SAFETY DATA SHEET

M47036 - NA - EN

Occidental Chemical Corporation
A subsidiary of Occidental Petroleum Corporation

HCC 240fa

SDS No.: M47036 **Rev. Date:** 25-Jun-2014 **Rev. Num.** 3

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Identification:	Occidental Chemical Corporation 5005 LBJ Freeway P.O. Box 809050 Dallas, TX 75380-9050 1-800-752-5151
24 Hour Emergency Telephone Number:	1-800-733-3665 or 1-972-404-3228 (USA); CHEMTREC (within USA and Canada): 1-800-424-9300; CHEMTREC (outside USA and Canada): +1 703-527-3887; CHEMTREC Contract No: CCN16186
To Request an SDS:	MSDS@oxy.com or 1-972-404-3245
Customer Service:	1-800-752-5151 or 1-972-404-3700
Product Identifier:	**HCC 240fa**
Synonyms:	5CP; 1,1,1,3,3-Pentachloropropane, VFS 8648.50
Product Use:	Refrigerant manufacturing
Uses Advised Against:	None identified.

2. HAZARDS IDENTIFICATION

OSHA REGULATORY STATUS: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

****

EMERGENCY OVERVIEW:

Color: Colorless
Physical state Liquid
Appearance: Clear
Odor: Slight chlorine odor

Signal Word: **WARNING**

MAJOR HEALTH HAZARDS: CAUSES SKIN IRRITATION. CAUSES SERIOUS EYE IRRITATION. HARMFUL IF SWALLOWED. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE: CENTRAL NERVOUS SYSTEM, LIVER, KIDNEY, NASAL EPITHELIUM.

ECOLOGICAL HAZARDS: Toxic to aquatic organisms.

PRECAUTIONARY STATEMENTS: Wash thoroughly after handling. Use personal protective equipment as required. Wear protective gloves, protective clothing, eye, and face protection. Wear respiratory protection. Do not breathe mist, vapors, or spray. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. Avoid release to the environment.

ADDITIONAL HAZARD INFORMATION: Acute inhalation exposure can cause central nervous system depression and enhanced cardiac sensitivity to sympathomimetic amines. There is no specific antidote.

****

GHS CLASSIFICATION:

GHS: CONTACT HAZARD - SKIN:	Category 2 - Causes skin irritation
GHS: CONTACT HAZARD - EYE:	Category 2A - Causes serious eye irritation
GHS: ACUTE TOXICITY - ORAL:	Category 4 - Harmful if swallowed
GHS: TARGET ORGAN TOXICITY (SINGLE EXPOSURE):	Category 3 - May cause drowsiness or dizziness
GHS: TARGET ORGAN TOXICITY (REPEATED EXPOSURE):	Category 2 - May cause damage to Central Nervous System, Liver, Kidney, Nasal Epithelium through prolonged or repeated exposure
GHS: CARCINOGENICITY:	This product is not classified as a carcinogen by NTP, IARC or OSHA
GHS: HAZARDOUS TO AQUATIC ENVIRONMENT - ACUTE HAZARD:	Category 2 - Toxic to aquatic life

GHS SYMBOL:
Exclamation mark, Health hazard

GHS SIGNAL WORD: WARNING

GHS HAZARD STATEMENTS:

GHS - Health Hazard Statement(s)
Causes skin irritation
Causes serious eye irritation
Harmful if swallowed
May cause drowsiness or dizziness
May cause damage to organs through prolonged or repeated exposure (Central Nervous System, Liver, Kidney, Nasal Epithelilum)

GHS - Precautionary Statement(s) - Prevention
Do not breathe dust, fume, gas, mist, vapors, or spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves
Wear eye protection/face protection
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area

GHS - Precautionary Statement(s) - Response
IF INHALED: Remove person to fresh air and keep comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell
IF ON SKIN: Wash with plenty of water
Specific treatment (see First Aid information on product label and/or Section 4 of the SDS)
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash it before reuse
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

GHS - Precautionary Statement(s) - Storage
Store in a well-ventilated place. Keep container tightly closed
Store locked up

GHS - Precautionary Statement(s) - Disposal
Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations

Hazards Not Otherwise Classified (HNOC)
None identified

See Section 11: TOXICOLOGICAL INFORMATION

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: 5CP; 1,1,1,3,3-Pentachloropropane, VFS 8648.50

Component	Percent [%]	CAS Number
1,1,1,3,3-Pentachloropropane [5CP]	99.7 - 100	23153-23-3
Tetrachloropropenes	0 - 0.1	60320-18-5

4. FIRST AID MEASURES

INHALATION: If inhalation occurs and adverse effects result, remove to uncontaminated area. Evaluate ABC's (is Airway constricted, is Breathing occurring, and is blood Circulating) and treat symptomatically. Acute exposure may cause dizziness or central nervous system depression. GET MEDICAL ATTENTION IMMEDIATELY. There is no specific antidote, treat symptomatically.

SKIN CONTACT: Immediately flush contaminated areas with water. Remove contaminated clothing, jewelry and shoes. Wash contaminated areas with large amounts of water. IF IRRITATION OCCURS, GET MEDICAL ATTENTION. Thoroughly clean and dry contaminated clothing and shoes before reuse.

EYE CONTACT: Immediately flush contaminated eyes with a directed stream of water for as long as possible. Remove contact lenses, if present, then continue rinsing. GET MEDICAL ATTENTION IMMEDIATELY.

INGESTION: If swallowed, do not induce vomiting. Give water. If vomiting occurs spontaneously, keep airway clear. Give more water when vomiting stops. Never give anything by mouth to an unconscious or convulsive person. GET MEDICAL ATTENTION IMMEDIATELY.

Most Important Symptoms/Effects (Acute and Delayed)

Acute Symptoms/Effects:

Inhalation (Breathing): Respiratory System Effects: This chemical behaves as a halogenated anesthetic agent. It may cause irritation of the upper and lower airways. It may cause central nervous system depression (narcotic effects).

Skin: Skin Irritation: Exposure to liquid may cause redness and irritation. This chemical is not significantly absorbed across the skin.

Eye: Eye Irritation: Exposure to eyes may cause irritation, with tearing, redness, or a stinging or burning feeling. May cause conjunctival redness and edema, and lid redness and edema. Edema may lead to blurred vision. Effects may be more serious with repeated or prolonged contact.

Ingestion (Swallowing): Ingestion is not a likely route of exposure. Exposure by ingestion may cause irritation, nausea, and vomiting. If ingestion occurs, effects may be similar to inhalation.

Other Health Effects: Narcotic Effects (Central Nervous System Depression): Ataxia or dizziness, drowsiness or fatigue, loss of consciousness, headache, euphoria and irritability, visual or hearing disturbances, nausea, memory loss.

Delayed Symptoms/Effects:
- Long term skin contact may cause the skin to dry and crack, and to develop a rash
- Repeated and prolonged skin contact may cause a dermatitis
- This material was not a skin sensitizer in guinea pig studies
- Effects of eye exposure may become more serious with repeated or prolonged contact
- Target Organs: Studies in laboratory animals indicate that prolonged exposures to vapors can cause adverse effects on the liver, kidneys, and nasal epithelium

Interaction with Other Chemicals Which Enhance Toxicity: Consumption of alcoholic beverages may increase potential for development of toxic effects resulting from exposure to this product. Combining with other solvents such as alcohol, volatile hydrocarbons, and halogenated hydrocarbons may be additive for central nervous depression effects.

Medical Conditions Aggravated by Exposure: May aggravate preexisting conditions, such as: eye disorders that decrease tear production or have reduced integrity; skin disorders that compromise the integrity of the skin; and respiratory conditions including asthma and other breathing disorders. Any condition that can be compromised by halogenated anesthetic agents, such as a liver disorder, or cardiac disorder. Acute intoxication with alcohol or narcotics may be worsened.

Protection of First-Aiders: Protect yourself by avoiding contact with this material. Use personal protective equipment. Refer to Section 8 for specific personal protective equipment recommendations. Do not breathe vapors or spray mist. Avoid contact with the skin and the eyes. Do not ingest.

Notes to Physician: This material sensitizes the heart to the effects of sympathomimetic amines. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in individuals exposed to this material. Remove from contaminated environment and provide adequate ventilation and oxygenation.

5. FIRE-FIGHTING MEASURES

Fire Hazard: Slight fire hazard.

Extinguishing Media: Use extinguishing agents appropriate for surrounding fire.

Fire Fighting: Consider evacuation of personnel located downwind. Keep unnecessary people away, isolate hazard area and deny entry. Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Flood with fine water spray. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Firefighters should wear a one piece, total-encapsulating suit of Viton® or Butyl coated nylon or equivalent. Wear NIOSH approved positive-pressure self-contained breathing apparatus operated in pressure demand mode.

Hazardous Combustion Products: Chlorine, Hydrogen chloride, Phosgene, Oxides of carbon

Sensitivity to Mechanical Impact: None known.

Sensitivity to Static Discharge: None known.

Lower Flammability Level (air): No information available

Upper Flammability Level (air): No information available

Flash point: 225 °F (107 °C)

Auto-ignition Temperature: Not determined

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:
Keep unnecessary and unprotected persons away. Isolate hazard area and deny entry. Evacuate surrounding area. Responders should wear a one piece, total-encapsulating suit of Butyl coated nylon or equivalent. Wear a self-contained breathing apparatus operated in pressure demand mode. When handling this material, wear appropriate personal protective equipment recommended in Section 8, Exposure Controls / Personal Protection, of the SDS.

Methods and Materials for Containment and Cleaning Up:
Completely contain spilled materials with dikes, sandbags, etc. Shut off ventilation system if needed. Ventilate closed spaces before entering. Stop leak if possible without personal risk. Collect with appropriate absorbent and place into suitable container. Keep container tightly closed. Liquid material may be removed with a properly rated vacuum truck.

Environmental Precautions:
Keep out of water supplies and sewers. Releases should be reported, if required, to appropriate agencies.

7. HANDLING AND STORAGE

Precautions for Safe Handling:
Avoid breathing vapor or mist. Avoid contact with skin, eyes and clothing. Do not taste or swallow. Wash thoroughly after handling.

Safe Storage Conditions:
Store and handle in accordance with all current regulations and standards. Store in a cool, dry area. Keep container tightly closed and properly labeled. Store in a well-ventilated area. Prevent water or moist air from entering storage tanks or containers. Most vapors are heavier than air and will spread along ground and collect in low or confined areas (drains, basements, tanks). Store away from basements, pits or other confined spaces. Make daily inspections for leaks. Keep separated from incompatible substances (see Section 10 of the Safety Data Sheet).

Incompatibilities/ Materials to Avoid:
No data available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Regulatory Exposure Limit(s): None

OEL: Occupational Exposure Limit; OSHA: United States Occupational Safety and Health Administration; PEL: Permissible Exposure Limit; TWA: Time Weighted Average; STEL: Short Term Exposure Limit

NON-REGULATORY EXPOSURE LIMIT(S): As listed below

OXY Recommended Exposure Limit (REL):	• 0.05 ppm = recommended 8-hour Time Weighted Average (TWA) - (internal Occupational Exposure Limit) • 0.25 ppm = recommended Short Term Exposure Limit (STEL) - (internal Occupational Exposure Limit)

- *The Non-Regulatory United States Occupational Safety and Health Administration (OSHA) limits, if shown, are the Vacated 1989 PEL's (vacated by 58 FR 35338, June 30, 1993).*

- The American Conference of Governmental Industrial Hygienists (ACGIH) is a voluntary organization of professional industrial hygiene personnel in government or educational institutions in the United States. The ACGIH develops and publishes recommended occupational exposure limits each year called Threshold Limit Values (TLVs) for hundreds of chemicals, physical agents, and biological exposure indices.

ENGINEERING CONTROLS: Use only in well-ventilated areas. Provide local exhaust ventilation where vapors, mist or aerosols may be generated.

PERSONAL PROTECTIVE EQUIPMENT:

Eye Protection: Wear chemical safety goggles with a face-shield to protect against eye and skin contact when appropriate. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin and Body Protection: Solvent resistant boots, jackets, pants, headgear and full face protection should be worn where splashing is a possibility. Thoroughly clean and dry contaminated clothing before reuse. Discard contaminated leather goods.

Hand Protection: Wear appropriate chemical resistant gloves. Wear medium weight (22-30 mil) or heavier solvent resistant gloves. Care must be taken not to contaminate bare hands when removing gloves.

Protective Material Types: Viton®, Butyl rubber, Nitrile - for short term contact

Respiratory Protection: Testing has been conducted that indicates a NIOSH approved full-face air purifying respirator equipped with organic vapor cartridges may be used for concentrations up to 5 ppm. When an air purifying respirator is not adequate for spills and/or emergencies of unknown concentrations, an approved self-contained breathing apparatus operated in the pressure demand mode is required. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Appearance:	Clear
Color:	Colorless

Odor:	Slight chlorine odor
Odor Threshold [ppm]:	An odor threshold has not been established for this compound
Molecular Weight:	216.32
Molecular Formula:	C3H3Cl5
Boiling Point/Range:	354 F (179 C)
Freezing Point/Range:	No data available
Melting Point/Range:	Not applicable to liquids
Vapor Pressure:	1.2 mm Hg @ 25 C
Vapor Density (air=1):	7.5
Relative Density - Specific Gravity (water=1):	1.58 @ 25 C
Density:	8.5 lbs/gal @ 25 C
Water Solubility:	No data available
pH:	9.3 @ 25 C
Volatility:	100% by volume
Evaporation Rate (ether=1):	No data available
Partition Coefficient (n-octanol/water):	Log Kow = 3.4
Flash point:	225 °F (107 °C)
Flammability (solid, gas):	Not applicable
Lower Flammability Level (air):	No information available
Upper Flammability Level (air):	No information available
Auto-ignition Temperature:	Not determined
Viscosity:	No data available

10. STABILITY AND REACTIVITY

Reactivity: No studies have been found on reactivity.

Chemical Stability: Not known.

Possibility of Hazardous Reactions:
Avoid heat, flames, sparks and other sources of ignition.

Conditions to Avoid:
(e.g., static discharge, shock, or vibration) -. None known.

Incompatibilities/ Materials to Avoid:
No data available

Hazardous Decomposition Products: chlorine, hydrogen chloride, phosgene, oxides of carbon

Hazardous Polymerization: Not expected to occur.

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA:

PRODUCT TOXICITY DATA: HCC 240fa

LD50 Oral:	LD50 Dermal:	LC50 Inhalation:
1369 mg/kg (Rat)	2020 mg/kg (Rabbit)	> 467 ppm - maximum obtainable concentration (4-hour Rat)

COMPONENT TOXICITY DATA:

Component	LD50 Oral:	LD50 Dermal:	LC50 Inhalation:
1,1,1,3,3-Pentachloropropane [5CP] 23153-23-3	1369 mg/kg (Rat)	> 2020 mg/kg (Rabbit)	> 467 ppm - maximum obtainable concentration (4-hour Rat)

****

POTENTIAL HEALTH EFFECTS:

Eye contact: May cause eye irritation with tearing, redness, or a stinging or burning feeling. May cause conjunctival redness and edema, and lid redness and edema. Edema may lead to blurred vision.

Skin contact: Skin Irritation: Exposure to liquid may cause redness and irritation. This chemical is not significantly absorbed across the skin.

Inhalation: It may cause irritation of upper and lower airways. Breathing this material may cause central nervous system depression with symptoms including nausea, headache, dizziness, fatigue, drowsiness, or unconsciousness.

Ingestion: Not a likely route of exposure. Exposure by ingestion may cause irritation, nausea, and vomiting. If ingestion occurs, symptoms may be similar to those of inhalation.

Chronic Effects: Studies in laboratory animals indicate that exposure to vapors of this material can cause adverse effects on the liver, kidney, and nasal epithelium. Repeated or prolonged skin contact may result in dermatitis. This material was found to be nonsensitizing in guinea pigs.

SIGNS AND SYMPTOMS OF EXPOSURE:

Inhalation (Breathing): Respiratory System Effects: This chemical behaves as a halogenated anesthetic agent. It may cause irritation of the upper and lower airways. It may cause central nervous system depression (narcotic effects).

Skin: Skin Irritation: Exposure to liquid may cause redness and irritation. This chemical is not significantly absorbed across the skin.

Eye: Eye Irritation: Exposure to eyes may cause irritation, with tearing, redness, or a stinging or burning feeling. May cause conjunctival redness and edema, and lid redness and edema. Edema may lead to blurred vision. Effects may be more serious with repeated or prolonged contact.

Ingestion (Swallowing): Ingestion is not a likely route of exposure. Exposure by ingestion may cause irritation, nausea, and vomiting. If ingestion occurs, effects may be similar to inhalation.

Other Health Effects: Narcotic Effects (Central Nervous System Depression): Ataxia or dizziness, drowsiness or fatigue, loss of consciousness, headache, euphoria and irritability, visual or hearing disturbances, nausea, memory loss.

ACUTE TOXICITY:
Findings from a 14-day acute dermal toxicity study in rabbits exposed to a single undiluted dose of 2020 mg/kg applied to the intact skin under semi-occlusive conditions found the following: no mortality occurred during the study, there were no clinical signs of toxicity at any time during the study. Signs of dermal irritation included erythema and desquamation. There was no effect on body weight gain, with the exception of one animal that lost weight during the second week. The gross necropsy conducted at termination of the study revealed no observable abnormalities. It was concluded that the material was not significantly absorbed across the skin.

CHRONIC TOXICITY:
Rats were exposed for 6 hours daily for a total of 10 days to vapor levels of 2, 10 and 50 ppm. Rats exposed to 50 ppm had atrophy and degeneration of the nasal epithelium and increased liver weight, hypertrophy and rarefaction of the liver. Rats exposed to 10 ppm had similar effects on the olfactory epithelium. Lack of responsiveness to stimuli was observed during exposures to 10 and 50 ppm. No adverse effects were observed at 2 ppm. Findings from a 90-day inhalation study in rats exposed to levels of 1,2 and 25 ppm were as follows: Increased organ weights and histopathological changes were evidence of mild toxicity to the liver and kidney at 25 ppm. Histopathological findings in the kidney at 2 ppm were very similar to control animals (equivocal) but were not ruled out as "possibly related to exposure to the test material." Follicular cell hypertrophy of the thyroid observed at 25 ppm was believed to be secondary to effects on the liver (metabolism of thyroid hormones). Histopathological lesions in the nasal epithelium were observed at 25 ppm with equivocal effects at 2 ppm. The no observed effects level (NOEL) for this study was 1 ppm.

Interaction with Other Chemicals Which Enhance Toxicity: Consumption of alcoholic beverages may increase potential for development of toxic effects resulting from exposure to this product Combining with other solvents such as alcohol, volatile hydrocarbons, and halogenated hydrocarbons may be additive for central nervous depression effects

****

GHS HEALTH HAZARDS:

GHS: ACUTE TOXICITY - ORAL: Category 4 - Harmful if swallowed

GHS: CONTACT HAZARD - SKIN: Category 2 - Causes skin irritation

GHS: CONTACT HAZARD - EYE: Category 2A - Causes serious eye irritation

GHS: CARCINOGENICITY: This product is not classified as a carcinogen by NTP, IARC or OSHA

SPECIFIC TARGET ORGAN TOXICITY (Single Exposure):
Category 3 - Narcotic Effects

SPECIFIC TARGET ORGAN TOXICITY (Repeated or Prolonged Exposure):
Category 2 - Central Nervous System, Liver, Kidney, Nasal Epithelium

MUTAGENIC DATA:
Not classified as a mutagen per GHS criteria. Negative responses have been observed.

REPRODUCTIVE TOXICITY:
Not classified as a reproductive toxin per GHS criteria
No studies have been located on possible reproductive or lactation effects

DEVELOPMENTAL TOXICITY:
Not classified as a developmental or reproductive toxin per GHS criteria. Overexposure to similar materials in an animal study at levels that caused severe maternal toxicity demonstrated developmental toxicity.

ASPIRATION HAZARD:
Not classified as an aspiration hazard per GHS criteria Aspiration of the liquid is expected to cause irritation of upper and lower airways The liquid is expected to be volatilized and exhaled/absorbed as a gas

12. ECOLOGICAL INFORMATION

ECOTOXICITY DATA:

Aquatic Toxicity:
LC50/48h/daphnia =1.29 mg/l.

Fish Toxicity:
LC50 Fathead minnow: 4.76 mg/l (96 hour)

FATE AND TRANSPORT:

BIODEGRADATION: If released in water, will not degrade readily.

BIOCONCENTRATION: This material is not expected to bioconcentrate in aquatic systems. The measured log octanol/water partition coefficient (log Kow) is 3.4.

13. DISPOSAL CONSIDERATIONS

Waste from material:
Reuse or recycle if possible. May be subject to disposal regulations. Dispose in accordance with all applicable regulations.

Container Management:
Dispose of container in accordance with applicable local, regional, national, and/or international regulations. Container rinsate must be disposed of in compliance with applicable regulations.

14. TRANSPORT INFORMATION

U.S. DOT 49 CFR 172.101:

UN NUMBER:	UN2810
PROPER SHIPPING NAME:	Toxic liquids, organic, n.o.s. (1,1,1,3,3-PENTACHLOROPROPANE)
HAZARD CLASS/ DIVISION:	6.1
PACKING GROUP:	III

LABELING REQUIREMENTS: 6.1

CANADIAN TRANSPORTATION OF DANGEROUS GOODS:

UN NUMBER:	UN2810
SHIPPING NAME:	Toxic liquids, organic, n.o.s. (1,1,1,3,3-PENTACHLOROPROPANE)
CLASS OR DIVISION:	6.1
PACKING/RISK GROUP:	III
LABELING REQUIREMENTS:	6.1

15. REGULATORY INFORMATION

U.S. REGULATIONS

OSHA REGULATORY STATUS:
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):
Not regulated.

SARA EHS Chemical
Not regulated

EPCRA SECTIONS 311/312 HAZARD CATEGORIES (40 CFR 370.10):
Acute Health Hazard, Chronic Health Hazard

EPCRA SECTION 313 (40 CFR 372.65):
Not regulated.

OSHA PROCESS SAFETY (PSM) (29 CFR 1910.119):
Not regulated

NATIONAL INVENTORY STATUS

U.S. INVENTORY STATUS: Toxic Substance Control Act (TSCA): This product is subject to a Significant New Use Rule (SNUR). This SNUR restricts this product to use as a chemical intermediate.

TSCA 12(b): This product is subject to export notification.

Canadian Chemical Inventory: Not Listed.

STATE REGULATIONS
There are no applicable state regulations for this product or its components.

CANADIAN REGULATIONS
This material is not listed on the Canadian Chemical Inventory. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Canada - CEPA Schedule I - Toxic Substance list: Not Listed

WHMIS - Classifications of Substances:
• Not Classified

16. OTHER INFORMATION

Prepared by: OxyChem Corporate HESS - Product Stewardship

SDS Revision Date: 25-Jun-2014

HMIS: (SCALE 0-4) (Rated using National Paint & Coatings Association HMIS: Rating Instructions, 2nd Edition)

Health Rating: 2* **Flammability Rating:** 0 **Reactivity Rating:** 0

NFPA 704 - Hazard Identification Ratings (SCALE 0-4)
Health Rating: 2 **Flammability:** 1 **Reactivity Rating:** 0

Reason for Revision:
• Changed the SDS format to meet the GHS requirements of the revised 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200}
• Updated the (M)SDS header
• Updated 24 Hour Emergency Telephone Number: SEE SECTION 1
• Product Identifier has been added or updated: SEE SECTION 1
• Updated Uses Advised Against information: SEE SECTION 1
• Revised Hazard(s) Identification information: SEE SECTION 2
• Added OSHA Status: SEE SECTION 2
• Emergency Overview was revised: SEE SECTION 2
• Added GHS Information: SEE SECTION 2
• Updated First Aid Measures: SEE SECTION 4
• Modified Fire Fighting Measure Recommendations: SEE SECTION 5
• Revised Accidental Release Measures: SEE SECTION 6
• Revised Handling and Storage Recommendations: SEE SECTION 7
• Updated Physical and Chemical Properties. SEE SECTION 9
• Stability and Reactivity recommendations: SEE SECTION 10
• Toxicological Information has been revised: SEE SECTION 11
• Updated Disposal Considerations. SEE SECTION 13
• Updated Transportation Information: SEE SECTION 14
• Regulatory Information Changes: SEE SECTION 15
• Added SDS Revision Date: SEE SECTION 16

IMPORTANT:
The information presented herein, while not guaranteed, was prepared by technical personnel and is true and accurate to the best of our knowledge. NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, OR WARRANTY OR GUARANTY OF ANY OTHER KIND, EXPRESSED OR IMPLIED, IS MADE REGARDING PERFORMANCE, SAFETY, SUITABILITY, STABILITY OR OTHERWISE. This information is not intended to be all-inclusive as to the manner and conditions of use, handling, storage, disposal and other factors that may involve other or additional legal, environmental, safety or performance considerations, and OxyChem assumes no liability whatsoever for the use of or reliance upon this information. While our technical personnel will be happy to respond to questions, safe handling and use of the product remains the responsibility of the customer. No suggestions for use are intended as, and nothing herein shall be construed as, a recommendation to infringe any existing patents or to violate any Federal, State, local or foreign laws.

OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, safety data sheets, training and access to written records. We request that you, and it is your legal duty to, make all information in this Safety Data Sheet available to your employees

End of Safety Data Sheet