CORCHEM®

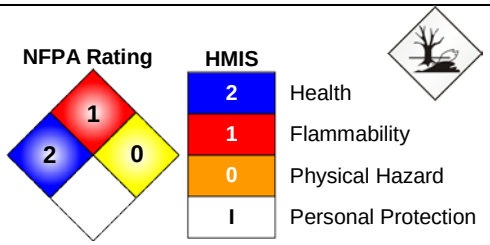
(M)SDS
SAFTY DATA SHEET

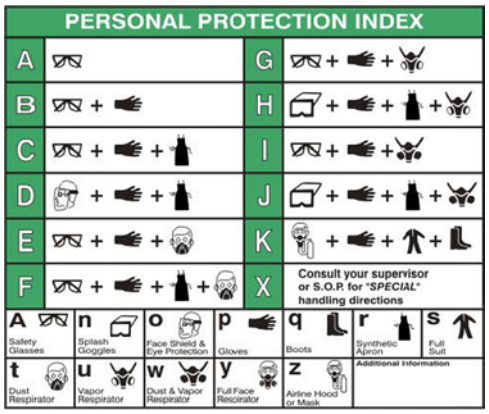
SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

GHS Product Code:	C261-A-0G1
Product Name:	CORCHEM® 261 EPOXY FLAKE COATING COMPONENT A, COLOR: GRAY
Recommended Use:	INDUSTRIAL PROTECTIVE COATING/LINING
Restrictions on Use:	INTENDED FOR PROFESSIONAL USE ONLY
Manufacturer:	CORCHEM MANUFACTURING, INC.
Address:	1227 SOUTH MURPHY STREET ODESSA TEXAS, USA 79766-8811
Emergency Contact:	INFOTRAC: +1-352-323-3500 (TOLL-FREE IN THE US: 800-535-5053)
Revision:	9-03132015

SECTION 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW





2012 ERG GUIDEBOOK # 128

GHS Classification

Category 1:	Skin sensitization Serious eye damage
Category 2:	Skin irritation Acute aquatic toxicity Chronic aquatic toxicity
Category 2A:	Eye irritation

GHS Label elements, including precautionary statements

Hazard Pictograms

Signal word: Danger

GHS Hazard statement(s)

H315:	Causes skin irritation.
H317:	May cause an allergic skin reaction.
H319:	Causes serious eye irritation.
H411:	Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P102:	Keep out of reach of children.
P202:	Do not handle until all safety precautions have been read and understood.
P261:	Avoid breathing dust/fumes/gas/mist/vapors/spray.
P264:	Wash skin thoroughly after handling.
P272:	Contaminated work clothing should not be allowed out of the workplace.
P273:	Avoid release to the environment.

P280:	Wear protective gloves/protective clothing/eye protection/face protection.
P302 + 352:	IF ON SKIN: Wash with soap and water.
P303 + P361 + P353:	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + 313:	If skin irritation occurs: Get medical advice/attention.
P333 + 313:	If skin irritation or a rash occurs: Get medical advice/attention.
P362:	Take off contaminated clothing and wash before reuse.
P391:	Collect spillage.
P401 + 402 + 403:	Store in original container protected from direct sunlight in a dry cool, well ventilated area.
P501:	Dispose of contents/container to a licensed waste disposal contractor.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS No.	% (by Weight)
2,6-Dimethyl-4-heptanone	108-83-8	<1
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer	25068-38-6	>40
CBI Additives [NOT REGULATED BY GHS, DOT, IMDG, OR IATA]	MIXTURE	>50

SECTION 4: FIRST AID MEASURES

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Skin

Immediately remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, initiate and maintain continuous irrigation until patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Cover wound with sterile dressing, seek immediate medical attention. If skin is not damaged and symptoms persist, avoid further exposure, seek medical attention. Launder clothing before reuse.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If not breathing, if breathing is irregular, or if respiratory arrest occurs, artificial respiration or oxygen should be administered by trained personnel only. It may be dangerous to provide mouth-to-mouth resuscitation. Keep person warm and quiet; seek immediate medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain open airway. Loosen tight clothing such as a collar, tie, belt, or waistband. Get medical attention if adverse health effects persist or are severe.

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently, irrigate for at least 30 minutes while holding eyelids open; seek immediate medical attention.

Protection of first aid personnel

No action shall be taken involving any personal risk without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, wear gloves.

Notes to Physicians or First Aid providers

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested.

SECTION 5: FIRE-FIGHTING MEASURES

Flash Point
Estimated: Closed Cup: >511°F (266°C)

Explosive Limit
Not established

Autoignition Temperature
Not Established

Hazardous Products of Combustion
Burning may produce noxious and toxic fumes. Decomposition products may be toxic and include the following materials: carbon dioxide, carbon monoxide, and various hydrocarbons. Fumes and vapors from the thermal and chemical decompositions vary widely in combustion and toxicity.

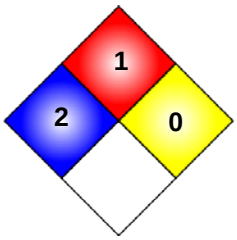
Fire and Explosion Hazards
In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing Media
Alcohol-resistant foam, water-fog, carbon dioxide, dry chemicals, dry sand, Limestone powder.

Fire Fighting Instructions
Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

NFPA Rating

Health:	**2**
Flammability:	**1**
Reactivity:	**0**
Special:	



SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions
No action shall be taken involving personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental Precautions
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

Small Spill
Stop leak if without risk. Dilute with water and mop up if water soluble or absorb liquid with a dry, inert, non-combustible, absorbent material such as: sand, diatomaceous earth, vermiculite, or other absorbent material. Persons not wearing proper personal protective equipment should be excluded from area of spill.

Large Spill
Stop leak if without risk. Move containers from spill area. Prevent run-off to sewers, water courses basements, or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with a dry, inert, non-combustible, absorbent material such as: sand, diatomaceous earth, vermiculite, or other absorbent material and place in container for disposal according to local regulations (see section 13). Dispose via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. If run-off occurs, notify proper authorities as required, that a spill has occurred. Note: see section 1 for emergency contact information and section 13 for waste disposal.

SECTION 7: HANDLING AND STORAGE

Handling

Wear appropriate personal protective equipment (see section 8). Eating, Drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face prior to eating, drinking, and smoking. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool, well-ventilated area, away from incompatible materials (see section 10), food and drink. Keep container tightly closed and sealed until ready to use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Other Precautions

Consult local, state, and federal hazardous waste regulators before disposing of waste materials.

Can cause skin irritation, eye irritation, and allergic skin reaction. Avoid contact with eyes, skin, and clothing. Wash thoroughly after using. **DO NOT TAKE INTERNALLY! HARMFUL IF SWALLOWED! FOR PROFESSIONAL USE ONLY.** Use protective skin cream such as FEND2 (MSA) where skin contact is likely. Prevent prolonged or repeated breathing of vapor, or spray mists. Liquid penetrated shoes and leather, may cause delayed irritation or skin reactions. **KEEP OUT OF REACH OF CHILDREN. DO NOT HANDLE UNTIL THE MANUFACTURER'S INSTRUCTIONS AND SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD!** Contact manufacturer if further information is required.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters, occupational exposure Limit(s)

Eye Protection

Chemical splash goggles and face shield in compliance with OSHA regulations are advised for eye protection.

Skin Protection

To prevent repeated or prolonged skin contact, wear appropriate safety garments such as impervious gloves, head/neck covers, aprons, jackets, pants, coveralls, and boots.

Respiratory Protection

When utilizing this material wear a NIOSH approved cartridge respirator or gas mask suitable to keep airborne mists and vapor concentration below the time-weighted threshold limit values. **WHEN USING IN POORLY VENTILATED OR CONFINED SPACES, USE A FRESH-AIR SUPPLYING RESPIRATOR OR A SELF-CONTAINED BREATHING APPARATUS.**

Engineering Controls

Use explosion-proof suction type exhaust fans and blowers with sufficient CFM capacity to keep solvent vapors below 20% of the explosive limit. Provide sufficient mechanical ventilation to maintain exposure below TLV(s).

Exposure Guidelines

Consult local authorities for acceptable exposure limits

Other Protective Clothing or Equipment

Use protective barrier creams on exposed skin areas.

Work Hygienic Practices

As with all products of this nature, good personal hygiene is essential. Hands and other exposed areas should be washed thoroughly with soap and water after contact, and before eating, drinking, using tobacco products or restrooms. Regular laundering of contaminated clothing is essential to reduce indirect skin contact with this material.

Exposure Limits

Component(s)	Basis	Authority	Control Parameters	
2,6-Dimethyl-4-heptanone	Threshold Limit Value (TLV):	ACGIH	25 ppm	–
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer	Recommended Exposure Limit (REL):	NIOSH	25 ppm	150 mg/m^3
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer	Time Weighted Average (TWA):	OSHA Z1	50 ppm	290 mg/m^3

Consult local authorities for acceptable exposure limits.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.):	Viscous gray liquid
Odor:	Slight
Odor Threshold:	Not available
pH:	Not available
Melting Point / Freezing Point:	311° F / 320° F (155° C / 160° C)
Initial Boiling Point and Range:	> 608° F (> 320° C)
Flash Point:	>511°F (266°C) (method: closed cup)
Evaporation Rate:	Not available.
Flammability (solid, gas):	Not applicable
Upper/Lower flammability or explosive limits:	Not available.
Vapor Pressure:	< 1.08 x 10^{-7} mmHg at 77° F (25° C)
Vapor Density:	Not available.
Relative Density:	1.16 g/cm^3 at 77° F (25° C)
Solubility:	Insoluble
Partition coefficient: *n*- octanol/water:	log Powr: 3.26
Auto-ignition temperature:	Not available
Decomposition Temperature:	Not available.
Volatile Organic Compounds (VOC):	0.74 Lbs. per gallon less water
Percent solids by weight:	100.00
Percent solids by volume:	99.26
Specific Gravity:	1.558 @ 68.0º F (20.00º C)
Weight per gallon:	13.00 Lbs.(6.05kg / 3.78L)

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Under normal conditions of storage and use, hazardous reactions should not occur.

Chemical Stability:

Stable under normal conditions.

Possibility of hazardous reactions:

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid:

Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

Incompatible materials:

Amines, incompatible with bases, reducing agents, oxidizing agents, nitrous acid and other nitrosating agents, organic acids (i.e. acetic acid, citric acid etc.), mineral acids, sodium hypochlorite, reactive metals (e.g. sodium, calcium, zinc etc.), materials reactive with hydroxyl compounds.

Hazardous Polymerization:

Under normal conditions of storage and use, hazardous polymerization will not occur.

Hazardous Decomposition or By-Products:

Carbon monoxide, carbon dioxide, aldehydes.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicological Information

Likely routes of exposure and potential health effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
Skin: May be harmful if absorbed through skin. May cause skin irritation.
Eyes: May cause eye irritation.
Ingestion: May be harmful if swallowed.

Acute Toxicity Data

Product/ingredient name	Method	Species	Dose	Exposure	Result
2,6-Dimethyl-4-heptanone	LD_{50} Inhalation	Rat	2,000 ppm	–	–
2,6-Dimethyl-4-heptanone	LD_{50} Dermal	Rabbit	16,000 mg/kg	–	–
2,6-Dimethyl-4-heptanone	LC_{50} Oral	Rat	5,800 mg/kg	–	–
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer	LD_{50} Inhalation	Rat	>10 mg/m^3	5 h	Negative
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer	LD_{50} Dermal	Rabbit	>300 mg/kg	13 d	Negative
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer	LC_{50} Oral	Rat	>540 mg/kg	10 d	Negative

Potential chronic health effects

Chronic Health Hazard

Chronic effects: Once sensitized, a severe allergic reaction may occur when subsequently exposed.
Target organs: No known significant effects or critical hazards on the product itself.
Carcinogenicity: No known significant effects or critical hazards on the product itself.
Mutagenicity: No known significant effects or critical hazards on the product itself.
Teratogenicity: No known significant effects or critical hazards on the product itself.
Fertility effects: No known significant effects or critical hazards on the product itself.
Developmental effects No known significant effects or critical hazards on the product itself.

Medical conditions aggravated by over- exposure: Pre-existing respiratory or skin disorders may be aggravated by over-exposure to this product.

SECTION 12: ECOLOGICAL INFORMATION

Ecological Information

Environmental affects This product, or a component of this product shows a high bioaccumulation potential. May be harmful to the environment if released in large quantities.

Aquatic ecotoxicity Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Water polluting material.

Ecotoxicity

Aquatic

Toxicity to Fish

Product/ingredient name	Test	Species	Dose	Exposure
2,6-Dimethyl-4-heptanone	LC_{50}	No data available.	–	–
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer	LC_{50}	Onocorhynchus mykiss (rainbow trout)	1.5 mg/l	96 h

Toxicity to aquatic invertebrates

Product/ingredient name	Test	Species	Dose	Exposure
2,6-Dimethyl-4-heptanone	EC_{50}	No data available.	–	–
4,4'-Isopropylidenediphenol	EC_{50}	Daphnia magna (water flea)	3.6 mg/l	24 h

Persistence and degradability

Product/ingredient name	Test	Concentration	Result
2,6-Dimethyl-4-heptanone	No Data Available	–	–
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer	Biotic/Aerobic	5.00%	Not readily biodegradable

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
2,6-Dimethyl-4-heptanone	No Data Available	–	–
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer	3.8	–	High

Mobility in soil

Product/ingredient name	
2,6-Dimethyl-4-heptanone	No Data Available
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer	No Data Available

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse affects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

SECTION 13: DISPOSAL CONSIDERATIONS

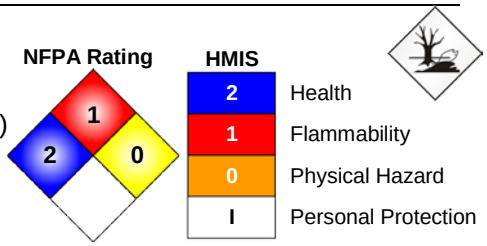
Waste Disposal Method

Consult local, state, and federal hazardous waste regulators before disposing of waste materials. The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions, and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. **DISPOSE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS ONLY.**

14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

Proper Shipping Name	Environmentally Hazardous Substance, Liquid, N.O.S. (Bisphenol A Diglycidyl Ether Resin Solution)
Hazard Class	9
ID Number	UN3082
Packing Group	III
Emergency Contact	INFOTRAC +1-352-323-3500 (US Toll Free: 800-535-5053)



TRANSPORT CANADA

Proper Shipping Name	Environmentally Hazardous Substance, Liquid, N.O.S. (Bisphenol A Diglycidyl Ether Resin Solution)
Hazard Class	9
ID Number	UN3082
Packing Group	III
Emergency Contact	INFOTRAC +1-352-323-3500 (US Toll Free: 800-535-5053)

IMO/IMDG

Proper Shipping Name	Environmentally Hazardous Substance, Liquid, N.O.S. (Bisphenol A Diglycidyl Ether Resin Solution)
Hazard Class	9
ID Number	UN3082
Packing Group	III
Emergency Contact	INFOTRAC +1-352-323-3500 (US Toll Free: 800-535-5053)
Stowage & Segregation	Category A, no segregation
EmS Fire / EmS Spill	F-A / S-F

IATA/DGR

Proper Shipping Name	Environmentally Hazardous Substance, Liquid, N.O.S. (Bisphenol A Diglycidyl Ether Resin Solution)
Hazard Class	9
ID Number	UN3082
Packing Group	III
Emergency Contact	INFOTRAC +1-352-323-3500 (US Toll Free: 800-535-5053)
Passenger and Cargo Aircraft	Quantity limitation: 25 Liters, Packing instruction 964
Cargo Aircraft Only	Quantity limitation: 25 Liters, Packing instruction 964

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

Nombre propio del transporte	Ambientalmente Sustancias Peligrosas, líquido, N.E.P. (Bisfenol A diglicidil éter Resina Solution)
Clase de peligro	9
Número de identificación del	UN3082
Grupo de embalaje	III
Contacto de Emergencia	INFOTRAC +1-352-323-3500 (US Toll Free: 800-535-5053)

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use, or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

Hazard Communication Standard **(HCS) Classification:** See Section 2 above

Effective 26 March 2012, OSHA modified its Hazard Communication Standard (HCS), **29 CFR Parts 1910, 1915, and 1926,** to conform to the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Emergency Planning and Community Right-to-Know Act (EPCRA)

Sections: 302/304 Extremely Hazardous Substances (EHS):

Ingredient(s)	CAS No.
–	–

Sections: 311/312 Hazard Categories

Category A:	Immediate (Acute) Health Hazard:	Yes
Category D:	Delayed (Chronic) Health Hazard:	Yes
Category F:	Fire Hazard:	Yes
Category R:	Reactive Hazard:	No
Category S:	Sudden Release of Pressure Hazard:	No

Ingredient(s)	CAS No.	Category
2,6-Dimethyl-4-heptanone	108-83-8	A, D, F

Sections: Section: 313 Reportable Ingredients: This material contains the following chemical component(s) that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Ingredient(s)	CAS No.
–	–

State Regulations

USA, California State Safe Drinking & Toxic Enforcement Act (Proposition 65): This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other harm.

USA, Massachusetts Right-to-Know Components:

Ingredient(s)	CAS No.
2,6-Dimethyl-4-heptanone	108-83-8
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer	25068-38-6

USA, New Jersey Right-to-Know Components:

Ingredient(s)	CAS No.
2,6-Dimethyl-4-heptanone	108-83-8
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer	25068-38-6

USA, Pennsylvania Right-to-Know Components:

Ingredient(s)	CAS No.
2,6-Dimethyl-4-heptanone	108-83-8
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer	25068-38-6

Product specific health and safety data in other sections of this MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

SECTION 16: OTHER INFORMATION

Preparation Information

This MSDS has been prepared by CORCHEM® Corporation.

Revision: 9-03132015, Product Code: C261-A-0G1

DISCLAIMER: All information contained herein is based upon data obtained from CORCHEM's suppliers and/or recognized technical sources.

The data in this MSDS relates only to the specific material designated herein and does not relate to its use in combination with any other material or in any other process.

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