SOVEREIGN CHEMICAL COMPANY
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Material Safety Data Sheet

Sovchem TMQ

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Sovereign Chemical Company 1225 West Market Street Akron, Ohio 44313 Phone: 330-869-0500 Fax: 330-869-0518	***Emergency Contact :*** Chemtrec: 1-800-424-9300 (continental USA) (1)703-527-3887 (outside continental USA)
Trade Name(s): Sovchem TMQ Flakes/granules/powder/prills	***MSDS Number:*** 1745
Chemical Name: Quinoline, 1,2-dihydro-2,2,4-trimethyl, homopolymer	***Synonyms:*** Poly-(1,2-dihydro-2,2,4-trimethyl-quinoline) 2,2,4-trimethyl-1,2-dihydroquinoline, polymer Trimethyl-dihydroquionoline, polymer Polymerized 2,2-4-trimethyl-1,2dihydroquinoline
Prepared By: Sovereign Chemical Company	***Date of Issue:*** May 7, 2009(supersedes: November 7, 2005) ***Revision Number:*** 2 ***Change(s):*** 3 year update

2. INGREDIENTS

Component	***CAS #***	***Percent***	***ACGIH (TLV)***	***OSHA (PEL)***	***Units***
Quinoline, 1,2-dihydro-2, 2,4-trimethyl, homopolymer	26780-96-1	100%	NE	NE	NE

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Amber to light brown flakes, granule, powder or prills. Use appropriate personal protective equipment. Provide sufficient ventilation to minimize dust explosion hazards. During fire situations, irritating and toxic gases may be generated. Keep from entering storm or sanitary sewers, ground water, or soil.

HMIS Rating: Health – 1, Flammability – 1, Reactivity – 0, Personal Protection Equipment - E - safety glasses, gloves, dust mask
This is recommended personal protection equipment; final personal protection equipment should be determined by the plant safety department based on the actual conditions under which the product is used.

Potential Health Effects:

Eye: May cause irritation.
Skin Contact: May cause irritation.
Ingestion: May be harmful if swallowed. May be irritating to the gastro-intestinal tract.
Inhalation: May be harmful if inhaled. May be irritating to the respiratory tract.
Chronic & Carcinogenicity: The product is not known to be carcinogenic. It does not contain any NTP or IARC listed materials. May aggravate pre-existing respiratory disorders.

4. FIRST AID MEASURES

Skin: Wash immediately with plenty of soap and water. Take off contaminated clothing and shoes and wash before reuse.
Eye: Rinse immediately with plenty of water.
Ingestion: Induce vomiting. Seek medical help immediately.
Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

5. FIRE FIGHTING MEASURES

Flash Point: 115°C (COC) ***LEL:*** 30 g/m^3 at 0.15 joules UEL***:*** ND Auto ***Ignition Temperature:*** ND
Use water, dry chemical, regular foam or carbon dioxide to extinguish fires. Product in or near fires should be cooled with a water spray or fog. A self contained breathing apparatus (SCBA) operating in the positive pressure mode and full fire fighting protective clothing should be worn for combating fires. During a fire the product can form carbon monoxide, carbon dioxide, aniline, acetone vapors, nitrogen oxides and toxic fumes. When heated over 90°C methane gas may be given off. Fine powder material may cause dust explosions. Take measure against electrostatic charges when product dust/air mixtures exist.

6. ACCIDENTAL RELEASE MEASURES

Take up any spilled product by mechanical means (avoid dust formation) and place into sealed containers for proper disposal. Individuals involved in the cleanup should wear appropriate personal protective equipment. See Section 8. Unnecessary personnel should be kept clear of the area. Do not allow product to enter sewage or ground water. Dispose of waste materials including empty product bags or drums in accordance with Local, State and Federal regulations.

7. HANDLING AND STORAGE

Storage Conditions: Do not store at temperatures above 40°C (104°F). Store in closed containers in a dry environment and away from foodstuffs, acids and oxidizing materials.
Handling: Take precaution against electrostatic charges when product dust/air mixtures exist. Good housekeeping and engineering practices should be employed to prevent the generation and accumulation of dusts. Wet mopping or vacuuming with a unit that contains a HEPA filter is recommended to clean up any dusts generated during processing or handling. Individuals handling this product should wear personal protective equipment specified in Section 8. Plant environment should include controls and equipment specified in Section 8.

8. EXPOSURE CONTROL - PERSONAL PROTECTION

Engineering Controls: Local exhaust ventilation should be provided. Design details for local exhaust ventilation systems may be found in the latest edition of "Industrial Ventilation: A Manual of Recommended Practices" published by the ACGIH Committee on Industrial Ventilation, P.O. Box 16153, Lansing, MI 48910. The need for local exhaust ventilation should be evaluated by a professional industrial hygienist. Local exhaust ventilation systems should be designed by a professional engineer.
Respiratory Protection: Dust mask. Do not inhale dust and vapor.
Eye Protection: Chemical protective goggles are recommended where there is a possibility of eye contact with the product.
Protection Gloves: Neoprene or nitrile gloves should be worn to prevent irritation and possible absorption. Cloth gloves are not recommended.

Other Protection Items: Wear long-sleeved clothing while handling product. Neoprene or nitrile rubber coated apron or other body covering may be required if there is a possibility of regular work clothing becoming contaminated with the product. All soiled or dirty clothing and personal protective equipment should be thoroughly cleaned before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical State: Amber to light brown flakes, granules or powder.	***Melt Point:*** 83.0 – 93.0°C
Vapor Density (Air = 1): Not applicable	***Octanol/Water Partition Coefficient:*** 3.2 log P
Vapor Pressure: Not applicable	***Evaporation Rate BuOAC = 1:*** Not applicable
Odor: Characteristic	***Specific Gravity:*** 1.05 g/cm^3
% Volatile by Volume: Not applicable	***Boiling Point:*** > 315°C
% Solubility (H_2O) : Insoluble	***pH:*** Not applicable
Other: Soluble in acetone, toluene, chloroform, ethanol	

10. STABILITY AND REACTIVITY

Stability /Polymerization: Stable, hazardous polymerization will not occur.
Incompatibility (conditions to avoid): Do not store at temperatures above 40°C (104°F). Avoid dust formation. Protect from electrostatic charges. Avoid strong oxidizing agents.
Hazardous Decomposition Products: During a fire the product can form carbon monoxide, carbon dioxide, aniline, acetone vapors, nitrogen oxides and toxic fumes. When heated over 90°C methane gas may be given off.
Special Sensitivity: None that are known.

11. TOXICOLOGICAL INFORMATION

Skin: Dermal LD_{50} over 5010 mg/kg, rabbit (practically non-toxic)
Eye: 0.0 (FHSA) on a scale of 110.0 (practically non-irritating)
Ingestion: LD_{50} 2225 mg/kg: rat, orally (slightly toxic)
Skin Irritation: 1.3 (FHSA), on a scale of 8.0 (slightly irritating)

Chronic Effects:

1. Polymerized TMQ was fed to rats for 2 years at concentrations up to 3%. Effects included enhanced lipid deposition in the liver. An increased incidence of cholangiofibroma was noted.
2. Polymerized TMQ was administered to mice cutaneously for 2 years at a dose of 10 mg. No increase in tumor incidence was noted.
3. TMQ was fed to dogs for 1 year at concentrations up to 0.15%. No increase in tumor incidence was noted.

12. ECOLOGICAL INFORMATION

Acute Fish Toxicity: Rainbow Trout LC50 96 hrs= 50.0 mg/l
Bluegill Sunfish LC50 96 hrs= 54.0 mg/l
Fathead Minnow LC50 96 hrs= 64.0 mg/l
Acute Crustaceans Toxicity: Daphnia Magna EC50 48 hrs=5.8 mg/kg

13. DISPOSAL CONSIDERATIONS

Product should be disposed of in an EPA approved incinerator or landfill in accordance with all local, state, and/or federal regulations.

14. TRANSPORTATION INFORMATION

US DOT: not regulated
DOT Shipping Name: None
IATA/IMO: not regulated
Canada TDG: not regulated
UN/NA Number: None

IMDG: Not Regulated

15. REGULATORY INFORMATION

EPA SARA Title III Hazard Class (SEC. 312/Chap.11): Chronic and acute health hazard.
CERCLA/RCRA: No planning or reportable quantities.
SARA Title III Section 313, 1910.119 OSHA, NTP, IARC, Subpart Z, NFPA: Not listed.
WHIMS HAZARD CLASS: D2B Toxic Materials/ Materials causing other toxic effects

Inventories:

1. United States – listed under TSCA
2. Canada – on DSL list
3. Australia – listed on Australian inventory of Chemical substances
4. EEC (Europe) – Inventory of the Existing Chemical substances
5. Japan – listed by Ministry of International Trade and Industry
6. Italy – classified as an aromatic amine, Group III
7. Korea(ECL) – Listed
8. Australia(AICS) – Listed
9. China(CLECS) - Listed

16. OTHER INFORMATION

NE = Not Established
NA = Not Applicable
ND = Not Determined

Information contained in this MSDS sheet have been gathered from the following documents:
Chemical REG-A-DEX, J.J.Keller,
WHMIS Compliance Manual, Carswell,
Transportation of Dangerous Good, J.J.Keller,
Code of Federal Regulations, Transportation, 49 CFR Parts 100 to 185, October 2003
NIOSH Pocket Guide to Chemical Hazards,
ACGIH Threshold Limit Values,
HMIS Implementation Manual, 2nd Edition
Toxicity and Safe Handling of Rubber Chemicals, BRMA, 3rd Edition
ChemCheck Handbook, Specialty Technical Publishers,
IARC WEB site
NTP WEB site