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A Geno Technology, Inc. (USA) brand name

# Safety Data Sheet

Cat. # DG902

2-D Detergent™ Nonidet® P-40 Substitute, 10% Aqueous Solution

Size: 10 x 10ml Vials



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# Nonidet P-40 Substitute

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 08/31/2015

Revision date: 05/11/2017

Version: 7.1

### SECTION 1: Identification

#### 1.1. Identification

Product form	: Substance
Substance name	: Nonidet P-40 Substitute
CAS-No.	: 9016-45-9
Product code	: 072N_073N
Formula	: (C <sub>2</sub> H <sub>4</sub> O) <sub>n</sub> .C <sub>15</sub> H <sub>24</sub> O
Synonyms	: (nonylphenoxy)polyethylene oxide / A 730 / A 730(surfactant) / adekatol NP / adekatol NP 100 / adekatol NP 650 / adekatol NP 660 / adekatol NP 700 / adekatol NP 720 / agral / agral 90 / agral LN / agral R / akyporox NP 105 / akyporox NP 95 / alfenol / alfenol 10 / alfenol 18 / alfenol 22 / alfenol 28 / alfenol 710 / alfenol 8 / alfenol N 8 / alkasurf NP 11 / alkasurf NP 15 / alkasurf NP 8 / alpha-(nonylphenyl)-omega-hydroxypoly(oxy-1,2-ethanediyl) / alpha-(nonylphenyl)-omega-hydroxypolyoxyethylene / antarox 897 / antarox CO / antarox CO 430 / antarox CO 530 / antarox CO 730 / antarox CO 850 / antarox CO 970 / arkopal 130 / arkopal 40 / arkopal 60 / arkopal 80 / arkopal 9 / arkopal N / arkopal N 040 / arkopal N 060 / arkopal N 080 / arkopal N 090 / arkopal N 100 / arkopal N 110 / arkopal N 130 / arkopal N 150 / arkopal N 230 / arkopal N 300 / arkopal N 50 / auxipon NP / B 315 / B 350 / berol / berol 02 / berol 09 / berol 259 / berol 26 / berol 267 / berol 268 / berol 296 / BLM / BLM (polymer) / burtemul N / carsonon N / carsonon N 30 / carsonon N 4 / carsonon N 8 / CCC jelly / cemulsol NP 10 / cemulsol NP 12 / cemulsol NP 6 / cemulsol NP 7 / cemulsol NP 8 / cemulsol NP-EO 6 / cemulsol NP 9 / chemax NP 9 / chimipal WN 6 / CO 610 / CO 630 / conco NI / conco NI 190 / dehscoxid 771 / dehscoxid 781 / dehydrophen 100 / diksol W 92 / dispergator BO / DME / DME (polymer) / dowfax 9N20 / dowfax 9N50 / dowfax 9N6 / dowfax 9N9 / DS 3195 / E 913 / EA 120 / EA 80 / elfapur N 70 / elfapur N 90 / emalex NP 12 / emalex NP 15 / emalex NP 8.5 / emmon 15332 / empilan NP 9 / EMU 02 / EMU 09 / emulgator NP 10 / emulgator U 6 / emulgen 900 / emulgen 903 / emulgen 904 / emulgen 905 / emulgen 906 / emulgen 909 / emulgen 910 / emulgen 911 / emulgen 913 / emulgen 920 / emulgen 921 / emulgen 930 / emulgen 931 / emulgen 935 / emulgen 950 / emulgen 985 / emulgen PI 20T / emulmin 140 / emulmin 240 / emulsit 100 / emulsit 161 / emulson 20B / emulson 9B / emulson PB / esapal NP 90 / ethoxylated nonylphenol / ethylan 20 / ethylan 44 / ethylan 55 / ethylan 77 / ethylan BCP / ethylan HA / ethylan KEO / ethylan N / ethylan N 5.5 / ethylan TU / ethylene oxide-nonylphenol condensate / ethylene oxide-nonylphenol polymer / etolat 914 / eumulgin 286 / fenopal / gafac CO 990 / gedepal CO 210 / glycols, polyethylene, mono(nonylphenyl) ether / hostapal CV / hostapal W / hyonic NP 40 / hyonic NP 4011 / hyonic NP 60 / hyonic NP 90 / hyonic PE 100 / hyonic PE 120 / hyonic PE 60 / iconol NP 40 / iconol NP 9 / igepal BC 16 / igepal CO 220 / igepal CO 436 / igepal CO 520 / igepal CO 530 / igepal CO 610 / igepal CO 620 / igepal CO 630 / igepal CO 660 / igepal CO 710 / igepal CO 720 / igepal CO 730 / igepal CO 850 / igepal CO 887 / igepal CO 890 / igepal CO 970 / igepal CO 977 / igepal CO 987 / igepal CO 990 / igepal CO 997 / igepal CTA 639W / igepal LO 997 / imbentim / imbentim N 52 / inbentine / lerolat N / lerolat N 300 / levelan P 208 / lipal 9N / liponox NC 130 / liponox NC 38 / liponox NC 500F / liponox NC 86 / liponox NC 95 / liponox NCA / liponox NCD / liponox NCG / liponox NCH / liponox NCI / liponox NCM / lissapol N / lissapol NX / lissapol NXP / lissapol TN 450 / lubrol APN 5 / lubrol L / lubrol N / lubrol N 13 / lutensol AP 10 / lutensol AP 20 / lutensol AP 9 / M 812 / macol NP / macol NP 4 / macol NP 9.5 / makon / makon 10 / makon 12 / makon 14 / makon 30 / makon 4 / makon 6 / makon 8 / markophen 85 / marlophen / marlophen 810 / marlophen 812 / marlophen 83 / marlophen 88 / marlophen 89 / mergital OP 2 / meriten NF 9 / merpoxen 230 / merpoxen ON / mono(nonylphenyl)polyethylene glycol / monopol 1020 / mylura N 100 / nemol 1030 / nemol 36 / nemol K 1032 / nemol K 1035 / nemol K 2030 / nemol K 3030 / nemol K 34 / nemol K 36 / nemol K 38 / nemol K 39 / nemol K 539 / nemolm K 1033 / neutronyl 640 / neutronyx 676 / newcol 504 / newcol 506 / newcol 509 / newcol 516 / newcol 520 / newcol 560 / newcol 561H / newcol 562 / newcol 564 / newcol 568 / NF 4 / nikkol NP / nikkol NP 10 / nikkol NP 100 / nikkol NP 15 / nikkol NP 18TX / nikkol NP 2 / nikkol NP 20 / nikkol NP 5 / nikkol NP 7.5 / nissan nonion NS / nissan nonion NS 12 / nissan nonion NS 202s / nissan nonion NS 203 / nissan nonion NS 204.5 / nissan nonion NS 206 / nissan nonion NS 208.5 / nissan nonion NS 210 / nissan nonion NS 215 / nissan nonion NS 220 / nissan nonion NS 230 / nissan nonion NS 270 / nissan nonion NS 402 / noigen EA 130T / noigen EA 150 / noigen EA 50 / noigen EA 70 / noigen EA 80 / nonal 206 / nonal 208 / nonal 210 / nonal 910 / nonaril 930 / nonidet NP 50 / nonidet P 80 / nonio-light PN 12 / nonio-light PN 4 / nonio-light PN 6 / nonion NS / nonion NS 203 / nonion NS 206 / nonion NS 208.5 / nonion NS 210 / nonion NS 212 / nonion NS 215 / nonion NS 220 / nonion NS 230 / nonion NS 240 / nonion NS 270 / nonionik NI / nonipol / nonipol 100 / nonipol 110 / nonipol 120 / nonipol 130 / nonipol 140 / nonipol 160 / nonipol 20 / nonipol 200 / nonipol 40 / nonipol 400 / nonipol 45 / nonipol 500 / nonipol 55 / nonipol 6 / nonipol 60 / nonipol 70 / nonipol 800 / nonipol 85 / nonipol 95 / nonoxinol / nonylphenol ethoxylate / nonylphenol ethylene oxide condensate / nonylphenol polyethylene glycol ether / nonylphenol polyethylene oxide / nonylphenol, ethoxylated / nonylphenoxy polyethoxy ethanol /

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nonylphenoxypoly (ethyleneoxy)ethanol / nonylphenoxypoly(oxyethylene)ethanol / nonylphenyl ethoxylate / nonylphenyl polyethylene glycol ether / nonylphenyl polyoxyethylene ether / NOP 9 / noregal LC 4 conc / NP / NP 10 / NP 100 / NP 13 / NP 14 / NP 17 / NP 30 / NP 40 / NP 6 / NP 660 / NP 695 / NP 7.5 / NP 8 / NP 80 / NP 9 / NP 936 / NP(nonionic surfactant) / NPEO10 / NPEO30 / NPEO40 / NPO20 / NPO30 / NS 205.5 / NS 215 / NS 230 / omega-hydroxy-alpha-(nonylphenyl)poly(oxy 1,2-ethanediyl) / ON 10 / OP 2 / oxyethylated nonylphenol / oxyethylene nonylphenol ether / PBI spreader / penerol NO 16 / penerol NP 10 / phenoxol 9/18 / phenoxol 9/20 / pionin D 414 / pnentrax / poly(ethylene oxide)nonylphenyl ether / poly(oxy)-1,2-ethanediyl, alpha-(nonylphenyl)-omega-hydroxy- / poly(oxyethylene nonylphenol ether / poly(oxyethylene) nonylphenyl ether / polyethoxylated nonylphenol / polyethylene glycol mono(nonylphenol) ether / polyethylene glycol mono(nonylphenyl) ether / polyethylene glycol nonylphenol ether / polyethylene glycol nonylphenyl monoether / polyethyleneoxide mono(nonylphenyl) ether / polyoxyethylated nonylphenol / polyoxyethylene (15) nonylphenyl ether / polyoxyethylene (20) nonyl phenyl ether / polyoxyethylene monononylphenyl ether / polystep F 10NP40 / polystep F 4 / polystep F 6 / polystep F 8 / polystep F 8NP20 / poly-tergent B / poly-tergent B 150 / poly-tergent B 300 / poly-tergent B 350 / prevocell N 11 / prevocell W-OF 100 / rendells suppository / renex 1000 / renex 110 / renex 230 / renex 300 / renex 40 / renex 647 / renex 648 / renex 678 / renex 679 / renex 682 / renex 688 / renex 697 / renex 698 / retzanol NP 100 / rewopal HV 10 / rewopal HV 25 / rewopal HV 5 / rewopal NP 10 / rexol 25/10 / rexol 25/15 / rexol 25/4 / rexol 25/9 / rexol 25J / rhodiasurf NO 9 / rioklen NF 10 / rioklen NF 9 / SA 1 / sapal / scourol 900 / SER-AD FN 1566 / serdox NNP / serdox NNP 1.5 / serdox NNP 12 / serdox NNP 15 / serdox NNP 20 / serdox NNP 7 / serdox NNP 8 / serdox NNP 8.5 / simulsol 630 / simulsol 830NP / sinnopal NP / siponic NP / siponic NP 9 / slovafof 903 / slovafof 905 / slovafof 906 / slovafof 909 / slovafof 90S / slovafof 910 / slovafof 920 / slovafof A / slovafof X / solar NF / soprophor BC 10 / soprophor BC 17 / soprophor BC 2 / soprophor BC 20 / soprophor BC 4 / soprophor BC 40 / soprophor BC 6 / soprophor BS 10 / soprophor NP 10 / steinapal HV / steinapal HV 10 / steinapal HV 14 / steinapal HV 25 / steinapal HV 3 / steinapal HV 4 / steinapal HV 5 / steinapal HV 8 / steinapal HV 9 / sterling NP 10 / sterox ND / stokolan NS 9 / sunaptol NP 55 / sunmorl X 1 / surfonic N 1 / surfonic N 10 / surfonic N 106 / surfonic N 120 / surfonic N 150 / surfonic N 200 / surfonic N 40 / surfonic N 60 / surfonic N 75 / surfonic N 95 / syn fac N 95 / synperonic N / synperonic NP / synperonic NP 10 / synperonic NP 12 / synperonic NP 13 / synperonic NP 15 / synperonic NP 20 / synperonic NP 30 / synperonic NP 4 / synperonic NP 5 / synperonic NP 6 / synperonic NP 8 / synperonic NP 9 / synperonic NX / synperonic NXP / synthrapol N / syntopon C / T-DET N / T-DET N 10.5 / T-DET N 14 / T-DET N 4 / T-det N 50 / T-DET N 507 / T-DET N 6 / tenzilin 080 / tenzilin FN 65 / tergitol NP / tergitol NP 10 / tergitol NP 101 / tergitol NP 13 / tergitol NP 14 / tergitol NP 15 / tergitol NP 27 / tergitol NP 33 / tergitol NP 35 / tergitol NP 40 / tergitol NP 6 / tergitol NP 7 / tergitol NP 9 / tergitol NPX / tergitol TH / tergitol TP 9 / teric GN / teric GN 5 / teric GN 9 / teric N / teric N 100 / teric N 12 / teric N 15 / teric N 30 / teric N 40 / teric N 450 / teric N 5 / teric N 9 / texofor FN 6 / texofor FN 8 / TN 450 / triton N / triton N 100 / triton N 101 / triton N 111 / triton N 128 / triton N 150 / triton N 302 / triton N 42 / triton N 57 / triton N 60 / triton N 998 / trycol 6940 / trycol 6954 / trycol 6964 / trycol NP 30 / trycol NP 40 / TX 10 / TX 10 (polyoxyalkylene) / value 3706 / varonic N 30-7 / varonic N 6 / veranol N 10 / WASC / wellaid 711W / witconol NP 100 / witconol NP 40 / witconol NP 60 / witconol NP 80 / YF 6500

BIG No : 31813

### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Detergent according to Regulation (EC) No 648/2004 Polymer

### 1.3. Supplier

Geno Technology, Inc./ G-Biosciences  
9800 Page Avenue  
Saint Louis, 63132-1429 - United States  
T 800-628-7730 - F 314-991-1504  
[technical@GBiosciences.com](mailto:technical@GBiosciences.com) - [www.GBiosciences.com](http://www.GBiosciences.com)

### 1.4. Emergency telephone number

Emergency number : Chemtrec 1-800-424-9300 (USA/Canada), +1-703-527-3887 (Intl)

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

#### GHS US classification

Hazardous to the aquatic environment - Chronic Hazard Category 4 H413 May cause long lasting harmful effects to aquatic life

Full text of H statements : see section 16

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### 2.2. GHS Label elements, including precautionary statements

#### GHS US labeling

Hazard statements (GHS US)	:	H413 - May cause long lasting harmful effects to aquatic life
Precautionary statements (GHS US)	:	P273 - Avoid release to the environment. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

### 2.3. Other hazards which do not result in classification

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

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Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
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Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
<p>Nonidet P-40 Substitute (Main constituent)</p>	<p>(nonylphenoxy)polyethylene oxide / A 730 / A 730(surfactant) / adekatol NP / adekatol NP 100 / adekatol NP 650 / adekatol NP 660 / adekatol NP 700 / adekatol NP 720 / agral / agral 90 / agral LN / agral R / akyporox NP 105 / akyporox NP 95 / alfenol / alfenol 10 / alfenol 18 / alfenol 22 / alfenol 28 / alfenol 710 / alfenol 8 / alfenol N 8 / alkasurf NP 11 / alkasurf NP 15 / alkasurf NP 8 / alpha-(nonylphenyl)-omega-hydroxypoly(oxy-1,2-ethanediyl) / alpha-(nonylphenyl)-omega-hydroxypolyoxyethylene / antarox 897 / antarox CO / antarox CO 430 / antarox CO 530 / antarox CO 730 / antarox CO 850 / antarox CO 970 / arkopal 130 / arkopal 40 / arkopal 60 / arkopal 80 / arkopal 9 / arkopal N / arkopal N 040 / arkopal N 060 / arkopal N 080 / arkopal N 090 / arkopal N 100 / arkopal N 110 / arkopal N 130 / arkopal N 150 / arkopal N 230 / arkopal N 300 / arkopal N 50 / auxipon NP / B 315 / B 350 / berol / berol 02 / berol 09 / berol 259 / berol 26 / berol 267 / berol 268 / berol 296 / BLM / BLM (polymer) / burtemul N / carsonon N / carsonon N 30 / carsonon N 4 / carsonon N 8 / CCC jelly / cemulsol NP 10 / cemulsol NP 12 / cemulsol NP 6 / cemulsol NP 7 / cemulsol NP 8 / cemulsol NP-EO 6 / cemulsol NP 9 / chemax NP 9 / chimipal WN 6 / CO 610 / CO 630 / conco NI / conco NI 190 / dehscoxid 771 / dehscoxid 781 / dehydrophen 100 / dikssol W 92 / dispergator BO / DME / DME (polymer) / dowfax 9N20 / dowfax 9N50 / dowfax 9N6 / dowfax 9N9 / DS 3195 / E 913 / EA 120 / EA 80 / elfapur N 70 / elfapur N 90 / emalex NP 12 / emalex NP 15 / emalex NP 8.5 / emmon 15332 / empilan NP 9 / EMU 02 / EMU 09 / emulgator NP 10 / emulgator U 6 / emulgen 900 / emulgen 903 / emulgen 904 / emulgen 905 / emulgen 906 / emulgen 909 / emulgen 910 / emulgen 911 / emulgen 913 / emulgen 920 / emulgen 921 / emulgen 930 / emulgen 931 / emulgen 935 / emulgen 950 / emulgen 985 / emulgen PI 20T / emulmin 140 / emulmin 240 / emulsit 100 / emulsit 161 / emulson 20B / emulson 9B / emulson PB / esapal NP 90 / ethoxylated nonylphenol / ethylan 20 / ethylan 44 / ethylan 55 / ethylan 77 / ethylan BCP / ethylan HA / ethylan KEO / ethylan N / ethylan N 5.5 / ethylan TU / ethylene oxide-nonylphenol condensate / ethylene oxide-nonylphenol polymer / etolat 914 / eumulgin 286 / fenopal / gafac CO 990 / gedepal CO 210 / glycols, polyethylene, mono(nonylphenyl) ether / hostapal CV / hostapal W / hyonic NP 40 / hyonic NP 4011 / hyonic NP 60 / hyonic NP 90 / hyonic PE 100 / hyonic PE 120 / hyonic PE 60 / iconol NP 40 / iconol NP 9 / igepal BC 16 / igepal CO 220 / igepal CO 436 / igepal CO 520 / igepal CO 530 / igepal CO 610 / igepal CO 620 / igepal CO 630 / igepal CO 660 / igepal CO 710 / igepal CO 720 / igepal CO 730 / igepal CO 850 / igepal CO 887 / igepal CO 890 / igepal CO 970 / igepal CO 977 / igepal CO 987 / igepal CO 990 / igepal CO 997 / igepal CTA 639W / igepal LO 997 /</p>	<p>(CAS-No.) 9016-45-9</p>	<p>100</p>	<p>Aquatic Chronic 4, H413</p>
<p>06/28/2019</p>	<p>igepal CTA 639W / igepal LO 997 /</p>			<p>5/10</p>

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Full text of hazard classes and H-statements : see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

- First-aid measures general : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.
- First-aid measures after inhalation : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.
- First-aid measures after skin contact : Wash immediately with lots of water. Take victim to a doctor if irritation persists.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.
- First-aid measures after ingestion : Rinse mouth with water. Call Poison Information Centre ([www.big.be/antigif.htm](http://www.big.be/antigif.htm)). Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital.

### 4.2. Most important symptoms and effects (acute and delayed)

- Potential Adverse human health effects and symptoms : Practically non-toxic if swallowed (LD50 oral, rat > 2000 mg/kg). Practically non-toxic in contact with skin (LD50 skin > 2000 mg/kg). Irritant to the skin. Slightly harmful by inhalation. Irritant to the eyes.
- Symptoms/effects after skin contact : Tingling/irritation of the skin.
- Symptoms/effects after eye contact : Irritation of the eye tissue.
- Symptoms/effects after ingestion : Irritation of the gastric/intestinal mucosa.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Quick-acting ABC powder extinguisher. Quick-acting BC powder extinguisher. Quick-acting class B foam extinguisher. Quick-acting CO2 extinguisher. Class B foam (alcohol-resistant). Water spray if puddle cannot expand.
- Unsuitable extinguishing media : Water (quick-acting extinguisher, reel); risk of puddle expansion. Water; risk of puddle expansion.

### 5.2. Specific hazards arising from the chemical

No additional information available

### 5.3. Special protective equipment and precautions for fire-fighters

- Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighbourhood close doors and windows.
- Firefighting instructions : Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.
- Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

- Protective equipment : Gloves. Face-shield. Protective clothing.
- Emergency procedures : Mark the danger area. Wash contaminated clothes.

#### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Prevent soil and water pollution. Prevent spreading in sewers.

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### 6.3. Methods and material for containment and cleaning up

- For containment : Contain released product, pump into suitable containers. Plug the leak, cut off the supply. Dam up the liquid spill.
- Methods for cleaning up : Take up liquid spill into inert absorbent material, e.g.: sand. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.
- Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well-ventilated place. Keep cool.
- Storage temperature : 5 - 40 °C
- Heat-ignition : KEEP SUBSTANCE AWAY FROM: heat sources.
- Information on mixed storage : KEEP SUBSTANCE AWAY FROM: water/moisture.
- Storage area : Store in a dry area. Meet the legal requirements.
- Special rules on packaging : SPECIAL REQUIREMENTS: closing. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
- Packaging materials : SUITABLE MATERIAL: stainless steel. synthetic material.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Nonidet P-40 Substitute (9016-45-9)

No additional information available

### 8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Gloves

#### Eye protection:

Face shield

#### Skin and body protection:

Protective clothing

#### Respiratory protection:

Respiratory protection not required in normal conditions

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Liquid.
- Color : No data available
- Odor : Almost odourless



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Odor threshold	: No data available
pH	: 6 - 7
Melting point	: 18 °C
Freezing point	: No data available
Boiling point	: > 200 °C
Flash point	: > 200 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 1.1 (40 °C)
Molecular mass	: 880 g/mol
Solubility	: Soluble in water. Water: soluble, Literature
Log Pow	: No data available
Auto-ignition temperature	: > 400 °C
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 0.3 Pa·s (40 °C)
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

Other properties : Hygroscopic. Slightly volatile.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

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

### 10.2. Chemical stability

Hygroscopic.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Hazardous decomposition products.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Nonidet P-40 Substitute (9016-45-9)	
LD50 oral rat	> 2000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)

Skin corrosion/irritation	: Not classified pH: 6 - 7
Serious eye damage/irritation	: Not classified pH: 6 - 7
Respiratory or skin sensitization	: Not classified

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Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Potential Adverse human health effects and symptoms	: Practically non-toxic if swallowed (LD50 oral, rat > 2000 mg/kg). Practically non-toxic in contact with skin (LD50 skin > 2000 mg/kg). Irritant to the skin. Slightly harmful by inhalation. Irritant to the eyes.
Symptoms/effects after skin contact	: Tingling/irritation of the skin.
Symptoms/effects after eye contact	: Irritation of the eye tissue.
Symptoms/effects after ingestion	: Irritation of the gastric/intestinal mucosa.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general	: May cause long lasting harmful effects to aquatic life.
Ecology - air	: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).
Ecology - water	: Water pollutant (surface water).

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Waste treatment methods	: Waste treatment methods.
Product/Packaging disposal recommendations	: Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber with energy recovery.
Additional information	: Can be considered as non hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT

Not applicable

#### Transportation of Dangerous Goods

Not applicable

#### Transport by sea

Not applicable

# Nonidet P-40 Substitute

## Safety Data Sheet

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### Air transport

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### Nonidet P-40 Substitute (9016-45-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag

SP - SP - indicates a substance that is identified in a proposed Significant New Use Rule.

### 15.2. International regulations

#### CANADA

#### Nonidet P-40 Substitute (9016-45-9)

Listed on the Canadian DSL (Domestic Substances List)

### EU-Regulations

#### National regulations

No additional information available

### 15.3. US State regulations

## SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 05/11/2017

Full text of H-phrases:

H413

May cause long lasting harmful effects to aquatic life

SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*