

Chemwatch Hazard Alert Code: 1

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S.GHS.USA.EN



2248, 2249, 20124, 1195, 1196, 20733 (1L, 5L, 20L, 60L, 205L, 1000L) SPECIAL TEC LL 5W-30

Liqui Moly GmbH

Chemwatch: 48-0453

Version No: 4.1.1.1 Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

SECTION 1 IDENTIFICATION

Product Identifier

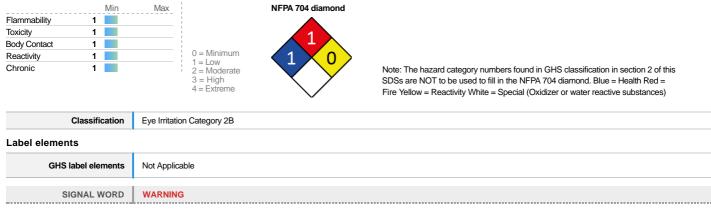
Froduct Identifier		
Product name	2249, 20124, 1195, 1196, 20733 (1L, 5L, 20L, 60L, 205L, 1000L) SPECIAL TEC LL 5W-30	
Synonyms	Item No. 2248, 2249, 20124, 1195, 1196, 20733	
Other means of identification	Available	
Recommended use of the chemical and restrictions on use		
Relevant identified uses	Use according to manufacturer's directions.	

SECTION 2 HAZARD(S) IDENTIFICATION

Lubricant.

Classification of the substance or mixture

CHEMWATCH HAZARD RATINGS



Hazard statement(s)

H320 Causes eye irritation.

Hazard(s) not otherwise specified

Not Applicable

Precautionary statement(s) Prevention

P264

Wash all exposed external body areas thoroughly after handling.

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2248, 2249, 20124, 1195, 1196, 20733 (1L, 5L, 20L, 60L, 205L, 1000L) SPECIAL TEC LL 5W-30

Precautionary statement(s) Response

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name		
64742-54-7.	40-60	paraffinic distillate, heavy, hydrotreated (severe)		
		base oil as		
Not avail.	1-<10	mineral oil		
36878-20-3	1-5	nonylated diphenylamines		

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 FIRST-AID MEASURES

Description of first aid measures

Eye Contact	 If this product comes in contact with the eyes: Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs: ► Flush skin and hair with running water (and soap if available). ► Seek medical attention in event of irritation.
Inhalation	 If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR in necessary. Transport to hospital, or doctor.
Ingestion	 If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice. Avoid giving milk or oils. Avoid giving alcohol. If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

+ Heavy and persistent skin contamination over many years may lead to dysplastic changes. Pre-existing skin disorders may be aggravated by exposure to this product.

- In general, emesis induction is unnecessary with high viscosity, low volatility products, i.e. most oils and greases.
- + High pressure accidental injection through the skin should be assessed for possible incision, irrigation and/or debridement.

NOTE: Injuries may not seem serious at first, but within a few hours tissue may become swollen, discoloured and extremely painful with extensive subcutaneous necrosis. Product may be forced through considerable distances along tissue planes.

SECTION 5 FIRE-FIGHTING MEASURES

Extinguishing media

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

Special hazards arising from the substrate or mixture

Fire Incompatibility + Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. 				
Fire/Explosion Hazard	 Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). Combustion products include: carbon dioxide (CO2) sulfur oxides (SOx) other pyrolysis products typical of burning organic material. May emit poisonous fumes. CARE: Water in contact with hot liquid may cause foaming and a steam explosion with wide scattering of hot oil and possible severe burns. Foaming may cause overflow of containers and may result in possible fire. 				

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	 Slippery when spilt. Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment.
Major Spills	 Slippery when spilt. Moderate hazard. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	 Electrostatic discharge may be generated during pumping - this may result in fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment.
	Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<=1 m/sec until fill pipe submerged to twice its diameter, th <= 7 m/sec).
	► Avoid splash filling.
	Avoid all personal contact, including inhalation.
	Wear protective clothing when risk of exposure occurs.
	► Use in a well-ventilated area.
	Prevent concentration in hollows and sumps.
	Store in original containers.
0 /1	 Keep containers securely sealed.
Other information	No smoking, naked lights or ignition sources.
	Store in a cool, dry, well-ventilated area.

Suitable container	 Metal can or drum Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	CARE: Water in contact with heated material may cause foaming or a steam explosion with possible severe burns from wide scattering of hot material. Resultant overflow of containers may result in fire. ► Avoid reaction with oxidising agents

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)						
INGREDIENT DATA						
Source	Ingredient	Material name	TWA	STEL	Peak	Notes

US OSHA Permissible Exposure Levels (PELs) - Table Z1	paraffinic distillate, heavy, hydrotreated (severe)	Oil mist, mineral	5 mg/m3	Not Available	Not Available	Not Available
US ACGIH Threshold Limit Values (TLV)	paraffinic distillate, heavy, hydrotreated (severe)	Mineral oil, excluding metal working fluids - Pure, highly and severely refined / Mineral oil, excluding metal working fluids - Poorly and mildly refined	5 mg/m3	Not Available	Not Available	TLV® Basis: URT irr
US NIOSH Recommended Exposure Limits (RELs)	paraffinic distillate, heavy, hydrotreated (severe)	Heavy mineral oil mist, Paraffin oil mist, White mineral oil mist	5 mg/m3	10 mg/m3	Not Available	Not Available
US OSHA Permissible Exposure Levels (PELs) - Table Z1	mineral oil	Oil mist, mineral	5 mg/m3	Not Available	Not Available	Not Available
US ACGIH Threshold Limit Values (TLV)	mineral oil	Mineral oil, excluding metal working fluids - Pure, highly and severely refined / Mineral oil, excluding metal working fluids - Poorly and mildly refined	5 mg/m3	Not Available	Not Available	TLV® Basis: URT irr
US NIOSH Recommended Exposure Limits (RELs)	mineral oil	Heavy mineral oil mist, Paraffin oil mist, White mineral oil mist	5 mg/m3	10 mg/m3	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3	
2248, 2249, 20124, 1195, 1196, 20733 (1L, 5L, 20L, 60L, 205L, 1000L) SPECIAL TEC LL 5W-30	Not Available	Not Available	Not Available	Not Available	
Ingredient	Original IDLH		Revised IDLH		
lingredient	Oliginal IDEI		Itevised IDEII		
paraffinic distillate, heavy, hydrotreated (severe)	Not Available		Not Available		
mineral oil	Not Available		Not Available		
nonylated diphenylamines	Not Available		Not Available		

Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.
Personal protection	
Eye and face protection	 Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.
Skin protection	See Hand protection below
Hands/feet protection	The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice. Personal hygiene is a key element of effective hand care. • Wear chemical protective gloves, e.g. PVC. • Wear safety footwear or safety gumboots, e.g. Rubber
Body protection	See Other protection below
Other protection	 Overalls. P.V.C. apron. Barrier cream.
Thermal hazards	Not Available

Respiratory protection

Type AK-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	AK-AUS P2	-	AK-PAPR-AUS / Class 1 P2
up to 50 x ES	-	AK-AUS / Class 1 P2	-
up to 100 x ES	-	AK-2 P2	AK-PAPR-2 P2 ^

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Brown colour liquid with characteristic odour; not miscible with water.		
Physical state	Liquid	Relative density (Water = 1)	0.855
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
Melting point / freezing point (°C)	-39	Viscosity (cSt)	66.3
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	234	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhalation hazard is increased at higher temperatures. Inhalation of oil droplets or aerosols may cause discomfort and may produce chemical inflammation of the lungs.
Ingestion	Accidental ingestion of the material may be damaging to the health of the individual. Ingestion of petroleum hydrocarbons can irritate the pharynx, oesophagus, stomach and small intestine, and cause swellings and ulcers of the mucous. Symptoms include a burning mouth and throat; larger amounts can cause nausea and vomiting, narcosis, weakness, dizziness, slow and shallow breathing, abdominal swelling, unconsciousness and convulsions.
Skin Contact	The liquid may be miscible with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives . Open cuts, abraded or irritated skin should not be exposed to this material

Mutagenicity

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Version No: 4.1.1.1 2248	, 2249, 20124, 1195, 1196, 20733 (1L, 5L, 3	20L, 60L, 205L, 1000L) S	PECIAL TEC LL 5W-30	Print Date: 18/01/201
	The material may accentuate any pre-existing dermatitis con Entry into the blood-stream, through, for example, cuts, abras		ic injury with harmful offacts. Examina th	ao skin prior to the use
	of the material and ensure that any external damage is suitab		ic injury with harmitic enects. Examine t	
Eye	There is some evidence to suggest that this material can cause eye irritation and damage in some persons. Direct eye contact with petroleum hydrocarbons can be painful, and the corneal epithelium may be temporarily damaged. Aromatic species can cause irritation and excessive tear secretion.			
Chronic	Constant or exposure over long periods to mixed hydrocarbo and reduced liver and kidney function. Skin exposure may res	Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Constant or exposure over long periods to mixed hydrocarbons may produce stupor with dizziness, weakness and visual disturbance, weight loss and anaemia, and reduced liver and kidney function. Skin exposure may result in drying and cracking and redness of the skin. Oil may contact the skin or be inhaled. Extended exposure can lead to eczema, inflammation of hair follicles, pigmentation of the face and warts on the soles of the feet.		
2248, 2249, 20124, 1195, 1196,		IDDITATION		
20733 (1L, 5L, 20L, 60L, 205L, 1000L) SPECIAL TEC LL 5W-30	TOXICITY Not Available	IRRITATION Not Available		
	ΤΟΧΙCITY	IRRITATION		
	Dermal (rabbit) LD50: >2000 mg/kg ^[1]	Not Available		
	Inhalation (rat) LC50: >3.9 mg/l/4hr ^[1]			
		I		
	Inhalation (rat) LC50: >4.7 mg/l/4hr ^[1]			
paraffinic distillate, heavy,	Inhalation (rat) LC50: >5 mg/l/4hr ^[1]			
hydrotreated (severe)	Inhalation (rat) LC50: >5.2 mg/l/4hr ^[1]	1		
	Inhalation (rat) LC50: >5.3 mg/l/4hr ^[1]			
	Inhalation (rat) LC50: 10.5 mg/l/4hr ^[1]			
	Inhalation (rat) LC50: 5.7 mg/l/4hr ^[1]			
	Inhalation (rat) LC50: 9.6 mg/l/4hr ^[1]			
	Oral (rat) LD50: >2000 mg/kg ^[1]			
	TOXICITY	IRRITATION		
mineral oil	Not Available	Not Available		
	ΤΟΧΙΟΙΤΥ	IRRITATION		
nonylated diphenylamines	Oral (rat) LD50: >5000 mg/kg ^[2]	Not Available		
Legend:	Acute toxicity 2.* Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances			
PARAFFINIC DISTILLATE, HEAVY, HYDROTREATED (SEVERE)	The materials included in the Lubricating Base Oils category. The potential toxicity of a specific distillate base oil is inverse. • The adverse effects of these materials are associated wi • The levels of the undesirable components are inversely. • Distillate base oils receiving the same degree or extent • The potential toxicity of <i>residual base oils</i> is independen • The reproductive and developmental toxicity of the distill Unrefined & mildly refined distillate base oils contain the high have shown the highest potential carcinogenic and mutagen refined oils by removing or transforming undesirable compon For highly and severely refined distillate base oils: In animal studies, the acute, oral, semilethal dose is >5g/kg b concentration for inhalation is 2.18 to >4 mg/L. The materials Testing for sensitisation has been negative. The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in	ly related to the severity or extent of p ith undesirable components, and related to the degree of processing; of processing will have similar toxici to the degree of processing the oil r late base oils is inversely related to th next levels of undesirable component ic activities. Highly and severely refin nents.	processing the oil has undergone, since ties; receives. In degree of processing. Is, have the largest variation of hydrocar ed distillate base oils are produced from by skin contact is >2g/kg body weight. T	rbon molecules and n unrefined and mildly The semilethal
MINERAL OIL	Evidence of carcinogenicity may be inadequate or limited in animal testing. Toxicity and Irritation data for petroleum-based mineral oils are related to chemical components and vary as does the composition and source of the original crude. A small but definite risk of occupational skin cancer occurs in workers exposed to persistent skin contamination by oils over a period of years. This risk has been attributed to the presence of certain polycyclic aromatic hydrocarbons (PAH) (typified by benz[a]pyrene). Petroleum oils which are solvent refined/extracted or severely hydrotreated, contain very low concentrations of both.			
NONYLATED DIPHENYLAMINES	Heating of substituted diphenylamines may generate vapours irritation may occur with prolonged or repeated contact. Over slight to very low order of toxicity following oral or topical adr	exposure may cause skin and airway		-
Acute Toxicity	0	Carcinogenicity	\otimes	
Skin Irritation/Corrosion	0	Reproductivity	0	
Serious Eye	✓	STOT - Single Exposure	0	
Damage/Irritation				
Respiratory or Skin sensitisation	\odot	STOT - Repeated Exposure	\otimes	

Aspiration Hazard

Continued...

седени:

Data available but uses not nin the chiena for dassification
 Data required to make classification available

🚫 – Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

TOXICITY					
Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
paraffinic distillate, heavy, hydrotreated (severe)	EC50	48	Crustacea	>1000mg/L	1
paraffinic distillate, heavy, hydrotreated (severe)	EC50	96	Algae or other aquatic plants	>1000mg/L	1
paraffinic distillate, heavy, hydrotreated (severe)	EC50	96	Algae or other aquatic plants	>1000mg/L	1
paraffinic distillate, heavy, hydrotreated (severe)	NOEC	504	Crustacea	>1mg/L	1
nonylated diphenylamines	NOEC	96	Crustacea	<10mg/L	1
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data				

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
	No Data available for all ingredients	No Data available for all ingredients

Bioaccumulative potential		
Ingredient	Bioaccumulation	
	No Data available for all ingredients	
Mobility in soil		
Ingredient	Mobility	
	No Data available for all ingredients	

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods	
Product / Packaging disposal	Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. A Hierarchy of Controls seems to be common - the user should investigate: • Reduction • Reuse • Recycling • Disposal (if all else fails) This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. • DO NOT allow wash water from cleaning or process equipment to enter drains. • It may be necessary to collect all wash water for treatment before disposal. • In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. • Where in doubt contact the responsible authority. • Recycle wherever possible or consult manufacturer for recycling options. • Consult State Land Waste Authority for disposal. • Bury or incinerate residue at an approved site. • Recycle containers if possible, or dispose of in an authorised landfill.

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant NO

Land transport (DOT): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

Safety, health and environmental regulations / legislation specific for the substance or mixture

nternational Agency for Research on Cancer (IARC) - Agents Classified by the IARC	US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminant
Vionographs	US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air
JS - Alaska Limits for Air Contaminants	Contaminants
JS - California Permissible Exposure Limits for Chemical Contaminants	US - Washington Permissible exposure limits of air contaminants
JS - California Proposition 65 - Carcinogens	US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
JS - Hawaii Air Contaminant Limits	US ACGIH Threshold Limit Values (TLV)
JS - Idaho - Limits for Air Contaminants	US ACGIH Threshold Limit Values (TLV) - Carcinogens
JS - Michigan Exposure Limits for Air Contaminants	US National Toxicology Program (NTP) 14th Report Part A Known to be Human Carcinoger
JS - Minnesota Permissible Exposure Limits (PELs)	US NIOSH Recommended Exposure Limits (RELs)
JS - Oregon Permissible Exposure Limits (Z-1)	US OSHA Permissible Exposure Levels (PELs) - Table Z1
JS - Pennsylvania - Hazardous Substance List	US Priority List for the Development of Proposition 65 Safe Harbor Levels - No Significant R
JS - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	Levels (NSRLs) for Carcinogens and Maximum Allowable Dose Levels (MADLs) for
	Chemicals Causing Reproductive Toxicity
	LIC Tavia Substances Control Act (TSCA) Chemical Substance Inventory
	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
/INERAL OIL(NOT AVAIL.) IS FOUND ON THE FOLLOWING REGULATORY LISTS	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
VINERAL OIL(NOT AVAIL.) IS FOUND ON THE FOLLOWING REGULATORY LISTS International Agency for Research on Cancer (IARC) - Agents Classified by the IARC	, , , , , , , , , , , , , , , , , , ,
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nternational Agency for Research on Cancer (IARC) - Agents Classified by the IARC	US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminar
nternational Agency for Research on Cancer (IARC) - Agents Classified by the IARC Nonographs	US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminal US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air
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Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs JS - Alaska Limits for Air Contaminants JS - California Permissible Exposure Limits for Chemical Contaminants JS - California Proposition 65 - Carcinogens JS - Idaho - Limits for Air Contaminants JS - Idaho - Limits for Air Contaminants JS - Michigan Exposure Limits for Air Contaminants JS - Minnesota Permissible Exposure Limits (PELs)	 US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminal US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants US - Washington Permissible exposure limits of air contaminants US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants US ACGIH Threshold Limit Values (TLV) US ACGIH Threshold Limit Values (TLV) - Carcinogens US National Toxicology Program (NTP) 14th Report Part A Known to be Human Carcinoge US NIOSH Recommended Exposure Limits (RELs)

NONYLATED DIPHENYLAMINES(36878-20-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SECTION 311/312 HAZARD CATEGORIES

Immediate (acute) health hazard	Yes
Delayed (chronic) health hazard	No
Fire hazard	No
Pressure hazard	No
Reactivity hazard	No

Chemicals Causing Reproductive Toxicity

US. EPA CERCLA HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES (40 CFR 302.4)

None Reported

State Regulations

US. CALIFORNIA PROPOSITION 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm

US - CALIFORNIA PREPOSITION 65 - CARCINOGENS & REPRODUCTIVE TOXICITY (CRT): LISTED SUBSTANCE

Soots, tars, and mineral oils (untreated and mildly treated oils and used engine oils) Listed

National Inventory	Status
Australia - AICS	N (mineral oil)
Canada - DSL	N (mineral oil)
Canada - NDSL	N (paraffinic distillate, heavy, hydrotreated (severe); nonylated diphenylamines; mineral oil)
China - IECSC	N (mineral oil)
Europe - EINEC / ELINCS / NLP	N (mineral oil)
Japan - ENCS	N (mineral oil)
Korea - KECI	N (mineral oil)
New Zealand - NZIoC	N (mineral oil)
Philippines - PICCS	N (mineral oil)
USA - TSCA	N (mineral oil)
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC — TWA: Permissible Concentration-Time Weighted Average PC — STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit. IDLH: Immediately Dangerous to Life or Health Concentrations OSF: Odour Safety Factor NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index