion May cause gastrointestinal irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause

respiratory irritation. May cause redness and pain.

Information on toxicological effects

Narcotic effects. May cause respiratory irritation. **Acute toxicity**

Product	Species	Test Results
NOVUS CE2655 (CAS Mix	ture)	
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg, (Calculated according to GHS additivity formula)
Inhalation		
LC50	Rat	18.5 mg/l, 4 Hour, (Calculated according to GHS additivity formula)
Oral		
LD50	Rat	> 5000 mg/kg, (Calculated according to GHS additivity formula)
Components	Species	Test Results

Distillates (petroleum), hydrotreated light (CAS 64742-47-8)

Acute Dermal

LD50 Rabbit > 2000 mg/kg

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Components	Species	Test Results
Inhalation		
LC50	Rat	> 5.2 mg/l, 4 Hour
Oral		
LD50	Rat	> 5000 mg/kg

^{*} Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

Causes serious eye irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization This product is not expected to cause respiratory sensitization. This product is not expected to cause skin sensitization. Skin sensitization

No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity

mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

May cause respiratory irritation. May cause drowsiness and dizziness.

Specific target organ toxicity -

repeated exposure

Not classified.

Based on available data, the classification criteria are not met. **Aspiration hazard**

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity

Product		Species	Test Results
NOVUS CE2655 (CAS	Mixture)		
Aquatic			
Crustacea	LC50	Daphnia magna	0.37 mg/L, Acute Toxicity, 48 hour, (Estimated)
	NOEL	Daphnia magna	0.06 mg/L, Acute Toxicity, 48 hour, (Estimated)
Fish	LC50	Fathead Minnow	5.7 mg/L, Acute Toxicity, 96 hour, (Estimated)

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

3 - 6 Distillates (petroleum), hydrotreated light

Bioconcentration factor (BCF)

Distillates (petroleum), hydrotreated light 207.7

Mobility in soil No data available. Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

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Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

UN number UN3082

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Distillates (petroleum),

hydrotreated light)

Transport hazard class(es)

Class 9
Subsidiary risk Packing group III
Environmental hazards Yes
ERG Code 171

Special precautions for user Not available.

IMDG

UN number UN3082

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Distillates (petroleum),

hydrotreated light), MARINE POLLUTANT

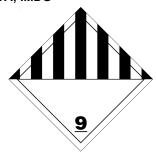
Transport hazard class(es)

Class 9
Subsidiary risk Packing group |||

Environmental hazards

Marine pollutant Yes
EmS F-A, S-F
Special precautions for user Not available.

IATA; IMDG



Marine pollutant



General information IMDG Regulated Marine Pollutant.

15. Regulatory information

US federal regulationsThis product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Yes

chemical

Classified hazard Skin corrosion or irritation

categories Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Acrylamide (CAS 79-06-1)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

Inventory status

Country(s) or regionInventory nameOn inventory (yes/no)*CanadaDomestic Substances List (DSL)YesCanadaNon-Domestic Substances List (NDSL)NoUnited States & Puerto RicoToxic Substances Control Act (TSCA) InventoryYes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

US state regulations

US. California Proposition 65

WARNING: This product can expose you to chemicals including Acrylamide, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Acrylamide (CAS 79-06-1) Listed: January 1, 1990

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Acrylamide (CAS 79-06-1) Listed: February 25, 2011

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

Acrylamide (CAS 79-06-1) Listed: February 25, 2011

16. Other information, including date of preparation or last revision

Issue date Oct-30-2014
Revision date Apr-16-2019

Version # 3.0
NFPA ratings Health: 2

Flammability: 0
Instability: 0

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NFPA ratings



CAS: Chemical Abstract Service Registration Number List of abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists

NOEL: No Observed Effect Level STEL: Short Term Exposure Limit LC50: Lethal Concentration, 50% TWA: Time Weighted Average BOD: Biochemical Oxygen Demand COD: Chemical Oxygen Demand TOC: Total Organic Carbon

IATA: International Air Transport Association

IMDG: International Maritime Dangerous Goods Code

LD50: Lethal Dose, 50%

TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.

References: No data available

The information provided in this Safety Data Sheet is correct to the best of our knowledge, Disclaimer

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.

Revision information Hazard(s) identification: Prevention

Hazard(s) identification: Supplemental information

Composition/information on ingredients: Composition comments

First-aid measures: Inhalation First-aid measures: Skin contact

Exposure controls/personal protection: Respiratory protection Stability and reactivity: Hazardous decomposition products Stability and reactivity: Possibility of hazardous reactions

Toxicological information: Skin corrosion/irritation

Toxicological information: Ingestion Regulatory information: California Prop 65

GHS: Classification

Prepared by This SDS has been prepared by SUEZ Regulatory Department (1-215-355-3300).

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