SECTION 1: IDENTIFICATION

PRODUCT IDENTIFIER: MODINE GULFCOAT CIRCUIT SHIELD IEA-OC-008

OTHER MEANS OF IDENTIFICATION (FOR CHEMTREC): FORMULA # 10E011N12C

RECOMMENDED USE OF THE CHEMICAL: AEROSOL SPRAY

SUPPLIER DETAILS: MANUFACTURED BY:

Modine Manufacturing Co. 1423 West Ormsby Ave. Louisville, KY 40210

EMERGENCY 24-HOUR TELEPHONE NUMBERS:

Call CHEMTREC: within USA dial 1-800-424-9300 or outside USA dial +1-703-527-3887

SECTION 2: HAZARDS IDENTIFICATION

HAZARD PICTOGRAMS:



GHS02 Flame, GHS04 Gas Cylinder, GHS07 Exclamation Mark, GHS08 Health Hazard

CLASSIFICATION OF THE SUBSTANCE OF MIXTURE:

Flammable Aerosols, Category 1 Gasses Under Pressure, Category Compressed Liquid Aspiration Hazard, Category 1 Skin Corrosion/Irritation, Category 2 Serious Eye Damage/Eye Irritation, Category 2A Specific Target Organ Toxicity - Single Exposure, Category 3 Carcinogenicity, Category 2 Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 7.63%

SIGNAL WORD: DANGER

HAZARD STATEMENTS:

- H222 Extremely flammable aerosol.
- H280 Contains gas under pressure; may explode if heated. H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H319 Causes serious eve irritation.
- H336 May cause drowsiness or dizziness. H351 Suspected of causing cancer.

PRECAUTIONARY STATEMENTS:

GENERAL & PREVENTION:

- P102 Keep out of reach of children.P201 Obtain special instructions before use.P202 Do not handle until all safety precautions have been read and understood. P210
- Keep away from heat/sparks/open flames/other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. P211
- P251
- P261 Avoid breathing vapor/spray. Wash hands thoroughly after handling.
- P264
- P271 Use only outdoors or in a well-ventilated area.

P280 Wear eye protection. **RESPONSE:**

- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P304+P340 IF INHALED: Remove victim to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do P312 Call a POISON CENTER/doctor if you feel unwell. P331 Do NOT induce vomiting. P337+P313 If eye irritation persists: Get medical advice/attention. STORAGE:

STORAGE:

- P403+P233 Store in a well-ventilated place. Keep container tightly closed when not in use. P410+P403 Protect from sunlight. Store in a well-ventilated place. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 degrees C/122 degrees F.

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DISPOSAL:

P501 Dispose of contents/container in accordance with local/regional/national regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#	COMPONENT	CAS#	<u>% by WT.</u>
1	ACETONE	67-64-1	40-51
2	N-BUTYL ACETATE	123-86-4	10-16
3	PROPANE	74-98-6	10-16
4	N-BUTANE	106-97-8	5-8
5	TBA (TERTIARY BUTYL ACETATE)	540-88-5	3-5
6	PM ACETATE	108-65-6	1-3
7	SOLVENT NAPHTHA	64742-95-6	1-3
8	1,2,4-TRIMETHYLBENZENE	95-63-6	0.1-1
9	DI-ISOBUTYL KETONE	108-83-8	0.1-1

SECTION 4: FIRST AID MEASURES

Inhalation: If inhaled: Move person to fresh air and keep in comfortable position for breathing.

If breathing difficulty persists: Get medical advice/attention. **Skin Contact:** If on skin: Wash with plenty of soap and water. Remove contaminated clothing and wash before reuse. If skin irritation persists: Get medical advice/attention.

Figure 11 on synth wash with period of soap and water. Network contaminated contaminated contaminated containing and wash before reuse. If skin irritation persists: Get medical advice/attention.
Eye Contact: 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.
Ingestion: If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting unless directed to do so by medical personnel.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

See Section 11: Toxicological Information and effects. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT REQUIRED:

Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: CO2 (Carbon Dioxide), dry chemical, or water fog.
Unsuitable Extinguishing Media: Water spray may be unsuitable. However if water is used fog nozzles are preferable.
Water may be used to cool closed containers to prevent pressure build-up and explosion when exposed to extreme heat.
Specific Hazards Arising From the Chemical: Closed containers exposed to heat from fire may build pressure and explode. Products of combustion may include but are not limited to: oxides of carbon.
Special Protective Equipment and Precautions for Fire-Fighters: Full protective equipment including

self-contained breathing apparatus should be used.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protection recommended in Section 8. **Environmental Precautions:** Prevent contamination of soil/ground, waterways, drains, and sewers. Methods of Containment: Absorb spilled liquid in suitable material. **Methods for Clean-Up:** Use spark-proof tools to sweep or scrape up, containerize, and dispose of properly. **Other Information:** Ensure adequate ventilation.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling:

Vapors may ignite explosively. Prevent buildup of vapors. Keep from sparks, heat, flame or other heat sources. Do not smoke. Turn off pilot lights, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Do not puncture or incinerate/burn container. Keep container tightly closed while not in use. Conditions for Safe Storage, Including Any Incompatibilities:

Store in dry, well-ventilated area and in accordance with federal, state, and local regulations. Do not expose to heat or store at temperatures above 50 degrees C / 122 degrees F. If storing in cold temperatures, allow product to warm to room temperature before use. Keep container tightly closed and away from heat and sunlight when not in use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

#	COMPONENT	ACGIH TLV-STEL	ACGIH TLV-TWA	OSHA PEL-TWA
1	ACETONE	750 ppm	500 ppm	1000 ppm
2	N-BUTYL ACETATE	200 ppm	150 ppm	150 ppm
3	PROPANE	1800 ppm	2500 ppm	1000 ppm
4	N-BUTANE	N/E	800 ppm	mqq 008
5	TBA (TERTIARY BUTYL ACETATE)	N/E	200 ppm	200 ppm
б	PM ACETATE	N/E	N/E	N/E
7	SOLVENT NAPHTHA	N/E	100 ppm	100 ppm
8	1,2,4-TRIMETHYLBENZENE	N/E	N/E	N/E
9	DI-ISOBUTYL KETONE	N/E	250 mg/m3	290 mg/m3

APPROPRIATE ENGINEERING CONTROLS: Provide adequate ventilation to keep air contamination below OSHA

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permissible exposure limits and ACGIH TLV exposure levels. EYE/FACE PROTECTION: Wear safety glasses with side shields. Have eye wash facilities immediately available. SKIN PROTECTION: Wear chemical resistant gloves(neoprene or butyl rubber) if contact is likely. RESPIRATORY PROTECTION: Use NIOSH-approved air-purifying respirator with organic cartridge or canister if exposure cannot be controlled within applicable limits with ventilation.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: COLOR:	Aerosol - Pressurized Liquid See product identification
ODOR:	Solvent Odor
ODOR THRESHOLD:	No data available
pH:	No data available
FREEZING POINT:	Not Established (mixture)
BOILING POINT:	Not Applicable (pressurized mixture)
FLASH POINT:	less than -18 degrees C (less than -0.4 degrees F), c.c.
EVAPORATION RATE:	Faster than ether
UPPER FLAMMABILITY LIMIT:	Not Established (mixture)
LOWER FLAMMABILITY LIMIT:	Not Established (mixture)
VAPOR PRESSURE:	Not Established (pressurized mixture)
SPECIFIC GRAVITY:	
SOLUBILITY (WATER):	
VOC PERCENT BY WEIGHT:	41.48
HAPS PERCENT BY WEIGHT:	0
MIR EPA NUMBER:	0.756
MIR CA NUMBER:	0.689

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal conditions. POSSIBILITY OF HAZARDOUS REACTIONS: Will not occur. CONDITIONS TO AVOID: Keep away from heat, sparks, and flames. INCOMPATIBLE MATERIALS: Strong oxidizing agents. INCOMPATIBLE MATERIALS: Strong oxidizing agents. HAZARDOUS DECOMPOSITION PRODUCTS: by fire - Carbon Dioxide and Carbon Monoxide

SECTION 11: TOXICOLOGICAL INFORMATION

LIKELY ROUTES OF ENTRY: Skin contact, Inhalation, Eye contact, Ingestion SIGNS AND SYMPTOMS OF EXPOSURE:

Skin Contact: Signs/symptoms may include localized redness, itching, drying and cracking of skin. Inhalation: Intentional concentration and inhalation may be harmful or fatal. Eye Contact: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the

cornea, and impaired vision. Ingestion: Signs/sympto Ingestion: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. TARGET ORGANS POTENTIALLY AFFECTED BY EXPOSURE:

Central nervous system, kidneys, lungs, liver, eyes, skin, brain, respiratory tract, urinary tract, reproductive system, cardiovascular system

TOXICOLOGICAL DATA:

#	COMPONENT	LD50 ORAL	LD50 DERMAL	LC50 INHALATION
1.	ACETONE	5800 mg/kg (rat)	20000 mg/kg (rabbit)	76 mg/L (rat) 4 h
2.	N-BUTYL ACETATE	>10,760 mg/kg (rat)	>14,112 mg/kg rabbit	>21 mg/l (rat) 4 h
3.	PROPANE	N/E	N/E	658 mg/L (rat) 4 h
4.	N-BUTANE	N/E	N/E	30957 mg/m3 (rat) 4h
5.	TBA (TERTIARY BUTYL ACETATE)	4100 mg/kg (rat)	>2 g/kg (rabbit)	>2230 mg/m3 (rat) 4h
6.	PM ACETATE	>5000 mg/kg (rat)	>5000 mg/kg (rabbit)	>10.8 mg/l (rat) 6 h
7.	SOLVENT NAPHTHA	N/E	N/E	N/E
8.	1,2,4-TRIMETHYLBENZENE	N/E	N/E	N/E
9.	DI-ISOBUTYL KETONE	N/E	N/E	N/E
9.	DI-ISOBUTYL KETONE	N/E	N/E	N/E

SECTION 12: ECOLOGICAL INFORMATION

No data available.

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SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of container and its contents in accordance with federal, state, and local regulations. Do not puncture, incinerate, or place container in trash compactor.

SECTION 14: TRANSPORTATION INFORMATION

GROUND (D.O.T./49 CFR): UN I.D. Number: UN1950 Proper Shipping Name: Hazard label: Shipping papers format:	Transport Hazard Class: 2.1 Packing Group: - (not applicable) AEROSOLS (",FLAMMABLE" is optional to add after AEROSOLS) Limited Quantity (LTD QTY) label see 49 CFR 172.315 UN1950, AEROSOLS, 2.1, LTD QTY (can add ",FLAMMABLE" after AEROSOLS)
AIR (IATA): UN I.D. Number: UN1950 Proper Shipping Name: Hazard labels: Shipping papers format:	Transport Hazard Class: 2.1 Packing Group: - (not applicable) AEROSOLS, FLAMMABLE Packing Instruction: Y203 LTD QTY label with "Y" in it, and Flammable Gas label UN1950, AEROSOLS, FLAMMABLE, 2.1 (Note LTD QTY not needed on papers)
WATER (IMDG): UN I.D. Number: UN1950 Proper Shipping Name: AEROSOLS Packing Instruction: P003,LP02 Shipping papers format:	Hazard label: LTD QTY label (see IMDG 3.4.5.1)

No component of this product is a listed Marine Pollutant (49 CFR 172,101,Appendix B).

SECTION 15: REGULATORY INFORMATION

International Chemical Inventory

All components of this product are listed on or exempt from the following inventories: TSCA (United States), CEPA/DSL (Canada), AICS (Australia), IECSC (China) SARA Section 313 Toxic Chemicals: 1,2,4-TRIMETHYLBENZENE 95-63-6, DI-ISOBUTYL KETONE 108-83-8 Chemicals listed above are subject to the SARA reporting requirements under 40 CFR 372.45(c)(5).

Chemicals listed above are subject to the SARA reporting requirements under 40 CFR 372.45(c)(5). California Prop65 Chemicals:

SOLVENT NAPHTHA 64742-95-6

* California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).

This product contains chemicals known to the state of California to cause cancer.

SECTION 16: OTHER INFORMATION

REVISION DATE: NEW

HMIS & NFPA Hazard Scale:

0=minimal, 1=slight, 2=moderate, 3=serious, 4=severe HMIS(American Coatings Association's Hazardous Material Identification System): Health = 2 Flammability = 4 Physical Hazard = 1 MFPA 704(National Fire Protection Association's Hazard Identification Ratings System): Health = 2 Flammability = 4 Instability = 1

This SDS is based on information believed to be reliable and accurate. Because of changing reporting requirements and other variables it is impossible to guarantee with complete accuracy all the information contained in this document. It is the responsibility of the user to determine proper personal protection based on actual condition of use and to comply with all federal, state, and local laws and regulations.