

CROSSFIELD PRODUCTS CORPORATION

www.crossfieldproducts.com

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 Rancho Dominguez, CA 90221 (Headquarters)
 (310)-886-9100 (8:00 AM – 5:00 PM Pacific Time)
 Eastern Time)

140 Valley Rd.
 Roselle Park, NJ 07204
 (908)-245-2800 (8:00 AM – 5:00 PM)

SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION

TRADE NAME (AS LABELED): MiraGard HD 50 Sealer – Gloss and Satin

CHEMICAL NAME/CLASS: Modified Acrylic Resin

PRODUCT USE: Specialty Flooring Resin

SUPPLIER/MANUFACTURER'S NAME: Crossfield Products Corp.

ADDRESS: (West Coast): 3000 E. Harcourt St.
 Rancho Dominguez, CA 90221 (Headquarters)

ADDRESS: (East Coast): 140 Valley Rd.
 Roselle Park, NJ 07204

EMERGENCY PHONE: **CHEMTREC:** 800-424-9300

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2. HAZARD(S) IDENTIFICATION



GHS classification:

Flammable liquids – Category 2
 Skin irritation – Category 2
 Eye irritation – Category 2
 Specific target organ toxicity (single exposure) – Category 3
 (Central Nervous System)

Signal Word: (Danger)

Hazard Statements:

- H226 - Flammable liquid and vapor.
- H315 - Causes skin irritation.
- H317 - May cause an allergic skin reaction.
- H319 - Causes serious eye irritation.
- H336 - May cause drowsiness or dizziness.
- H373 - May cause damage to organs through prolonged or repeated exposure. .

Precautionary Statements:

- P201 - Obtain special instructions before use.
- P202 - Do not handle until all safety precautions have been read and understood.
- P210 - Keep away from extremely high or low temperatures, ignition sources, and incompatible materials. - No smoking
- P240 - Ground/bond container and receiving equipment.
- P241 - Use explosion-proof electrical, ventilating, and lighting equipment.
- P242 - Use only non-sparking tools.
- P243 - Take precautionary measures against static discharge.
- P260 - Do not breathe vapors, mist, or spray.
- P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

P271 - Use only outdoors or in a well-ventilated area.
 P272 - Contaminated work clothing must not be allowed out of the workplace.
 P273 - Avoid release to the environment. P280 - Wear protective gloves, protective clothing, and eye protection.
 P301+P310 - If swallowed: Immediately call a poison center or doctor.
 P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position 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. Continue rinsing.
 P308+P313 - If exposed or concerned: Get medical advice/attention.
 P331 - Do NOT induce vomiting.
 P362+P364 - Take off contaminated clothing and wash it before reuse.
 P370+P378 - In case of fire: Use appropriate media (see section 5) to extinguish.
 P391 - Collect spillage.
 P405 - Store locked up.
 P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.
 P403+P233+P235 - Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Other Hazards

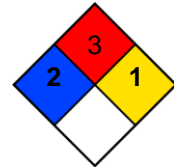
Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

HMIS-RATINGS (SCALE 0 – 4)

HEALTH	2
FLAMMABILITY	3
REACTIVITY	1

Health = 2
 Fire = 3
 Reactivity = 1

NFPA RATING



3. COMPOSITION / INFORMATION ON INGREDIENTS

Components	CAS Number	Concentration (Weight)
Acrylic Polymer	Non-Hazardous	20-40 %
Acetone	67-64-1	10-50 %
4-CHLOROBENZOTRIFLUORIDE	98-56-6	10-50 %
Synthetic amorphous silica	112926-00-8	< 10%
Proprietary	Proprietary	< 25 %

4. FIRST-AID MEASURES

Description of first aid measures

General advice:

Immediately remove contaminated clothing.

If inhaled:

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

If on skin:

Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

If in eyes:

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Seek medical attention.

If swallowed:

Rinse mouth and then drink plenty of water. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.

Most important symptoms and effects, both acute and delayed:

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote, administer corticosteroid dose aerosol to prevent pulmonary edema.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: Preferable: Alcohol resistant foam. Water spray, CO₂
Unsuitable extinguishing media: Solid water jet ineffective as extinguishing medium

Special hazards arising from the substance or mixture

Hazards during fire-fighting: harmful vapors
Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

Fire Hazard:

Highly flammable. Gas/vapour flammable with air within explosion limits. INDIRECT FIRE HAZARD. May be ignited by sparks. Gas/vapour spreads at floor level: ignition hazard. Reactions involving a fire hazard: see "Reactivity Hazard"

Explosion Hazard:

DIRECT EXPLOSION HAZARD. Gas/vapour explosive with air within explosion limits. INDIRECT EXPLOSION HAZARD. Heat may cause pressure rise in tanks/drums: explosion risk. May be ignited by sparks. Reactions with explosion hazards: see "Reactivity Hazard".

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing.

Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

Spills should be contained, solidified, and placed in suitable containers for disposal.

7. HANDLING and STORAGE

Precautions for safe handling

Remove contaminated clothing immediately. Clean contaminated clothing. Handle uncleaned empty containers as full ones. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Do not use compressed air for pumping over. Use spark/explosion proof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Avoid prolonged and repeated contact with skin. Keep container tightly closed. Measure the concentration in the air regularly. Work under local exhaust/ventilation.

Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place away from heat sources, direct sunlight.

Storage stability:
Stable

Storage Temperature: 15 – 20 C

Storage Area:

Store in a cool area. Keep out of direct sunlight. Store in a dry area. Store in a dark area. Ventilation at floor level. Fireproof storeroom. Provide for an automatic sprinkler system. Provide for a tub to collect spills. Provide the tank with earthing. Meet the legal requirements.

Special rules on packaging:

SPECIAL REQUIREMENTS: closing with pressure relief valve. clean. opaque. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

Packaging materials:

SUITABLE MATERIAL: steel. stainless steel. carbon steel. aluminium. iron. copper. nickel. bronze. glass.

MATERIAL TO AVOID: synthetic material

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Measures

Provide readily accessible eye wash stations and safety showers.

Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits

Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) organic vapor/particulate respirator. Do not exceed the maximum use concentration for the respirator face piece/cartridge combination. For emergency or non-routine, high exposure situations, use a NIOSH-certified full face piece pressure demand self-contained breathing apparatus (SCBA) or a full face piece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:

Chemical resistant protective gloves

Eye protection:

Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is required additionally to the stated personal protection equipment. Avoid inhalation of mists. Contact with eyes and skin must be avoided.

Occupational Exposure limit(s)

N/A

**For Routine
Industrial
Applications**



Vapor Respirator



Safety Goggles



Safety Gloves



Protective Clothing

9. PHYSICAL and CHEMICAL PROPERTIES

Form:	Liquid
Odor:	Solvent-Like
Color:	Clear to yellow
pH value:	N/A
Melting point:	No data available
Boiling point:	56 °C
Flash point:	-18 °C
Flammability:	Highly Flammable
Lower explosion limit:	Not applicable
Upper explosion limit:	Not applicable
Vapor pressure:	<0.03 hPa at 20 °C
Viscosity, Dynamic	500-10000 CPS
Solubility in Water	Slightly
Volatile Organic Compounds:	<50 g/l

10. STABILITY and REACTIVITY

Corrosion to metals:

Corrosion effect on metals are not anticipated

Chemical Stability:

Stable under normal conditions.

Conditions to avoid:

Avoid contact with: Strong oxidizing agents. Avoid contact with acids. Avoid heat, flames and other sources of ignition

Materials to avoid:

Potassium sulphate, sodium hydroxide, sulphuric acid, nitric acid, hydrogen peroxide, chloroform, activated carbon, bromine.

Hazardous decomposition products:

No decomposition if used correctly

11. TOXICOLOGICAL INFORMATION

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact.

Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Of moderate toxicity after short-term inhalation.

TOXIC DOSE - LD 50:

5800 mg/kg (oral rat)

TOXICOLOGICAL INFORMATION:

Low order of acute toxicity.

HEALTH HAZARDS, GENERAL:

Vapour will irritate the membranes of nose, throat, lungs and eyes.

INGESTION:

Ingestion will cause gastric irritation and vomiting. Aspiration during swallowing or vomiting may severely damage the lungs.

ROUTE OF ENTRY:

Inhalation. Ingestion. Skin and/or eye contact.

TARGET ORGANS:

Central nervous system. Eyes. Respiratory system, lungs. Skin.

MEDICAL SYMPTOMS:

Symptoms may include irritation to eyes and mucous membranes, (inflammation of nasal mucous membranes), general respiratory distress and unproductive cough. Skin irritation, dryness of skin due to de-fatting. Inhalation of vapour may cause intoxication including drowsiness, disorientation and central nervous system depression.

MEDICAL CONSIDERATIONS:

Skin disorders and allergies

12. ECOLOGICAL INFORMATION

Toxicity

LC 50, 96 HRS, FISH mg/l:

8300 mg/l (96 hours)

ECOLOGICAL INFORMATION:

Prevent contamination of soil, drains or surface water, use appropriate containment method to avoid environmental contamination.

MOBILITY:

Soluble in water. Lost within short period through evaporation and dissolution.

BIO ACCUMULATION:

Not expected to bio-accumulate.

DEGRADABILITY:

Poses a significant risk of oxygen depletion in aquatic systems. Environmental half-life expected to be 1-<10 days. Readily biodegradable

13. DISPOSAL CONSIDERATIONS

Dispose of in a licensed facility. Do not discharge into waterways or sewer systems without proper authorization.

Container disposal:

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. TRANSPORTATION INFORMATION

Land transport

USDOT

Proper Shipping Name: PAINT RELATED MATERIAL (including paint thinning and reducing compound)
 Hazard Class or Division: 3
 UN/NA Number: 1263
 Packaging Group: II
 Hazard Label(s): Danger, Flammable Liquid
 Hazard Placards(s): Flammable

Sea transport

IMDG

Proper Shipping Name: PAINT RELATED MATERIAL (including paint thinning and reducing compound)
 Hazard Class or Division: 3
 UN/NA Number: 1263
 Packaging Group: II
 Hazard Label(s): Danger, Flammable Liquid
 Hazard Placards(s): Flammable

Air transport

IATA/ICAO

Proper Shipping Name: PAINT RELATED MATERIAL (including paint thinning and reducing compound)
 Hazard Class or Division: 3
 UN/NA Number: 1263
 Packaging Group: II
 Hazard Label(s): Danger, Flammable Liquid
 Hazard Placards(s): Flammable

15. REGULATORY INFORMATION

Federal Regulations:

Chemical: TSCA, US - Released/Listed

Regulation	CAS Number	Chemical Name
EPCRA	75-56-9	Methyloxirane
CERCLA RQ	75-56-9	Methyloxirane

STATE REGULATORY INFORMATION: Components of this product are covered under specific State regulations, as denoted below:

New Jersey Right-to-know: The following is required composition information:

CAS Number: 67-64-1
 Chemical Name: Acetone

Pennsylvania Right-to-know: The following is required composition information:

CAS Number: 67-64-1
 Chemical Name: Acetone

CA Prop 65: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER

16. OTHER INFORMATION

PREPARED BY:

BILL BEACH

CROSSFIELD PRODUCTS CORP,

THIS INFORMATION IS DRAWN FROM RECOGNIZED SOURCES BELIEVED TO BE RELIABLE. CROSSFIELD PRODUCTS CORP. MAKES NO GUARANTEES NOR ASSUMES ANY LIABILITY IN CONNECTION WITH THIS INFORMATION. THE USER SHOULD BE AWARE OF CHANGING TECHNOLOGY, RESEARCH, REGULATIONS AND ANALYTICAL PROCEDURES THAT MAY REQUIRE CHANGES HEREIN. THE ABOVE DATA IS SUPPLIED UPON THE CONDITION THAT PERSONS WILL EVALUATE THIS INFORMATION AND THEN DETERMINE ITS SUITABILITY FOR THEIR USE.

DEFINITIONS OF TERMS

A large number of abbreviations and acronyms appear on a MSDS. Some of these which are commonly used include the following:

CAS #: This is the Chemical Abstract Service Number which uniquely identifies each constituent. It is used for computer-related searching.

EXPOSURE LIMITS IN AIR:

ACGIH - American Conference of Governmental Industrial Hygienists, a professional association which establishes exposure limits.

TLV - Threshold Limit Value - an airborne concentration of a substance which represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse effect. The duration must be considered, including the 8-hour **Time Weighted Average (TWA)**, the 15-minute **Short Term Exposure Limit**, and the instantaneous **Ceiling Level**. Skin adsorption effects must also be considered.

OSHA - U.S. Occupational Safety and Health Administration.

PEL - Permissible Exposure Limit - This exposure value means exactly the same as a TLV, except that it is enforceable by OSHA. The OSHA Permissible Exposure Limits are based in the 1989 PELs and the June, 1993 Air Contaminants Rule (*Federal Register*: 58: 35338-35351 and 58: 40191). Both the current PELs and the vacated PELs are indicated. The phrase, "Vacated 1989 PEL," is placed next to the PEL which was vacated by Court Order.

IDLH - Immediately Dangerous to Life and Health - This level represents a concentration from which one can escape within 30-minutes without suffering escape-preventing or permanent injury. **The DFG - MAK** is the Republic of Germany's Maximum Exposure Level, similar to the U.S. PEL. **NIOSH** is the National Institute of Occupational Safety and Health, which is the research arm of the U.S. Occupational Safety and Health Administration (**OSHA**). NIOSH issues exposure guidelines called **Recommended Exposure Levels (RELs)**. When no exposure guidelines are established, an entry of **NE** is made for reference.

HMIS HAZARD RATINGS:

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: Health Hazard: **0** (minimal acute or chronic exposure hazard); **1** (slight acute or chronic exposure hazard); **2** (moderate acute or significant chronic exposure hazard); **3** (severe acute exposure hazard; onetime over-exposure can result in permanent injury and may be fatal); **4** (extreme acute exposure hazard; onetime over-exposure can be fatal). Flammability Hazard: **0** (minimal hazard); **1** (materials that require substantial pre-heating before burning); **2** (combustible liquid or solids; liquids with a flash point of 38-93°C [100-200°F]); **3** (Class IB and IC flammable liquids with flash points below 38°C [100°F]); **4** (Class IA flammable liquids with flash points below 23°C [73°F] and boiling points below 38°C [100°F]). Reactivity Hazard: **0** (normally stable); **1** (material that can become unstable at elevated temperatures or which can react slightly with water); **2** (materials that are unstable but do not detonate or which can react violently with water); **3** (materials that can detonate when initiated or which can react explosively with water); **4** (materials that can detonate at normal temperatures or pressures).

NATIONAL FIRE PROTECTION ASSOCIATION: Health Hazard: **0** (material that on exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials); **1** (materials that on exposure under fire conditions could cause irritation or minor residual injury); **2** (materials that on intense or continued exposure under fire conditions could cause temporary incapacitation or possible residual injury); **3** (materials that can on short exposure could cause serious temporary or residual injury); **4** (materials that under very short exposure could cause death or major residual injury). Flammability Hazard and Reactivity Hazard: Refer to definitions for "Hazardous Materials Identification System".

FLAMMABILITY LIMITS IN AIR:

Much of the information related to fire and explosion is derived from the **National Fire Protection Association (NFPA)**. Flash Point - Minimum temperature at which a liquid gives off sufficient vapors to form an ignitable mixture with air. Autoignition Temperature: The minimum temperature required to initiate combustion in air with no other source of ignition. LEL - the lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source. UEL - the highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.

TOXICOLOGICAL INFORMATION:

Possible health hazards as derived from human data, animal studies, or from the results of studies with similar compounds are presented. Definitions of some terms used in this section are: **LD₅₀** - Lethal Dose (solids & liquids) which kills 50% of the exposed animals; **LC₅₀** - Lethal Concentration (gases) which kills 50% of the exposed animals; **ppm** concentration expressed in parts of material per million parts of air or water; **mg/m³** concentration expressed in weight of substance per volume of air; **mg/kg** quantity of material, by weight, administered to a test subject, based on their body weight in kg. Data from several sources are used to evaluate the cancer-causing potential of the material. The sources are: **IARC** - the International Agency for Research on Cancer; **NTP** - the National Toxicology Program, **RTECS** - the Registry of Toxic Effects of Chemical Substances, **OSHA** and **CAL/OSHA**. IARC and NTP rate chemicals on a scale of decreasing potential to cause human cancer with rankings from 1 to 4. Subrankings (2A, 2B, etc.) are also used. Other measures of toxicity include **TDLo**, the lowest dose to cause a symptom and **TCLo** the lowest concentration to cause a symptom; **TDo**, **LDLo**, and **LDo**, or **TC**, **TCo**, **LCLo**, and **LCo**, the lowest dose (or concentration) to cause death. **BEI** - Biological Exposure Indices, represent the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV.

REGULATORY INFORMATION:

This section explains the impact of various laws and regulations on the material. **EPA** is the U.S. Environmental Protection Agency. **WHMIS** is the Canadian Workplace Hazardous Materials Information System. **DOT** and **TC** are the U.S. Department of Transportation and the Transport Canada, respectively. Other acronyms used are: **Superfund Amendments and Reauthorization Act (SARA)**; the **Toxic Substance Control Act (TSCA)**; Marine Pollutant status according to the **DOT**; California's Safe Drinking Water Act (**Proposition 65**); the **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund)**; and various state regulations. This section also includes information on the precautionary warnings which appear on the materials package label.