**Product Regulatory Overview (PRO)**

# Sulfole® 90 Mercaptan (tert-Nonyl Mercaptan; TNM)

**(CAS RN® 25360-10-5)**

## Company

Chevron Phillips Chemical (CPChem)

## Chemical Inventories

AUSTRALIA: Australian Inventory of Industrial Chemicals (AIIC): On the inventory, or in compliance with the inventory.

CANADA: Domestic Substances List (DSL): All components of this product are on the Canadian DSL

PEOPLE'S REPUBLIC OF CHINA: Inventory of Existing Chemical Substances (IECSC): On the inventory, or in compliance with the inventory.

EUROPEAN UNION: All necessary components have been registered according to Regulation (EU) No. 1907/2006 (REACH). Registration number(s) shown on the EU SDS are specific for CPChem entities

JAPAN: Existing & New Chemical Substances (ENCS) Inventory: On the inventory, or in compliance with the inventory.

KOREA: Existing Chemicals List (ECL): A substance(s) in this product was not registered, notified to be registered, or exempted from registration by CPChem according to K-REACH regulations. Importation of this product is still permitted provided the Korean Importer of Record has themselves notified the substance.

PHILIPPINES: Philippine Inventory of Chemicals and Chemical Substances (PICCS)

TAIWAN: Taiwan Chemical Substance Inventory (TCSI) On the inventory or in compliance with the inventory. Further registrations may apply.

TURKEY: Not registered (KKDIK; Turkey-REACH).

UNITED KINGDOM: Not registered (UK-REACH)

UNITED STATES: On or in compliance with the active portion of the Toxic Substances Control Act (TSCA) Chemical Inventory

## Origin

This product is from synthetic origin.

## Animal-Derived Materials / BSE TSE

Animal-derived materials are not intentionally used in the manufacture or formulation of this product

## California's Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This product, as shipped, does not contain any carcinogens or reproductive toxins presently known by the State of California to cause cancer or reproductive toxicity at a level of exposure subject to the requirements of California Proposition 65. See following link for latest review date per most recent Prop 65 update.

https://www.cpchem.com/who-we-are/environment-health-safety-security/regulatory-information
(SELECT Prop 65 Letter: Specialty Chemicals for review of most recent Prop 65 update)

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## Consumer Product Safety Improvement Act of 2008 (H.R. 4040)

This product does not contain lead and phthalates. It therefore complies with the relevant sections of the Consumer Product Safety Improvement Act of 2008 (H.R. 4040).

## Clean Air

This product does not contain any ozone depleting substances, including those listed in Regulation (EC) No 1005/2009.

This product does not contain any of the following substances regulated by the Clean Air Act:

- Class I or Class II Ozone-Depleting Substances (CAA Section 602)

## Heavy metals, RoHS, WEEE, Waste packaging, CONEG

No heavy metals (i.e., antimony, arsenic, barium, cadmium, chromium, lead, mercury, selenium, or silver) are purposely added to this product in quantities that would violate governmental guidelines. The summation of lead, cadmium, mercury, and hexavalent chromium in this product is less than 20 ppm. No polybrominated biphenyls (PBB), polybrominated diphenyl ethers (PBDE), deca brominated diphenyl ethers (deca BDE), or phthalates are intentionally added to this product. This product therefore meets the relevant requirements of the following Directives or Regulations:

- Directive (EU) 2017/2102, 2015/863, 2011/65/EU and 2002/95/EC (RoHS)
- China RoHS directive SJ/T 11363-2006
- 2002/96/EC and 2012/19/EU (WEEE)
- 2000/53/EC (ELV)
- (EU) 2025/40 PPWR (Packaging and Packaging Waste Regulation Amendment) Article 5 point 4
- USA CONEG Regulation / Model Toxics in Packaging Legislation
- California Toxics in Packaging Prevention Act

Regarding EU Amendment 2025/40 PPWR (Packaging and Packaging Waste Regulation Amendment) Article 5 point 5(c), fluorine is not expected to be greater than 50 mg/kg in the listed product(s), as shipped, based on process knowledge. The customer is responsible for determining whether its product meets regulatory requirements regarding PFAS content. Chevron Phillips Chemical does not have control over the final product manufactured by the customer.

## Phthalates

No phthalates, including di-(2-ethylhexyl) phthalate (DEHP), dibutyl phthalate (DBP), benzyl butyl phthalate (BBP), diisononyl phthalate (DINP), diisodecyl phthalate (DIDP), di-n-octyl phthalate (DNOP), diisobutyl phthalate (DIBP), dimethyl phthalate (DMP), and diethyl phthalate (DEP) are intentionally added to this product. This product therefore meets the requirements of the Consumer Product Safety Improvement Act of 2008 and EU Directive 2005/84/EC.

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## European Chemicals Agency (ECHA) Substances of Concern

This product does not contain in a concentration above 0.1% w/w any Substances of Very High Concern (SVHC) as listed on the candidate list published by ECHA as of *dated in the link below*. This product does not contain substances subject to authorization under REACH Annex XIV (Authorization List).

https://www.cpchem.com/who-we-are/environment-health-safety-security/regulatory-information (SELECT Specialty Chemicals)

## UK REACH (HSE) Substances of Concern

This product does not contain in a concentration above 0.1% w/w Substances of Very High Concern (SVHC) as listed on the candidate list published by UK's Health and Safety Executive (HSE) as of this date *UK REACH Candidate List of substances of very high concern (SVHCs) for authorisation*. This product, as shipped, does not contain substances with applicable restrictions under the UK HSE REACH (Annex 14 *authorisation-list-annex-xiv.xlsx*).

## CEPA "Challenge" Substances

This product, as shipped, does not intentionally contain high priority chemical substances listed on the "Challenge" Substance Batches as issued by CEPA.

## Nanomaterial

This product is not a nanomaterial and does not contain any intentionally added functional nanoparticles.

## Synthetic polymer microparticles (microplastics)

CPChem can state that this product does not contain microparticles per Entry 78 of Annex XVII regarding (EU) 2023/2055 and (EC) No. 1907/2006.

## Conflict Minerals

Neither tantalum, tin, gold, and tungsten, nor the minerals associated with these metals (Columbite-Tantalite, Cassiterite, Gold, or Wolframite) are intentionally added to this product. These substances are not necessary to the production of this product.

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## PFAS

This product is not formulated with the use of a PFAS (as defined[1] by the OECD in 2021). However, trace amounts of PFAS may be present in the product incidentally due to other factors such as PFAS presence in the ambient external environment or in the supply chain. Chevron Phillips Chemical does not analyze for PFAS in its products and, therefore, cannot guarantee the absence of PFAS in its products.

The customer is responsible for determining whether its product meets regulatory requirements regarding PFAS content. Chevron Phillips Chemical does not have control over the final product manufactured by the customer.

[1] OECD (2021), Reconciling Terminology of the Universe of Per- and Polyfluoroalkyl Substances: Recommendations and Practical Guidance, OECD Series on Risk Management, RN 61, OECD Publishing, Paris.

## Regulatory or Industry Lists

To the best of our knowledge this product, as shipped, meets the following requirements as being within stipulated limits as listed as of this date:

- Stockholm Convention Persistent Organic Pollutants (POPs): Directive 850/2004/EC, EU 2016/293, EU 2019/1021, EU 2021/115, 2020/784, 2021/277, and EU 2023/1608 (PFHxS) substances not used.
  - Listing of POPs in the Stockholm Convention
  - List of substances subject to POPs Regulation - ECHA (europa.eu)
- Rotterdam Convention Prior Informed Consent (PIC) substances Annex III substances as well as EU 649/2012 Annex I substances not contained above classification limits: http://www.pic.int/TheConvention/Chemicals/AnnexIIIChemicals/tabid/1132/language/en-US/Default.aspx
- Persistent, Bioaccumulative, and Toxic (PBT) substances as restricted under US Code of Federal Regulations title 40, part 751, subpart E– “Regulation of Certain Chemical Substances and mixtures under section 6 of The Toxic Substances Control Act” (TSCA): also see substances not used: Decabromodiphenyl ether (DecaBDE); Phenol, isopropylated phosphate (3:1) (PIP (3:1)); 2,4,6-Tris(tert-butyl)phenol (2,4,6-TTBP); Hexachlorobutadiene (HCBD); and Pentachlorothiophenol (PCTP)
- Substances defined as Persistent, Bioaccumulating, Toxic (PBT) or very Persistent very Bioaccumulating (vPvB) per EU not used.

## Substances and Chemicals

None of the following substances are intentionally used as additives or raw materials in the manufacture of this product:

- Acrylamide
- Acrylates
- Adsorbable Organic Halides (AOX); see Halogens
- Alkylphenols
- Alkylphenol Ethoxylates, including nonylphenol ethoxylate and octylphenol ethoxylate
- Allergens, including but not limited to those listed in EU Regulation 1169/2011, Directives 2000/13/EC, 2003/89/EC, and Section B.01.010.1 (1) of Canadian Regulation C.R.C., c. 870, and US FDA Food Allergen Labeling and Consumer Protection Act of 2004 (FALCPA) such as: peanuts, tree nuts, milk, eggs, wheat gluten, soybeans, fish and shellfish
- Anthraquinone
- Antibacterial/antimicrobial/antifungal agents: substances used are not used as antimicrobial agents
- Aromatic amines e.g. aniline, toluidines, naphthylamine, diphenyl amine, aminopyridines; see also Primary Aromatic Amines (PAA)
- Asbestos
- Azo compounds
- Benzotiazol (BTA) see antifungal agents
- Biocides
- Bisphenol compounds, including but not limited to: BPA, BPB, BPC, BPE, BPF, BPS, and BPZ
- Boron or boron derived compounds
- Brominated or halogenated flame retardants
- Butylated Hydroxytoluene (BHT) and Butylated Hydroxyanisole (BHA)
- Chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC), hydrofluorocarbons (HFC)
- Chlorinated compounds (Polychlorinated dibenzodioxins (PCDD), Polychlorinated dibenzofurans (PCDFs); see also dioxins and furans
- Chlorinated hydrocarbons e.g. 1,3-Dichloropropanediol (1,3-DCP); 2,4-Dichlorophenol; 3-Monochloropropanediol (MCPD) a.k.a. 3-Chloropropane 1,2-Diol (CAS RN® 96-24-2)
- Chlorinated paraffins
- Cobalt (CAS RN® 7440-48-4)
- Colorants, dyes or pigments e.g. Green 7 CAS No.® 1328-53-6, Green 36, Pigment Red 104 CAS No.® 12656-85-8, Yellow #5, CI Pigment Yellow 34 CAS No.® 1344-37-2, Yellow 138 CAS No.® 14302-13-7, Violet 23 CAS No.® 215247-95-3; Pigment Green 50; Cobalt titanite green spinel (CAS RN® 68186-85-6); EU resolution AP(89) not applicable, colorants not contained
- Cyanuric acid
- Decabromodiphenyl ether (DecaBDE)
- Dicyandiamide

- Di(ethylhexyl) adipate (DEHA), diethyl hydroxyl amine (DEHA), or di(ethylhexyl)maleate (DEHM)
- Diethylaminobenzone (DEAB)
- Diisononyl cyclohexane-1,2-dicarboxylate (DINCH; CAS RN® 166412-78-8)
- Di-Isopropylnaphthalene (DIPN)
- Dimethylfumarate (DMF)
- Dioxins or furans e.g. Polychlorinated dibenzodioxins (PCDD), Polychlorinated dibenzofurans (PCDFs)
- Dyes (also see Colorants) and dye intermediates and precursors such as 2,4-Xylidine (CAS RN® 95-68-1); 4-aminoazobenzene (CAS RN® 60-09-3); 2-aminotoluene (CAS RN® 95-53-4); 4,4′-thiodianiline (CAS RN® 139-65-1); 4-cresidine (CAS RN® 120-71-8), 3,3′-dimethoxybenzidine (CAS RN® 119-90-4); 3,3′-dimethylbenzidine (CAS RN® 119-93-7); Benzidine (CAS RN® 92-87-5); 4-aminodiphenyl (CAS RN® 92-67-1); 4-chloro-o-toluidine (CAS RN® p-Phenylenediamine (CAS RN® 106-50-3); 2-naphthylamine (CAS RN® 91-59-8); 2-amino-4-nitrotoluene (CAS® RN 99-57-0); 4-chloro-o-toluidine (CAS RN® 95-69-2); Triacrylcarbonium pigments
- Endocrine disruptors
- Epoxy derivatives listed in EU Directives 2002/16/EC and 1895/2005
- Epoxidized Soybean Oil
- Ethanol
- Ethyl hexanoic acid; Ethylhexanoic acid (2-EHA; CAS RN® 149-57-5)
- Fluorotelomer alcohols (FTOHs)
- Formaldehyde
- Fungicides, preservatives or fumigants
- Genetically-modified organisms (GMO)
- Glyoxal
- Halogens
- Hexachlorobutadiene (HCBD)
- Iron (Fe)
- Isocyanates
- Melamine
- Methyl bromide
- Mica, natural (CAS RN® 12001-26-2)
- Michler's Ketone
- Mineral oil: Mineral Oil Saturated Hydrocarbon (MOSH)/ Mineral Oil Aromatic Hydrocarbon (MOAH)
- Natural rubber latex, dry natural rubber, or synthetic latex
- Nickel titanium trioxide (CAS RN® 12035-39-1)
- N-Nickeltitantrioxid a.k.a. Nickel titanate; NiO3Ti (CAS RN® 12653-76-8)
- N-Butylbenzene (a.k.a. 1-butylbenzene or 1-phenylbutane); (CAS RN® 104-51-8)
- Nitrites, Nitrates, Nitrosamines, Nitrosamines impurities: N-nitrosodimethylamine (NDMA), N-Nitrosodiethylamine (NDEA), N-diisopropylnitrosoamine (NDIPA), N-ethyl-N-isopropylnitrosoamine (NEIPA); or nitrosating reagent NaNO2.

- Nonyl phenol; nonylphenol (CAS RN® 25154-52-3)
- o-Phenyl phenol; o- Phenylphenol; 2- Phenylphenol (CAS RN® 90-43-7)
- Optical brightening agents (OBAs)
- Organic solvents, also see ICH Q3C statement
- Organotin compounds (e.g. Tributyl Tin TBT, Triphenyl Tin TPT, Tributyl Tin Oxide TBTO)
- Pentachlorothiophenol (PCTP; CAS RN® 133-49-3) see also chlorinated hydrocarbon
- Perfluoroctanoic acid (PFOA) or perfluoroctane sulfonate (PFOS)
- Perfluorononanioic Acid (PENA)
- Pesticides and fungicides
- Phenol, isopropylated phosphate (3:1) (PIP (3:1))
- Photoinitiators, including: benzophenone, hydroxybenzophenone, and 4-methylbenzophenone, and Isopropylthioxanthone (ITX)
- Pigment Green 50; Cobalt titanite green spinel (CAS RN® 68186-85-6); see colorants/dyes
- Plant or plant derived substances: e.g. palm oil, Jathropha-oil
- Plasticizers
- Polyaromatic Hydrocarbons (PAHs)
- Polybrominated Diphenyl Ethers (PBDEs) included: decaBDE, octaBDE, and pentaBDE
- Polycarbonates
- Polychlorinated and Polybrominated Biphenyls (PCBs and PBBs)
- Polychlorinated and Polybrominated Terphenyls (PCTs and PBTs)
- Polyvinyl chloride (PVC; PVdC)
- Primary Aromatic Amines (PAA) e.g. aniline, o-toluidine, p-toluidine, m-toluidine, 2-naphthylamines, 4-naphthylamine, benzidine; see also azo compounds, dyes and colorants
- Radioactive Substances not used to alter product characteristics
- Recycled materials
- Silicone
- Sulfonamides
- Tallow and Tallow derived substances; see ADM statement
- Triacrylcarbonium pigments (e.g. Fanalpigments, rodamin B; see Dyes and colorants)
- Triclosan (2,4,4’-trichloro-2’-hydroxydiphenylether)
- Triphenylphosphate
- Tris-Nonylphenol Phosphite
- 2,4,6-Tris(tert-butyl)phenol (2,4,6-TTBP)
- Vinyl Chloride Monomer (VCM) and Polyvinyl Chloride (PVC) or copolymers
- Zinc (Zn)

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*It is the responsibility of the customer to check compliance of the final articles with the relevant legislative and applicable regulatory requirements including their restrictions.*

Disclaimer: *Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. It is the ultimate responsibility of the user to ensure that the product is suited and the information is applicable to the user's specific application. Chevron Phillips Chemical Company LP does not make, and expressly disclaims, all warranties, including warranties of merchantability or fitness for a particular purpose, regardless of whether oral or written, express or implied, or allegedly arising from any usage of any trade or from any course of dealing in connection with the use of the information contained herein or the product itself. This information is subject to change. The user expressly assumes all risk and liability, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or the product itself. Further, information contained herein is given without reference to any intellectual property issues, as well as federal, state or local laws which may be encountered in the use thereof. Such questions should be investigated by the user. Any reference to registered trademarks for CPChem (or joint venture) products generally refers to U.S. trademark registration of the same only, and trademark registrations in other jurisdictions may vary and should be confirmed by the user contacting its CPChem entity (or joint venture) representative.*

**Additional information on the health and safety aspects of our product is listed in the SDS of the product.**

Address: Chevron Phillips Chemical Company LP, 9500 Lakeside Blvd., The Woodlands, TX 77381
Website: http://www.cpchem.com/en-us/ehs/pages/productregulatoryoverviews.aspx