

# Modification Notice - Regulation 22

If the modification to the regulated activity has already occurred, a regulation 22 modification notice is not applicable.

<b>Interest Holder</b>	<b>Central Petroleum Limited</b>	<b>EMP Title</b>	<b>Palm Valley Development Wells – PV-14 / PV-15 – Environment Management Plan</b>	<b>Unique EMP ID No.</b>	CTP10-2	<b>Mod No.</b>	4	<b>Date</b>	14 May 2026
<b>Brief Description</b>	<p>This Regulation 22 modification is seeking to update Table 11 of the EMP to include alternative chemicals for the drilling campaign.</p> <p>When the EMP was written, it was estimated what chemicals would be required. However, Central Petroleum has since engaged a drilling contractor who have been able to specify exactly which chemicals they require. These are largely similar to the previously listed chemicals however are just alternative brands. Please see attachment 1 for a risk assessment on all chemicals.</p> <p>The outcome of this modification and attached risk assessment is that there is no effecting change in environmental risk due to the control measures in place to manage loss of containment.</p>								
<b>Geospatial Files Included?</b>	No								

Does the proposed change result in a new, or increased, potential or actual environmental impact or risk?	If an INCREASE in an existing potential or actual environmental impact or risk, is the increase provided for in the approved EMP?	Does the proposed change require additional mitigation measures to ensure it is managed to ALARP and acceptable levels?	Has additional stakeholder engagement been conducted?	Does the proposed change require additional environmental performance standards or measurement criteria?	Does the proposed change affect compliance with Sacred Site Authority Certificates?	Does the proposed change affect any sub-plans to the EMP?	Will the environmental outcome continue to be achieved?
<i>Attach supporting information to support all answers to the above questions</i>							
No. The chemicals are mostly alternative brands to what has already been listed in the EMP.	N/A	No additional mitigation measures are considered necessary. The additional chemicals are mostly alternative brands to what has already been listed in the EMP.	No. The updated chemicals list does not impact any stakeholders and adequate stakeholder engagement has been conducted previously.	No additional environmental performance standards and measurement criteria are required. A review of the existing standards and criteria in the EMP identified that all elements will be able to be met and the proposed works will not impact compliance.	No. All works are conducted on existing operational areas and aligned with existing approvals.	No.	Yes (refer to Risk Assessment in Attachment 1).

**Current EMP Text**

*Table 11: Drilling Fluid Chemicals*

Function	Product name	Hazardous substance	Unit/kilogram	Estimated Quantity (kg)/well	Storage location
Sealant	Mica (F)	No	22.7	872	Well site
Biocide	Nuosept 78	Yes	25	25	Well site

**Amended EMP Text**

*Table 11: Drilling Fluid Chemicals*

Purpose	Product Name	Hazardous	Unit of measure (kg)	Estimated quantity kg/well	Storage location
Fluid Loss	POLYPAC (All Grades)	Non-Hazardous	25	8,700.00	Well site
Stabilizing Agent	Citric Acid	Hazardous	25	4,500.00	Well site
pH	Caustic Soda	Hazardous	25	225	Well site
Buffer	Soda Ash	Hazardous	25	225	Well site
Clay Control Agent	Potassium Chloride	Non-Hazardous	1200	56,500.00	Well site
Buffer	MAGNESIUM OXIDE	Non-Hazardous	25	1,500.00	Well site
Lost Circulation Material	M-I-X* II (All Grades)	Non-Hazardous	11.34	2,381.40	Well site
Lost Circulation Material	G-SEAL PLUS	Non-Hazardous	25	5,250.00	Well site
Clay Control Agent	POLY-PLUS DRY	Non-Hazardous	25	1,200.00	Well site
Weighting Agent	SAFE-CARB (All Grades)	Non-Hazardous	25	47,000.00	Well site
Corrosion Control	SAFE-COR	Hazardous	229	6,496.00	Well site
Oxygen Scavenger	SAFE-SCAV CA	Non-Hazardous	6.8	884	Well site
Oxygen Scavenger	SAFE-SCAV NA	Hazardous	25	528.6	Well site

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Function	Product name	Hazardous substance	Unit/kilogram	Estimated Quantity (kg)/well	Storage location
Calcium remover	Sodium bicarbonate	No	25	500	Well site
Complexing agent	GELPLEX (bentonite)	No	22.7	28,330	Well site
Corrosion inhibitor	SAFE SCAV NA	Yes	25	25	Well site
Corrosion inhibitor	SAFE-COR	Yes	189	189	Well site
Defoaming agent	Defoam A25	Yes	20	640	Well site
Filtration control agent	Polypac UL	Yes	25	1000	Well site
Foaming agent	Platinum foam plus	Yes	18.9	1,363	Well site
Lost circulation and weighting materials	Barite	No	1500	220,500	Well site
Lost circulation and weighting materials	Form-A-Blok	No	9	1,746	Well site
Lost circulation and weighting materials	Kwik seal (M)	No	22.7	872	Well site
Lost circulation and weighting materials	Losseal max	No	22.7	454	Well site
Lost circulation and weighting materials	M-I-X II coarse	No	22.7	872	Well site
Lost circulation and weighting materials	Nut plug (F)	No	22.7	872	Well site
Lost circulation and weighting materials	Nut plug (M)	No	22.7	872	Well site
pH control additive	Caustic soda	Yes	25	525	Well site
pH control additive	Citric acid	Yes	25	500	Well site
Primary fluid-loss control additive	FLO-PLEX	No	25	3,675	Well site
Primary fluid-loss control additive	Safe-carb 250	No	22.7	1,317	Well site
Primary fluid-loss control additive	Safe-carb 40	No	22.7	1,308	Well site
Secondary pH control & Ca++ removal agent	Soda ash	No	25	700	Well site

Weighting Agent	SODIUM CHLORIDE POWDER (SALT PVD or GRANULAR SALT)	Non-Hazardous	1300	78,000.00	Well site
Stabilizing Agent	SAPP	Hazardous	25	3,000.00	Well site
Neutraliser	SODIUM BICARBONATE	Non-Hazardous	25	3,000.00	Well site
Defoamer	DEFOAM-A	Hazardous	19	612.2	Well site
Weighting Agent	SODIUM FORMATE	Non-Hazardous	25	170,000.00	Well site
Retarder	SUGAR	Non-Hazardous	25	3,000.00	Well site
Lost Circulation Material	FORM-A-BLOK	Non-Hazardous	9.1	3,265.20	Well site
Weighting Agent	Calcium Carbonate - Coarse Products	Non-Hazardous	25	7,200.00	Well site
Defoamer	DEFOAM PLUS NS	Non-Hazardous	18.2	556.6	Well site
Biocide	Nuosept 78 (Troy)	Hazardous	25	637.5	Well site
Defoamer	DEFOAM EXTREME	Non-Hazardous	19.3	956.6	Well site
Weighting Agent	CALCIUM CHLORIDE (All Grades)	Hazardous	25	120,000.00	Well site
Viscosifier	VeraVIS	Non-Hazardous	10	6,520.00	Well site
Stabiliser	PTS-200	Hazardous	208	10,093.40	Well site
Viscosifier	DUO-VIS	Non-Hazardous	25	3,975.00	Well site

Function	Product name	Hazardous substance	Unit/kilogram (kg)	Estimated Quantity (kg)/well	Storage location
Stabiliser	Potassium chloride	No	25	875	Well site
Thinner and dispersant	SAPP (Sodium Acid Pyrophosphate)	Yes	25	500	Well site
Viscosifier	DRILPLEX	Yes	11.3	2,825	Well site

  

Fluid Loss	DUAL-FLO HT	Non-Hazardous	22.7	5,726.70	Well site
Weighting Agent	M-I BAR (All Grades)	Non-Hazardous	1500	166,500.00	Well site
Viscosifier	M-I GEL	Non-Hazardous	1200	51,000.00	Well site
Alkalinity	LIME	Hazardous	20	10,100.00	Well site
Stabiliser	KLA-HIB	Hazardous	219	35,400.00	Well site
Lubricant	STARGLIDE	Hazardous	198	35,400.00	Well site
Completion fluid additive	DEEPCLEAN	Hazardous	194	3,900.00	Well site
Stabiliser	KLA-STOP	Hazardous	217	35,400.00	Well site
Stabiliser	IDCAP D	Non-Hazardous	25	5,132.04	Well site
Foamer	PLATINUM FOAM PLUS	Hazardous	19.7	2,559.89	Well site
Lubricant	SAFE-LUBE	Hazardous	210	130,701.45	Well site
Stabiliser	POLYAMINE APG	Hazardous	214	130,701.45	Well site

Submit this notice and supporting information to [Onshoregas.DLPE@nt.gov.au](mailto:Onshoregas.DLPE@nt.gov.au)

## Attachment 1 – Risk Assessment

Product Name	Hazardous	Dangerous good	Typical quantity on site (kg)	Concentration kg/m3	Concentration %	CAS Number	Brief description of risk
POLYPAC (All Grades)	Non-Hazardous	N	17,400	7.4000	0.4459%	Proprietary	Acute Toxicity: Polyanionic cellulose: LD50 Oral (rat): 5005 mg/kg Chronic Toxicity: Not known to be carcinogenic, mutagenic, or sensitizing. No known reproductive or developmental hazards Ecotoxicity: Product is not considered toxic to algae, fish, or invertebrates. Biodegradation/Bioaccumulation: Product is biodegradable, does not bioaccumulate.
Citric Acid	Hazardous	N	9,000	3.8	0.2306%	5949-29-1	Acute Toxicity Citric Acid: LD50 Oral (Rat): 3000 mg/kg Chronic Toxicity: Not known to be carcinogenic, mutagenic, or sensitizing. No known reproductive or developmental hazards Ecotoxicity: LC50 (Fish): 1516 mg/L Biodegradation/Bioaccumulation: No product level data available
Caustic Soda	Hazardous	Y	450	0.2	0.0115%	1310-73-2	Acute Toxicity: LD50 Oral (rat): 325 mg/kg, LD50 Dermal (rabbit): 1350 mg/kg Chronic Toxicity: Not known to be carcinogenic, mutagenic, or sensitizing. No known reproductive or developmental hazards Ecotoxicity: Not considered toxic to algae, fish, or invertebrates. EC50 (Fish) 45.4mg/L Biodegradation/Bioaccumulation:N/A Inorganic chemical
Soda Ash	Hazardous	N	450	0.2	0.0115%	497-19-8	Acute Toxicity: LD50 Oral (rat): 4090 mg/kg, LD50 Dermal (rabbit): 2002 mg/kg Chronic Toxicity: Not known to be carcinogenic, mutagenic, or sensitizing. No known reproductive or developmental hazards Ecotoxicity: LC50 (fish): 300 mg/L, EC50 (invertebrates): 265 mg/L Biodegradation/Bioaccumulation:N/A Inorganic chemical
Potassium Chloride	Non-Hazardous	N	113,000	47.8	2.8959%	Not Available	Acute Toxicity: None Chronic Toxicity: Not known to be carcinogenic, mutagenic, or sensitizing. No known reproductive or developmental hazards Ecotoxicity: Not considered toxic to algae, fish, or invertebrates. Biodegradation/Bioaccumulation:N/A Inorganic chemical

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MAGNESIUM OXIDE	Non-Hazardous	N	3,000	1.3	0.0769%	1309-48-4	<p>Acute Toxicity: LD50 Oral (rat): 3780 mg/kg</p> <p>Chronic Toxicity: Not known to be carcinogenic, mutagenic, or sensitizing. No known reproductive or developmental hazards</p> <p>Ecotoxicity: Not considered toxic to algae, fish, or invertebrates.</p> <p>Biodegradation/Bioaccumulation: Not applicable, inorganic chemical.</p>
M-I-X* II (All Grades)	Non-Hazardous	N	4762.8	2	0.1221%	14808-60-7	<p>Acute Toxicity:</p> <p>Sodium carbonate: LD50 Oral (Rat): &gt; 5 g/kg, LD50 Dermal (Rabbit): &gt;2g/kg, LC50 Inhalation (Rat): &gt;5800 mg/m<sup>3</sup>,</p> <p>Crystalline quartz, silica: LD50 Oral (Rat): 500 mg/kg</p> <p>Chronic Toxicity:</p> <p>No known sensitizing, carcinogenic, reproductive, or mutagenic effects. contains a known or suspected carcinogen (crystalline silica dust)</p> <p>Ecotoxicity:</p> <p>This product is not considered toxic to algae, fish, daphnia, or invertebrates.</p> <p>Biodegradation/Bioaccumulation: No product level data available</p>
G-SEAL PLUS	Non-Hazardous	N	10,500	4.4	0.2691%	7782-42-5 14808-60-7	<p>Acute Toxicity:</p> <p>Graphite : LD50 Oral (Rat): = 10010 mg/kg</p> <p>Chronic Toxicity: Not known to be mutagenic or sensitizing. Crystalline silica dust is listed by IARC as Group 1 carcinogen. No known reproductive or developmental hazards.</p> <p>Ecotoxicity: Graphite: LC50 (Fish): &gt;100 mg/L</p> <p>Crystalline Silica:LC50(Fish): = 10000 mg/L (96 h), EC50 (algae): &gt;1000 mg/L (120 h) EC50 (invertebrates) &gt;10000 mg/L (48 h)</p> <p>Biodegradation/Bioaccumulation: Not applicable- Inorganic chemical.</p>
POLY-PLUS DRY	Non-Hazardous	N	2,400	1	0.0615%	Not Available	<p>Acute Toxicity: None</p> <p>Chronic Toxicity:</p> <p>Does not contain any components suspected to be sensitizing, mutagenic, or carcinogenic. No known reproductive or developmental toxicity</p> <p>Ecotoxicity: Not considered toxic to algae, fish, or invertebrates.</p> <p>Biodegradation/Bioaccumulation: No data available</p>

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SAFE-CARB (All Grades)	Non-Hazardous	N	94,000	39.8	2.4090%	471-34-1 14808-60-7	<p>Acute Toxicity: Calcium Carbonate: LD50 Oral (Rat): 6450 mg/kg, LD50 Dermal (rabbit):2002 mg/Kg</p> <p>Crystalline Silica: LD50 Oral (Rat): = 500 mg/kg. Chronic toxicity: Product contains no components known to be sensitizing or mutagens. Crystalline silica dust is listed by IARC as Group 1 carcinogen. or developmental Chronic Toxicity: Not known to be mutagenic or sensitizing. Crystalline silica dust is listed by IARC as Group 1 carcinogen. No known reproductive or developmental hazards.</p> <p>Ecotoxicity: Crystalline Silica: Toxicity to Fish: LC50(Danio Rerio): = 10000 mg/L (96 h) Toxicity to Algae: EC50: &gt;1000 mg/L (120 h) Toxicity to Invertebrates: EC50 (Daphnia magna) &gt;10000 mg/L (48 h)</p> <p>Biodegradation/Bioaccumulation: Not applicable- Inorganic chemical.</p>
SAFE-COR	Hazardous	N	12,992	5.5	0.3330%	68909-77-3	<p>Acute Toxicity: Ethanol,2,2'oxybis-reaction products with ammonia, mopholine derivs, residues: LD50 Oral (Rat): &gt; 1500 mg/kg</p> <p>Chronic Toxicity: No known sensitizing, carcinogenic, reproductive, or mutagenic effects.</p> <p>Ecotoxicity: Ethanol,2,2'oxybis-reaction products with ammonia, mopholine derivs, residues: LC50(fish): &gt;45 mg/L (96 h) LC50(algae): 45 mg/L (72 h) EC50(invertebrates): = &gt;100 mg/L (48 h)</p> <p>Biodegradation/Bioaccumulation: Biodegradable. No bioaccumulation expected.</p>
SAFE-SCAV CA	Non-Hazardous	N	1,768	0.7	0.0453%	Not Available	<p>Acute Toxicity: None</p> <p>Chronic Toxicity: Does not contain any components suspected to be sensitizing, mutagenic, or carcinogenic. No known reproductive or developmental toxicity</p> <p>Ecotoxicity: Not considered toxic to algae, fish, or invertebrates.</p> <p>Biodegradation/Bioaccumulation: Not readily biodegradable, does not bioaccumulate</p>

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SAFE-SCAV NA	Hazardous	N	1057.2	0.4	0.0271%	10192-30-0 7446-09-5	<p>Acute Toxicity: Ammonium Hydrogensulfite LD50 Oral (Rat): = 2746 mg/kg, &gt; 2150 mg/kg, LD50 Dermal: &gt;2000 mg/kg (24 h), LC50 Inhalation: 5.5 mg/L (4 h) Sulphur dioxide: LC50 Inhalation (Rat): 2500 ppm (1 h) Chronic Toxicity: No known carcinogenic, reproductive, or mutagenic effects. Repeated or prolonged contact may cause allergic reactions in very susceptible persons. Ecotoxicity: This product is not considered toxic to algae, fish, daphnia, or invertebrates. Ammonium Hydrogensulfite: EC50 (Algae): = 43.8 mg/L (72 h); LC50(Fish): &gt; 464 mg/L (96 h); EC50 (Invertebrates) =89 mg/L (48 h) Biodegradation/Bioaccumulation: Not applicable- Inorganic chemical.</p>
SODIUM CHLORIDE POWDER (SALT PVD or GRANULAR SALT)	Non-Hazardous	N	156,000	66	3.9979%	7647-14-5	<p>Acute Toxicity: Sodium chloride: LD50 Oral (Rat): &gt; 3 g/kg LD50 Dermal (Rabbit): &gt; 10g/kg LC50 Inhalation (Rat): &gt;42 g/m3 (1 h) Chronic Toxicity: No known sensitizing, carcinogenic, reproductive, or mutagenic effects. Ecotoxicity: This product is not considered toxic to algae, fish, daphnia, or invertebrates. LC50(Fish): = 12946, 5560-6080 mg/L (96 h) EC50 (Invertebrates) = 340.7-469.2, 1000 mg/L (48 h) Biodegradation/Bioaccumulation: Not applicable- Inorganic chemical.</p>
SAPP	Hazardous	N	6,000	2.5	0.1538%	7758-16-9	<p>Acute Toxicity: Disodium dihydrogen diphosphate: LD50 Oral (Rat): 1800 mg/kg, LD50 Dermal (rabbit): 2002 mg/kg Chronic Toxicity: No known sensitizing, carcinogenic, reproductive, sensitizing, or mutagenic effects. Ecotoxicity: Product is not considered toxic to fish, algae, or invertebrates. Biodegradation/bioaccumulation: Not applicable - Inorganic chemical</p>
SODIUM BICARBONATE	Non-Hazardous	N	6,000	2.5	0.1538%	144-55-8	<p>Acute Toxicity: Sodium hydrogen carbonate: LD50 Oral (rat): 4220 mg/kg Chronic Toxicity: Not known to be carcinogenic, mutagenic, or sensitizing. No known reproductive or developmental hazards Ecotoxicity: Sodium hydrogen carbonate: LC50 (fish): 8250 mg/L, LC50 (invertebrates): 2350 mg/L Biodegradation/Bioaccumulation: N/A, inorganic chemical</p>

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DEFOAM-A	Hazardous	N	1224.4	0.5	0.0314%	6846-50-0 144-19-4	<p>Acute Toxicity: 2,2,4 trimethyl-1,3, pentanediol diisobutyrate: LD50 Oral (rat): 3203.2 mg/kg, LD50 Dermal (rabbit): 2002 mg/kg 2,2,4 trimethyl-1,3, pentanediol: LD50 Oral (rat): 2000 mg/kg Chronic Toxicity: Not known to be mutagenic, or sensitizing.. Contains a known or suspected carcinogen. suspected of damaging fertility or the unborn child Ecotoxicity: 2,2,4 trimethyl-1,3, pentanediol diisobutyrate: LC50 (fish): &gt;1.55 mg/L, EC50 (Algae): &gt;7.49 mg/l, EC50 (invertebrates):&gt;1.46 mg/L 2,2,4 trimethyl-1,3, pentanediol: LC50 (fish): &gt;700 mg/L, EC50 (Algae): &gt;100 mg/l, EC50 (invertebrates): &gt;100 mg/L Biodegradation/Bioaccumulation: Not available</p>
SODIUM FORMATE	Non-Hazardous	N	340,000	189.4	8.7134%	144-19-4	<p>Acute Toxicity: Sodium Formate: LD50 Oral: 11200 mg/kg; LD50 oral: &gt;2000 mg/kg, LC50 Inhalation: &gt;0.67mg/L Chronic Toxicity: No known sensitizing, carcinogenic, reproductive, or mutagenic effects. No known reproductive or developmental hazards. Ecotoxicity: This product is not considered toxic to algae, fish, daphnia, or invertebrates. Biodegradation/Bioaccumulation:No product level data available</p>
SUGAR	Non-Hazardous	N	6,000	2.5	0.1538%	57-50-1	<p>Acute Toxicity: None Chronic Toxicity: Not known to be carcinogenic, mutagenic, or sensitizing. No known reproductive or developmental hazards Ecotoxicity: Not considered toxic to algae, fish, or invertebrates. Biodegradation/Bioaccumulation: Readily biodegradable, Bioaccumulation is unlikely.</p>
FORM-A-BLOK	Non-Hazardous	N	6530.4	2.8	0.1674%	1332-58-7 9004-34-6 13983-17-0	<p>Acute Toxicity: Calcium metasilicate: LD50 Oral: 5005 mg/kg, LD50 Dermal: &gt;2000 mg/kg, LC50 Inhalation: &gt;5800 mg/m3 Kaolin; LD50 oral: &gt;5000 mg/kg, LD50 Dermal: &gt;5000 mg/Kg Cellulose: LD50 Oral 5005 mg/kg, Polyvinyl alcohol: LD50 oral: 23854 mg/kg Chronic Toxicity: No known sensitizing, carcinogenic, reproductive, or mutagenic effects. No known reproductive or developmental hazards. Ecotoxicity: This product is not considered toxic to algae, fish, daphnia, or invertebrates. Biodegradation/Bioaccumulation: Not readily biodegradable, does not bioaccumulate.</p>

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Calcium Carbonate - Coarse Products	Non-Hazardous	N	14,400	6.1	0.3690%	1317-65-3	<p>Acute Toxicity: Calcium Carbonate: LD50 Oral (Rat): 6450 mg/kg, LD50 Dermal (rabbit):2002 mg/Kg</p> <p>Crystalline Silica: LD50 Oral (Rat): = 500 mg/kg. Chronic toxicity: Product contains no components known to be sensitizing or mutagens. Crystalline silica dust is listed by IARC as Group 1 carcinogen. or developmental Chronic Toxicity: Not known to be mutagenic or sensitizing. Crystalline silica dust is listed by IARC as Group 1 carcinogen. No known reproductive or developmental hazards.</p> <p>Ecotoxicity: Crystalline Silica: Toxicity to Fish: LC50(Danio Rerio): = 10000 mg/L (96 h) Toxicity to Algae: EC50: &gt;1000 mg/L (120 h) Toxicity to Invertebrates: EC50 (Daphnia magna) &gt;10000 mg/L (48 h)</p> <p>Biodegradation/Bioaccumulation: Not applicable- Inorganic chemical.</p>
DEFOAM PLUS NS	Non-Hazardous	N	1113.2	0.5	0.0285%	Not Available	<p>Acute Toxicity LD50 Oral (Rat): &gt;2000 mg/kg</p> <p>Chronic Toxicity: Not known to be carcinogenic, or mutagenic or sensitizing. No known reproductive or developmental hazards.</p> <p>Ecotoxicity:Not considered toxic to algae, fish, or invertebrates.</p> <p>Biodegradation/Bioaccumulation: Not readily biodegradable. Contains potentially bioaccumulating substances.</p>
Nuosept 78 (Troy)	Hazardous	N	1275	0.5	0.0327%	Not Available	<p>Acute Toxicity:LD50 Oral (Rat- Female): = 2000 mg/kg LD50 Dermal (Rat): &gt;1009-3950 mg/kg</p> <p>Chronic Toxicity: No known carcinogenic, reproductive, or teratogenic effects.</p> <p>Skin sensitizing</p> <p>Ecotoxicity: EC50 (invertebrates): 10-100 mg/L (48 h), LC50 (Fish): 10-100 mg/L (96 h)</p> <p>Biodegradation/Bioaccumulation: Product is biodegradable, has low bioaccumulative potential</p>
DEFOAM EXTREME	Non-Hazardous	N	1913.2	0.8	0.0490%	Not Available	<p>Acute toxicity: None known</p> <p>Chronic Toxicity: No known sensitizing, carcinogenic, reproductive, or mutagenic effects.</p> <p>Ecological: Product is not considered toxic to algae, fish, or invertebrates</p> <p>Biodegradation/Bioaccumulation: Expected to be readily biodegradable</p>

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CALCIUM CHLORIDE (All Grades)	Hazardous	N	240,000	133.7	6.1506%	10043-52-4	<p>Acute Toxicity: Calcium chloride: LD50 Oral: 100 mg/kg; LD50 Dermal: 5005 mg/kg</p> <p>Chronic Toxicity: No known sensitizing, reproductive, carcinogenic, or mutagenic effects.</p> <p>Ecotoxicity: Calcium chloride: LC50 Fish: 10650 mg/L; EC50 Algae: &gt;1000 mg/L, LC50 Invertebrates:&gt; 2400 mg/L</p> <p>Biodegradation/Bioaccumulation: Not expected to be bioaccumulating</p>
VeraVIS	Non-Hazardous	N	13,040	5.5	0.3342%	75-65-0	<p>Acute Toxicity: 2-methylpropan-2-ol: LD50 Oral: 2200 mg/kg, ; LD50 oral: &gt;2g/kg, LC50 Inhalation: &gt;10000 ppm</p> <p>Chronic Toxicity: No known sensitizing, carcinogenic, reproductive, or mutagenic effects. No known reproductive or developmental hazards.</p> <p>Ecotoxicity: Derivative of substituted acrylamides copolymer: LC50 Fish: &gt;4080 mg/L; EC50 Algae: &gt;700 mg/L, LC50 Invertebrates:&gt; 400 mg/L</p> <p>2-methylpropan-2-ol: LC50 Fish: 6130-6700 mg/L; EC50 Algae: &gt;1000 mg/L, LC50 Invertebrates: 933 mg/L</p> <p>Biodegradation/Bioaccumulation:Not readily biodegradable, does not bioaccumulate</p>
PTS-200	Hazardous	Y	20,186.8	8.5	0.5173%	141-43-5	<p>Acute Toxicity: 2-aminoethanol: LD50 Oral (rat): 1720 mg/kg, LD50 Dermal (rabbit): 1000 mg/kg</p> <p>Chronic Toxicity: Not known to be carcinogenic, mutagenic, or sensitizing. No known reproductive or developmental hazards</p> <p>Ecotoxicity: 2-amino ethanol: LC50 (fish): &gt;200 mg/L, EC50 (algae): 15 mg/L, EC50(invertebrates): 65 mg/L</p> <p>Biodegradation/Bioaccumulation: Not readily biodegradable, not suspected to bioaccumulate.</p>
DUO-VIS	Non-Hazardous	N	7950	3.4	0.2037%	107-22-2	<p>Acute Toxicity:None</p> <p>Chronic Toxicity: No known sensitizing, reproductive, carcinogenic effects. Contains a known or suspected mutagen.</p> <p>Ecotoxicity:This product is not considered toxic to algae, fish, or invertebrates</p> <p>Biodegradation/Bioaccumulation: Product is biodegradable, does not bioaccumulate</p>

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DUAL-FLO HT	Non-Hazardous	N	11,453.4	4.8	0.2935%	9005-25-8	<p>Acute Toxicity: None</p> <p>Chronic Toxicity: Not known to be carcinogenic, mutagenic, or sensitizing. No known reproductive or developmental hazards</p> <p>Ecotoxicity: Not considered toxic to algae, fish, or invertebrates.</p> <p>Biodegradation/Bioaccumulation: Biodegradable, does not bioaccumulate</p>
M-I BAR (All Grades)	Non-Hazardous	N	333,000	140.9	8.5340%	13462-86-7 14808-60-7	<p>Acute Toxicity: Barite: LD50 Oral (Rat): &gt;15000 mg/kg Crystalline Silica: LD50 Oral (Rat): = 500 mg/kg.</p> <p>Chronic Toxicity: Not known to be mutagenic or sensitizing. Crystalline silica dust is listed by IARC as Group 1 carcinogen. No known reproductive or developmental hazards.</p> <p>Ecotoxicity: Crystalline Silica: Toxicity to Fish: LC50(Danio Rerio): = 10000 mg/L (96 h) Toxicity to Algae: EC50: &gt;1000 mg/L (120 h) Toxicity to Invertebrates: EC50 (Daphnia magna) &gt;10000 mg/L (48 h)</p> <p>Biodegradation/Bioaccumulation: Not applicable- Inorganic chemical.</p>
M-I GEL	Non-Hazardous	N	102,000	43.1	2.6140%	14808-60-7	<p>Acute Toxicity: None</p> <p>Chronic Toxicity: Not known to be mutagenic or sensitizing. Crystalline silica dust is listed by IARC as Group 1 carcinogen. No known reproductive or developmental hazards.</p> <p>Ecotoxicity: Crystalline Silica: LC50(Fish): = 10000 mg/L (96 h) EC50(Algae): &gt;1000 mg/L (120 h) EC50 (Invertebrates): &gt;10000 mg/L (48 h)</p> <p>Biodegradation/Bioaccumulation: Not applicable- Inorganic chemical.</p>
LIME	Hazardous	N	20,200	8.6	0.6460%	1305-62-0	<p>Acute Toxicity: May cause respiratory irritation. Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. Unknown acute toxicity: Not applicable.</p> <p>Ecotoxicity: LD50 Oral = 7340 mg/kg ( Rat ). LD50 Dermal &gt; 2500 mg/kg ( Rat ). LC50 Inhalation &gt; 6.04 mg/L ( Rat ) 4 h.</p> <p>Biodegradation: Not Applicable - Inorganic chemical. Bioaccumulation: No bioaccumulation potential</p>

KLA-HIB	Hazardous	N	70,800	30	2.2584%	68411-90-5 7647-01-0 124-09-4 694-83-7	<p>Acute Toxicity:  Hexanedinitrile, hydrogenated, high-boiling fraction: LD50 (Oral): 1500 mg/kg (Rat). LD50 (Dermal): &gt; 200 mg/kg (Rabbit). LC50 Inhalation: No data available.  Hydrochloric acid: LD50 (Oral): 238 - 277 mg/kg (Rat). LD50 (Dermal): &gt; 5010 mg/kg (Rabbit). LC50 Inhalation: 1.68 mg/L (Rat) 1 h.  Hexane-1,6-diamine: LD50 (Oral): 750 mg/kg (Rat). LD50 (Dermal): 1110 mg/kg (Rabbit). LC50 Inhalation: No data available.  Cyclohex-1,2-ylenediamine: LD50 (Oral): 4556 mg/kg (Rat). LD50 (Dermal): 1870 mg/kg (Rat). LC50 Inhalation: &gt; 3.23 mg/L (Rat) 4 h.</p> <p>Chronic Toxicity:  Ecotoxicity:  Hexanedinitrile, hydrogenated, high-boiling fraction: LC50 (fish): No information available. EC50 (algae): No information available. LC50 (invertebrates): No information available.  Hydrochloric acid: LC50 (fish): No information available. EC50 (algae): No information available. LC50 (invertebrates): No information available.  Hexane-1,6-diamine: LC50 (fish): 1825 mg/L LC50 Pimephales promelas 96 h. &gt; 56 mg/L LC50 Lepomis macrochirus 96 h. EC50 (algae): 15 mg/L EC50 Pseudokirchneriella subcapitata 72h. 14.8 mg/L EC50 Pseudokirchneriella subcapitata 96h. EC50 (invertebrates): 23.4 mg/L EC50 Daphnia magna 48h.  Cyclohex-1,2-ylenediamine: LC50 (fish): No information available. EC50 (algae): No information available. LC50 (invertebrates): No information available.</p> <p>Biodegradation/Bioaccumulation:  Hexanedinitrile, hydrogenated, high-boiling fraction: Readily biodegradable / No information available.  Hydrochloric acid: Not Applicable - Inorganic chemical / Not Applicable - Inorganic chemical .  Hexane-1,6-diamine: Readily biodegradable / Does not bioaccumulate.  Cyclohex-1,2-ylenediamine: Readily biodegradable / No information available.</p>
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STARGLIDE	Hazardous	N	70,800	30	2.2584%	9004-77-7	<p>Acute Toxicity: LD50 Oral: 2630 mg/kg (Rat). LD50 Dermal: 3540 mg/kg bw (Rabbit).</p> <p>Chronic Toxicity: Not known to be mutagenic or sensitising.</p> <p>Ecotoxicity: LC50 (fish): &gt;1800 mg/l, 96h Scophthalmus maximus OECD 203. EC50 (algae): 2490 mg/l, 72h Selenastrum capricornutum OECD 201. EC50 (invertebrates): &gt;3200 mg/l, 48h Daphnia magna OECD 202.</p> <p>Biodegradation: OECD 301D 76%. Bioaccumulation: log Kow 0.44@20°C.</p>
DEEPCLEAN	Hazardous	N	7,800	3	0.2486%	68515-73-1 111-76-2 68647-72-3 64742-47-8	<p>Acute Toxicity:</p> <p>D-Glucopyranose, oligomeric, C8-10 glycosides: Oral (Rat): &gt; 2000 mg/kg bw ECHA Data. Dermal (Rabbit): &gt; 2000 mg/kg ECHA Data.</p> <p>2-butoxyethanol: Oral (Rat): 470 mg/kg. Dermal (Rabbit): 435 mg/kg. Inhalation = 486 ppm ( Rat ) 4 h</p> <p>Citrus Extract: no data available.</p> <p>Distillates, petroleum, hydrotreated light: Oral (Rat): &gt; 5000 mg/kg. Dermal (Rabbit): &gt; 2000 mg/kg. Inhalation: &gt; 5.2 mg/L ( Rat ) 4 h</p> <p>Chronic Toxicity: Not known mutagenic or carcinogenic. May cause sensitization by skin contact.</p> <p>Ecotoxicity:</p> <p>D-Glucopyranose, oligomeric, C8-10 glycosides: LC50 (fish): 170 mg/l LC50 Zebra fish. EC50 (algae): 37 mg/L (= 21 mg a.i./L) EC50 to the freshwater algae Scenedesmus subspicatus 72h. EC50 (invertebrates): &gt; 100 mg/l EC50 Daphnia magna.</p> <p>2-butoxyethanol: LC50 (fish): 1490 mg/L LC50 Lepomis macrochirus 96 h. 2950 mg/L LC50 Lepomis macrochirus 96 h. EC50 (algae): No information available. EC50 (invertebrates): &gt; 1000 mg/L EC50 Daphnia magna 48 h.</p> <p>Citrus Extract: No data available.</p> <p>Distillates, petroleum, hydrotreated light: LC50 (fish): 2.4 mg/L LC50 Oncorhynchus mykiss 96 h. 2.2 mg/L LC50 Lepomis macrochirus 96 h. 45 mg/L LC50 Pimephales promelas 96 h. EC50 (algae): No information available. EC50 (invertebrates): No information available.</p> <p>Biodegradation/Bioaccumulation: Readily biodegradable. Not likely to bioaccumulate.</p>

KLA-STOP	Hazardous	Y	70,800	30	2.2584%	9046-10-0	<p>Acute Toxicity: LD50 (Oral): 2885 mg/kg ( Rat ) OECD 401. LD50 (Dermal): 2979 mg/kg ( Rabbit ) OECD 402. Inhalation: &gt; 0.74 mg/l ( Rat ) OECD 403.</p> <p>Chronic Toxicity: Not known sensitizing or mutagenic.</p> <p>Ecotoxicity: LC50 (fish): &gt;700 mg/l 96h. EC50 (algae): &gt;700 mg/l 72h. EC50 (invertebrate): &gt;1001 mg/l 48h.</p> <p>Biodegradation/Bioaccumulation: Not biodegradable. Does not bioaccumulate.</p>
IDCAP D	Non-Hazardous	N	10,264.08	5.7	0.5719%	Not available	<p>Acute Toxicity: Inhalation of dust in high concentration may cause irritation of respiratory system. Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. Unknown acute toxicity / Not applicable.</p> <p>Chronic Toxicity: This product does not contain any components suspected to be sensitizing or mutagenic.</p> <p>Ecotoxicity: The product component(s) are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. This product is not considered toxic to algae / fish / invertebrates.</p> <p>Biodegradation/Bioaccumulation: Product is not biodegradable and does not bioaccumulate.</p>

<p>PLATINUM FOAM PLUS</p>	<p>Hazardous</p>	<p>N</p>	<p>5,119.78</p>	<p>2.9</p>	<p>0.2852%</p>	<p>68439-57-6 111-76-2 111-46-6 50-00-0</p>	<p>Acute Toxicity: This product may contain or release trace amounts of formaldehyde. The International Agency for Research on Cancer (IARC) has classified formaldehyde as a Group 1 carcinogen (limited evidence in humans, sufficient evidence in animals). Exposure to formaldehyde has been linked to adverse reproductive effects in some human and animal studies. In other reproductive studies, however, no adverse effects were noted. (Meditext). Formaldehyde may also cause skin sensitisation (allergic reaction). - Sodium (C14-16) Olefin Sulfonate: LD50 Oral &gt;2000-5000 mg/kg (Rat). LD50 Dermal &gt; 740mg/kg (Rabbit). LC50 Inhalation &gt; 52 mg/L ( Rat ) 4h. - 2-butoxyethanol: LD50 Oral = 470 mg/kg (Rat). LD50 Dermal = 435 mg/kg (Rabbit). LC50 Inhalation = 450 ppm (Rat) 4h. - 2,2' -oxydiethanol: LD50 Oral = 12565 mg/kg (Rat). LD50 Dermal = 11890 mg/kg (Rabbit). LC50 Inhalation &gt; 4600 mg/m3 (Rat) 4h. - Formaldehyde (impurity): LD50 Oral = 100 mg/kg (Rat). LD50 Dermal &gt; 2000 mg/kg (Rat). LC50 Inhalation &lt; 463 ppm (Rat) 4h. Chronic Toxicity: Sensitization: Repeated or prolonged contact may cause allergic reactions in very susceptible persons. Mutagenic effects: Contains an known or suspected mutagen. Carcinogenicity: Formaldehyde is listed by IARC in Group 1 as carcinogenic to humans. Ecotoxicity: - Sodium (C14-16) Olefin Sulfonate: Fish - &gt;1-10 mg/l, 96h Read-across (analogy). Algae - NOEC &gt;1-10 mg/l, 72 h, Skeletonema costatum (marine diatom) Literature data. Daphnia and other aquatic invertebrates - &gt;1-10 mg/l, 48 h, Daphnia Read-across (analogy). - 2-butoxyethanol: Fish = 1490 mg/L LC50 Lepomis macrochirus 96h / = 2950 mg/L LC50 Lepomis macrochirus 96h. Algae - No information available. Daphnia and other aquatic invertebrates - &gt; 1000 mg/L EC50 Daphnia magna 48h. - 2,2' -oxydiethanol: Fish = 75200 mg/L LC50 Pimephales promelas 96h. Algae - No information available. Daphnia and other aquatic invertebrates - = 84000 mg/L EC50 Daphnia magna 48h. - Formaldehyde (impurity): Fish 22.6 - 25.7 mg/L LC50 Pimephales promelas 96h / 23.2 - 29.7 mg/L LC50 Pimephales promelas 96h / 100 - 136 mg/L LC50 Oncorhynchus mykiss 96h / 0.032 - 0.226 mL/L LC50 Oncorhynchus mykiss 96h / = 41 mg/L LC50 Brachydanio rerio 96h / = 1510 µg/L LC50 Lepomis macrochirus 96h. Algae - No information available. Daphnia and other aquatic invertebrates - = 2 mg/L LC50 Daphnia magna 48h / 11.3 - 18 mg/L EC50 Daphnia magna 48h. Biodegradation/Bioaccumulation: Formaldehyde (impurity) - Rapidly biodegradable / Does not bioaccumulate log Pow =0.35.</p>
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SAFE-LUBE	Hazardous	N	261,402.9	145.6	14.5641%		<p>Acute Toxicity: Inhalation of vapors in high concentration may cause irritation of respiratory system. Unknown acute toxicity: Not applicable. Toxicology data for the components: No data available.</p> <p>Chronic Toxicity: This product does not contain any known or suspected mutagens / carcinogens.</p> <p>Ecotoxicity: Toxicity to fish: LC50 &gt; 0.24mg/l <i>Scophthalmus maximus</i> (96h) - SLB Product level Data. 1-Propanaminium, 3,3',3''-[phosphinylidynetris(oxy)]tris[N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl-, N,N',N''-tri-C6-18 acylderivs, trichlorides - LC50 2 mg/l 96h Turbot ECHA Data. Toxicity to algae: EC50 0.11mg/l <i>Skeletonema costatum</i> (72h) - SLB Product level Data. 1-Propanaminium, 3,3',3''-[phosphinylidynetris(oxy)]tris[N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl-, N,N',N''-tri-C6-18 acylderivs, trichlorides - EC50 0.37 mg/l 72h <i>Pseudokirchneriella subcapitata</i> ECHA Data. Toxicity to daphnia and other aquatic invertebrates: LC50 1.9 mg/l <i>Acartia tonsa</i> (48h) - SLB Product level Data. 1-Propanaminium, 3,3',3''-[phosphinylidynetris(oxy)]tris[N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl-, N,N',N''-tri-C6-18 acylderivs, trichlorides - EC50 3.0 mg/l 48h <i>Daphnia Magna</i> ECHA Data.</p> <p>Biodegregation/Bioaccumulation: Readily biodegradable / No information available.</p>
POLYAMINE APG	Hazardous	N	261,402.9	145.6	14.5641%	124-09-4 143-23-7 111-40-0 112-24-3 64-19-7	<p>Acute Toxicity: Diethylene triamine - LD50 Oral = 1080 mg/kg (Rat). LD50 Dermal = 672 mg/kg (Rabbit). LC50 Inhalation = 0.3mg/L/4h (Rat)</p> <p>Chronic Toxicity: No information available.</p> <p>Ecotoxicity: Contains a substance which is: Harmful to aquatic organisms. The product contains following substances which are hazardous for the environment Diethylene triamine - Freshwater Algae: EC50:= 592 mg/L, 96h (<i>Desmodesmus subspicatus</i>), EC50: = 345.6 mg/L, 96h (<i>Pseudokirchneriella subcapitata</i>), EC50: = 1164 mg/L, 72h (<i>Pseudokirchneriella subcapitata</i>). Freshwater Fish: LC50:248 mg/L/96h (<i>Leuciscus idus</i>). Microtox:EC50 = 2000 mg/L 1 h, EC50 = 96 mg/L 17 h. Water Flea:EC50: = 16 mg/L, 48h (<i>Daphnia magna</i>).</p> <p>Biodegregation/Bioaccumulation: No information available. Diethylene triamine: log Pow: -1.3.</p>