

SAFETY DATA SHEET

1. Identification

Product identifier OAK PROTECT® 406-AY
CORROSION PREVENTIVE

Other means of identification

SDS number Not applicable

Recommended use CORROSION PREVENTIVE

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name CIMCOOL® Industrial Products LLC
3000 Disney Street
Cincinnati, Ohio 45209

Telephone (General Information) 513-458-8100

Emergency telephone number 1-800-424-9300 (CHEMTREC)

Emergency telephone number (outside USA) 1-703-527-3887 (CHEMTREC)

2. Hazard(s) identification

Physical hazards Flammable liquids Category 3

Health hazards Serious eye damage/eye irritation Category 2

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

Specific target organ toxicity, single exposure Category 3 narcotic effects

Specific target organ toxicity, repeated exposure Category 1

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Flammable liquid and vapor. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. Causes damage to organs through prolonged or repeated exposure.

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. No smoking. Ground/bond container and receiving equipment. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment.

Response IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a poison center/doctor if you feel unwell. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell. Take off immediately all contaminated clothing and wash it before reuse.

Storage Keep container tightly closed. Protect from sunlight. Store in a well-ventilated place. Store away from incompatible materials. Store in accordance with local/regional/national/international regulation.

Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
STODDARD SOLVENT, POLYAROMATIC FREE		8052-41-3	15 - 40
C9-C11 ISOALKANES		68551-16-6	10 - 30
SEVERELY-HYDROTREATED NAPHTHENIC PETROLEUM DISTILLATES		64742-52-5	1 - 5
Other components below reportable levels			30 - 60

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth thoroughly. Do not give liquids. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
Most important symptoms/effects, acute and delayed	Aspiration may cause pulmonary edema and pneumonitis. May cause respiratory irritation. May cause drowsiness and dizziness. Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Defatting of the skin.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Symptoms may be delayed.
General information	Take off all contaminated clothing immediately. Wash contaminated clothing before reuse. If exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media	Foam. Dry chemical powder. Carbon dioxide (CO ₂). Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed. Vapors may travel considerable distance to a source of ignition and flash back.
Special protective equipment and precautions for firefighters	Wear suitable protective equipment. In the event of fire, wear self-contained breathing apparatus.
Fire fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Some of these materials, if spilled, may evaporate leaving a flammable residue.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials. In the event of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
General fire hazards	Flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Local authorities should be advised if significant spillages cannot be contained. Take precautionary measures against static discharge. The product is immiscible with water and will spread on the water surface.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Clean up in accordance with all applicable regulations. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Do not flush spill to drain. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground. Contact local authorities in case of spillage to drain/aquatic environment. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling

Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Electrostatic Accumulation Hazard: Use proper grounding or bonding procedures. Additional information regarding the safe handling of products with static accumulation potential can be ordered from the American Petroleum Institute (API) request API Recommended Practice 2003 or from the National Fire Protection Association (NFPA) request NFPA 77. Do not ingest. Do not get this material on clothing. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes. Avoid prolonged and repeated contact. Use only in well-ventilated areas. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash thoroughly after handling. Wash contaminated clothing before reuse. Practice good housekeeping. Handle and open container with care. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

Do not handle or store near an open flame, heat or other sources of ignition. To maintain product quality, do not store in heat or direct sunlight. Use care in handling/storage. Keep containers closed when not in use. Keep away from food, drink and animal feedingstuffs. Store in original container. Store away from incompatible materials (see Section 10 of the SDS). Store in a well-ventilated place. Room temperature - normal conditions. Do not allow material to freeze. If frozen, product may separate. Thaw completely at room temperature and stir thoroughly prior to use.

8. Exposure controls/personal protection

Occupational exposure limits

U.S. - OSHA

	Type	Value
SEVERELY-HYDROTREATED NAPHTHENIC PETROLEUM DISTILLATES (CAS 64742-52-5)	PEL	5 mg/m3
C9-C11 ISOALKANES (CAS 68551-16-6)	PEL	500 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

	Type	Value
STODDARD SOLVENT, POLYAROMATIC FREE (CAS 8052-41-3)	PEL	2900 mg/m3
		500 ppm

U.S. - NIOSH

	Type	Value
C9-C11 ISOALKANES (CAS 68551-16-6)	TWA	350 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

	Type	Value
STODDARD SOLVENT, POLYAROMATIC FREE (CAS 8052-41-3)	Ceiling	1800 mg/m3
	TWA	350 mg/m3

ACGIH

	Type	Value
SEVERELY-HYDROTREAT ED NAPHTHENIC PETROLEUM DISTILLATES (CAS 64742-52-5)	TWA	5 mg/m3
C9-C11 ISOALKANES (CAS 68551-16-6)	TWA	100 ppm

US. ACGIH Threshold Limit Values

	Type	Value
STODDARD SOLVENT, POLYAROMATIC FREE (CAS 8052-41-3)	TWA	100 ppm

Appropriate engineering controls

Ensure compliance with applicable exposure limits. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash fountain and emergency showers are recommended.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Do not get in eyes. Eye wash fountain is recommended.

Skin protection

Hand protection Use protective gloves made of: Nitrile.

Other Wear suitable protective clothing and gloves.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using, do not eat, drink or smoke. Do not get in eyes, on skin, on clothing. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	CLEAR
Physical state	Liquid.
Form	Liquid.
Color	Not available.
Odor	CHEMICAL
Odor threshold	Not available.
pH	Not Applicable
Melting point/freezing point	Not available.
Initial boiling point and boiling range	> 300 °F (> 148.89 °C) estimated
Flash point	120 °F (48.9 °C) Setaflash
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.

Upper/lower flammability or explosive limits

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

Vapor pressure Not available.

Vapor density Not available.

Relative density Not available.

Solubility(ies) Insoluble

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Flash point class	Combustible II
Specific gravity	0.84
VOC ASTM D2369	65 %

10. Stability and reactivity

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

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use. Hazardous polymerization does not occur.

Conditions to avoid Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Acids. Avoid contact with oxidizers or reducing agents.

Hazardous decomposition products Smoke, fumes, and oxides of carbon

11. Toxicological information**Information on likely routes of exposure**

Inhalation	May cause drowsiness and dizziness. May cause irritation to the respiratory system.
Skin contact	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Eye contact	Causes serious eye irritation.
Ingestion	May be harmful if swallowed. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. May cause respiratory irritation. Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Defatting of the skin.

Information on toxicological effects

Acute toxicity In high concentrations, vapors are anesthetic and may cause headache, fatigue, dizziness and central nervous system effects. May cause respiratory irritation. Narcotic effects. Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

Components	Species	Test Results
C9-C11 ISOALKANES (CAS 68551-16-6)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	15400 mg/kg
<i>Inhalation</i>		
LC50	Rat	12.4 mg/l, 4 hours

Components	Species	Test Results
<i>Oral</i> LD50	Rat	34600 mg/kg
Chronic <i>Inhalation</i> NOEL	Rat	> 922 ppm, 6 hours
SEVERELY-HYDROTREATED NAPHTHENIC PETROLEUM DISTILLATES (CAS 64742-52-5)		
Acute <i>Dermal</i> LD50	Rabbit	> 2000 mg/kg
<i>Inhalation</i> LC50	Rat	2.18 mg/l, 4 hr
<i>Oral</i> LD50	Rat	> 5000 mg/kg
STODDARD SOLVENT, POLYAROMATIC FREE (CAS 8052-41-3)		
Acute <i>Dermal</i> LD50	Rat	> 3000 mg/kg
<i>Inhalation</i> LC50	Rat	> 5500 mg/kg, 4 hours

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

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Defatting, drying and cracking of skin.
Serious eye damage/eye irritation Causes serious eye irritation. Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization Not classified.

Skin sensitization Not classified.

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

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

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

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

Specific target organ toxicity - single exposure May cause respiratory irritation. May cause drowsiness and dizziness.

Specific target organ toxicity - repeated exposure Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard May be harmful if swallowed and enters airways.

Chronic effects May cause damage to organs through prolonged or repeated exposure.

Further information Symptoms may be delayed.

12. Ecological information

Ecotoxicity Contains a substance which causes risk of hazardous effects to the environment.

Components	Species	Test Results	
C9-C11 ISOALKANES (CAS 68551-16-6)			
Aquatic			
<i>Acute</i>			
Crustacea	EC50	Daphnia	1000 mg/l, 48 hours
Fish	LC50	Rainbow Trout	1000 mg/l, 96 hours

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

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

STODDARD SOLVENT, POLYAROMATIC FREE 3.16 - 7.15

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Consult authorities before disposal. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

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

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

14. Transport information

DOT

UN number UN1268
UN proper shipping name Petroleum products, n.o.s. (STODDARD SOLVENT and C9-C11 ISOALKANES)
Transport hazard class(es)
Class 3
Subsidiary risk -
Label(s) 3
Packing group III
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Special provisions 144, B1, IB3, T4, TP1, TP29
Packaging exceptions 150
Packaging non bulk 203
Packaging bulk 242

Supplemental Information: This material may be transported as "non regulated" by DOT if all criteria referenced in 49 CFR are met and it is in "non-bulk" packages (119 gallons or less).

IATA

UN number UN1268
UN proper shipping name Petroleum products, n.o.s. (STODDARD SOLVENT, C9-C11 ISOALKANES)
Transport hazard class(es)
Class 3
Subsidiary risk -
Packing group III
Environmental hazards No.
ERG Code 3L
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Other information
Passenger and cargo aircraft Allowed.
Cargo aircraft only Allowed.

IMDG

UN number UN1268
UN proper shipping name PETROLEUM PRODUCTS, N.O.S. (STODDARD SOLVENT and C9-C11 ISOALKANES)
Transport hazard class(es)
Class 3
Subsidiary risk -
Packing group III
Environmental hazards
Marine pollutant No.

EmS

F-E, S-E

Special precautions for user
Transport in bulk according to
Annex II of MARPOL 73/78 and
the IBC Code

Read safety instructions, SDS and emergency procedures before handling.
Not established.

DOT



IATA; IMDG



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. It may be reportable under the provisions of SARA Sections 311 and 312 if specific threshold criteria are met or exceeded.

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

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

Not regulated.

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

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

STODDARD SOLVENT, POLYAROMATIC FREE (CAS 8052-41-3)

US. New Jersey Worker and Community Right-to-Know Act

STODDARD SOLVENT, POLYAROMATIC FREE (CAS 8052-41-3)

US. Pennsylvania Worker and Community Right-to-Know Law

STODDARD SOLVENT, POLYAROMATIC FREE (CAS 8052-41-3)

US. Rhode Island RTK

Not regulated.

California South Coast Air Quality Management District (SCAQMD) Rule 1144 (VOC Emissions)

This product is subject to SCAQMD Rule 1144; it is not compliant and shall not be sold and used in the SCAQMD. The VOC content of the product is 450 g/L, measured by ASTM Method E-1868-10. This product has a specified VOC limit of 50 g/L.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory or exempt (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

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

Issue date 07-08-2015

Version # 01

Further information Not available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision Information

Product and Company Identification: Product and Company Identification
Composition / Information on Ingredients: Ingredients
Physical & Chemical Properties: Multiple Properties
Transport Information: Proper Shipping Name/Packing Group
Regulatory Information: United States
Material Attributes & Uses; Experimental Data: Experimental Data
HazReg Data: North America
GHS: Classification