

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date: 06/14/2022 Version: 1.0

#### **SECTION 1: Identification**

#### 1.1. Identification

Product form : Mixture

Product name : MS-1600 DK Gray Part A; MS-1600 DK Blue Part A; MS-1600 Navy Blue Part A

#### 1.2. Recommended use and restrictions on use

No additional information available

#### 1.3. Supplier

ITW Polymers and Sealants NA

12055 Cutten Road Houston, TX 77066 T 281-397-0033

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC (US Transportation): (800) 424-9300 International: +1 (703) 527-3887

#### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

#### **GHS US classification**

Flammable liquid, Category 3

Skin corrosion/irritation, Category 2

H315

Serious eye damage/irritation, Category 2

H319

Skin sensitization, Category 1

H317

Hazardous to the aquatic environment - Chronic Hazard, Category 3

H412

## 2.2. GHS Label elements, including precautionary statements

#### **GHS US labeling**

Hazard pictograms (GHS US)





Signal word (GHS US) : Warning

Hazard statements (GHS US) : H226 - Flammable liquid and vapor

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (GHS US) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking. P233 - Keep container tightly closed.

P240 - Ground/Bond container and receiving equipment.

P241 - Use explosion-proof electrical/ventilating/lighting equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P261 - Avoid breathing mist/vapors/spray.

P264 - Wash hands, forearms and face thoroughly after handling.

P272 - Contaminated work clothing must not be allowed out of the workplace.

P273 - Avoid release to the environment.

P280 - Wear eye protection, protective gloves, protective clothing.

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

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse.

P370+P378 - In case of fire: Use media other than water to extinguish.

P403+P235 - Store in a well-ventilated place. Keep cool.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

#### 2.3. Other hazards which do not result in classification

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

#### **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%
Oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, homopolymer	(CAS-No.) 25085-99-8	10 – 30
Bisphenol A-epichlorohydrin polymer	(CAS-No.) 25068-38-6	3 – 7
Alkyl (C12-14) glycidyl ether	(CAS-No.) 68609-97-2	3 – 7

<sup>\*</sup>In accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200), the specific chemical identity or exact weight % has been withheld as a trade secret

## SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

First-aid measures general : If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an

unconscious person.

unochocious person.

First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing is affected. If breathing is difficult, supply oxygen.

First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at

least 15 minutes. If irritation develops or persists, get medical attention.

First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact

lenses if present and easy to do so. Continue rinsing if pain, blinking, or irritation develops or

persists, get medical attention. Continue rinsing.

First-aid measures after ingestion : IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison

control center. Get medical attention if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction.

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Causes skin irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : May cause gastrointestinal irritation.

#### 4.3. Immediate medical attention and special treatment, if necessary

No additional information available

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Carbon dioxide. Dry powder.

#### 5.2. Specific hazards arising from the chemical

Fire hazard : Flammable liquid and vapor. Explosion hazard : Product is not explosive.

Reactivity : No dangerous reactions known under normal conditions of use.

#### 5.3. Special protective equipment and precautions for fire-fighters

Precautionary measures fire : Eliminate all ignition sources if safe to do so.

Firefighting instructions : Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed

containers. Do not dispose of fire-fighting water in the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Self-contained breathing apparatus.

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures

: Evacuate area. Ventilate area. Keep upwind. Spill should be handled by trained cleaning

personnel properly equipped with respiratory and eye protection.

#### 6.1.1. For non-emergency personnel

Protective equipment

: Wear protective equipment as described in section 8.

**Emergency procedures** : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment

: Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

#### 6.2. **Environmental precautions**

Avoid release to the environment. Prevent entry to sewers and public waters.

#### 6.3 Methods and material for containment and cleaning up

For containment/cleaning up

: SMALL SPILL: Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on absorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal. After all visible traces, including ignitable vapors, have been removed, thoroughly wet vacuum the area. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal. Only those persons who are adequately trained, authorized, and wearing the required personal protective equipment (PPE) should participate in spill response and clean-up.

LARGE SPILL: Keep spectators away. Only those persons who are adequately trained, authorized and wearing the required personal protective equipment (PPE) should participate in spill response and clean-up. Ventilate the area by natural means or by explosion proof means (i.e. fans). Know and prepare for spill response before using or handling this product. Eliminate all ignition sources (flames, hot surfaces, portable heaters and sources of electrical, static, or frictional sparks). Dike and contain spill with inert material (e.g. sand, earth). Transfer liquids to covered and labeled metal containers for recovery or disposal, or remove with inert absorbent. Use only non-sparking tools and appropriate PPE. Place absorbent diking materials in covered metal containers for disposal. Prevent contamination of sewers, streams, and groundwater with spilled material or used absorbent.

#### 6.4. Reference to other sections

See Sections 8 and 13.

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling

: For professional or industrial use only. Follow label instructions. Keep out of reach of children. Not for consumption. No smoking. Do not breathe vapors. Avoid contact with body. Turn off all pilot lights, flames, stoves, heaters, electric motors, welding equipment and other sources of ignition. Empty containers must not be washed and re-used for any purpose. Contact lens wearers must wear protective eye wear around chemical vapors and liquid. Wash hands thoroughly after handling. Flammable vapors may cause flash fire or ignite explosively. To prevent build-up of vapors, use adequate natural and/or mechanical ventilation (e.g. open all windows and doors to achieve cross ventilation). Containers may be hazardous when empty. Never use welding or cutting torch on or near container. Do not cut, drill, grind, or expose containers to heat, sparks, static electricity or other source of ignition. Explosion may occur causing injury or death.

#### Conditions for safe storage, including any incompatibilities 7.2.

Storage conditions

Store in original container. Keep container closed when not in use. Containers which are opened should be properly resealed and kept upright to prevent leakage. Store in a dry, cool and well-ventilated place.

Incompatible materials : No data available.

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1. **Control parameters**

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Bisphenol A-epichlorohydrin polymer (25068-38-6)				
ACGIH	Remark (ACGIH)	OELs not established		
OSHA	Remark (OSHA)	OELs not established		
Alkyl (C12-14) glycidyl	ether (68609-97-2)			
ACGIH	Remark (ACGIH)	OELs not established		
OSHA	Remark (OSHA)	OELs not established		
Oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, homopolymer (25085-99-8)				
ACGIH	Remark (ACGIH)	OELs not established		
OSHA	Remark (OSHA)	OELs not established		

#### 8.2. Appropriate engineering controls

Appropriate engineering controls

: Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Ensure adequate ventilation, especially in confined areas.

### 8.3. Individual protection measures/Personal protective equipment

### Personal protective equipment symbol(s):







#### Personal protective equipment:

Gloves. Protective goggles. Protective clothing.

#### Hand protection:

Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl. Suitable gloves for this specific application can be recommended by the glove supplier.

#### Eye protection:

Wear eye protection, including chemical splash goggles and a face shield when possibility exists for eye contact due to spraying liquid or airborne particles.

#### Skin and body protection:

Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

#### Respiratory protection:

Use NIOSH (or other equivalent national standard) -approved dust/particulate respirator. Where vapor, mist, or dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment. An approved organic vapor respirator/supplied air or self-contained breathing apparatus must be used when vapor concentration exceeds applicable exposure limits.

#### **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Color : Dark Gray; Dark Blue; Navy Blue

Odor : No data available
Odor threshold : No data available
pH : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Boiling point : > 240 °F (>115.56 °C)
Flash point : > 101 °F (>38.3 °C)

Relative evaporation rate (n-butyl acetate=1) : 0.7

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Flammability (solid, gas) : No data available

Vapor pressure : 8 mm Hg
Vapor density : 3.1

Relative density : No data available

Density : Dark Gray: 13.32 lb/gal

Dark Blue: 13.06 lb/gal

Navy Blue: 12.81 lb/gal

Specific gravity : Dark Gray: 1.6

Dark Blue: 1.54 Navy Blue: 1.57 No data available

Solubility : No data available Partition coefficient n-octanol/water (Log Pow) Auto-ignition temperature : No data available : No data available Decomposition temperature Viscosity, kinematic : No data available : No data available Viscosity, dynamic **Explosion limits** : No data available : No data available Explosive properties Oxidizing properties : No data available

#### 9.2. Other information

No additional information available

#### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

## 10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

### 10.3. Possibility of hazardous reactions

None under normal use.

### 10.4. Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Avoid contact with incompatible materials.

### 10.5. Incompatible materials

Strong oxidizing agents.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Bisphenol A-epichlorohydrin polymer (25068-38-6)			
LD50 oral rat 11400 mg/kg			
LD50 dermal rat	> 2000 mg/kg Source: CHEMIDPLUS		
Alkyl (C12-14) glycidyl ether (68609-97-2)			
LD50 oral rat	17100 mg/kg		

LDEO L (	4000 //	
Oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, homopolymer (25085-99-8)		
LD50 dermal rabbit	> 3987 mg/kg	
LD30 oral rat	17 100 mg/kg	

Oxfrane, 2,2 -[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)jbis-, nomopolymer (25065-99-6)		
LD50 oral rat	> 4000 mg/kg	
LD50 dermal rabbit	> 20000 mg/kg	
Skin correcion/irritation	· Causes skin irritation	

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified : Not classified Carcinogenicity

Titanium dioxide (13463-67-7)		
IARC group	2B - Possibly carcinogenic to humans	
In OSHA Hazard Communication Carcinogen	Yes	

Reproductive toxicity : Not classified STOT-single exposure : Not classified STOT-repeated exposure Not classified Aspiration hazard : Not classified Viscosity, kinematic : Not applicable

Symptoms/effects : Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction.

Symptoms/effects after inhalation May cause respiratory irritation.

Symptoms/effects after skin contact : Causes skin irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Causes serious eve irritation. Symptoms/effects after ingestion : May cause gastrointestinal irritation.

### **SECTION 12: Ecological information**

#### 12.1. **Toxicity**

: No data available. Ecology - general : Not classified. Hazardous to the aquatic environment, short-

term (acute)

Hazardous to the aquatic environment, long-

term (chronic)

: Harmful to aquatic life with long lasting effects.

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

Other adverse effects : No data available.

#### **SECTION 13: Disposal considerations**

#### Disposal methods

Waste treatment methods : Do not discharge to public wastewater systems without permit of pollution control authorities.

No discharge to surface waters is allowed without an NPDES permit.

Product/Packaging disposal recommendations Dispose in a safe manner in accordance with local/national regulations. Do not allow the

product to be released into the environment.

#### **SECTION 14: Transport information**

#### Department of Transportation (DOT)

In accordance with DOT

Transport document description (DOT) : UN1263 Paint (contains Epoxy resin, Bisphenol A-epichlorohydrin polymer), 3, III

: UN1263 UN-No.(DOT) Proper Shipping Name (DOT) : Paint

contains Epoxy resin, Bisphenol A-epichlorohydrin polymer

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Packing group (DOT) : III - Minor Danger

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hazard labels (DOT) : 3 - Flammable liquid



DOT Quantity Limitations Passenger aircraft/rail : 60 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

Emergency Response Guide (ERG) Number : 12

Other information : No supplementary information available.

Transport by sea (IMDG)

Transport document description (IMDG) : UN 1263 PAINT (contains Epoxy resin, Bisphenol A-epichlorohydrin polymer), 3, III

UN-No. (IMDG) : 1263
Proper Shipping Name (IMDG) : PAINT

Class (IMDG) : 3 - Flammable liquids

Packing group (IMDG) : III - substances presenting low danger

Limited quantities (IMDG) : 5 L

Air transport (IATA)

Transport document description (IATA) : UN 1263 Paint (contains Epoxy resin, Bisphenol A-epichlorohydrin polymer), 3, III

UN-No. (IATA) : 1263
Proper Shipping Name (IATA) : Paint

Class (IATA) : 3 - Flammable Liquids
Packing group (IATA) : III - Minor Danger

## **SECTION 15: Regulatory information**

### 15.1. US Federal regulations

MS-1600 DK Blue		
All chemical substances in this product are listed as "Active" in the EPA (Environmental Protection Agency) "TSCA Inventory Notification (Active-Inactive) Requirements Rule" ("the Final Rule") of Feb. 2019, as amended Feb. 2021, or are otherwise exempt or regulated by other agencies such as FDA or FIFRA		
SARA Section 311/312 Hazard Classes	Health hazard - Skin corrosion or Irritation Health hazard - Serious eye damage or eye irritation Health hazard - Respiratory or skin sensitization Physical hazard - Flammable (gases, aerosols, liquids, or solids)	

## 15.2. International regulations

Epichlorohydrin (106-89-8)	
Toxic Substance (CEPA – Schedule I)	Yes

## 15.3. US State regulations

⚠ WARNING:

This product can expose you to Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	Carcinogenicity	Developmental toxicity	Reproductive toxicity male	Reproductive toxicity female	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Titanium dioxide (13463-67-7)	X				Not available	

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Component	Carcinogenicity	Developmental toxicity	Reproductive toxicity male	Reproductive toxicity female	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Ethylbenzene (100-41-4)	Х				54 μg/day (inhalation); 41 μg/day (oral)	
Toluene (108-88-3)		X				7000 µg/day
Benzene (71-43-2)	Х	Х	Х		6.4 μg/day (oral); 13 μg/day (inhalation)	24 µg/day (oral); 49 µg/day (inhalation)
Cumene (98-82-8)	Х					
Silica: Crystalline, quartz (14808-60-7)	Х					
Carbon black (1333- 86-4)	Х					
Epichlorohydrin (106- 89-8)	Х		Х		9 μg/day	

Component	State or local regulations	
Xylene (1330-20-7)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List	
Titanium dioxide (13463-67-7)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List	
Ethylbenzene (100-41-4)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List	
n-Butyl acetate (123-86-4)	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List; U.S Pennsylvania - RTK (Right to Know) List	
Toluene (108-88-3)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List	
Benzene (71-43-2)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List	
Dipropylene glycol monomethyl ether (34590-94-8)	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List	
Cumene (98-82-8)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List; U.S Pennsylvania - RTK (Right to Know) - Special Hazardous Substances	
Benzene, 1,2,4-trimethyl- (95-63-6)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List	
Diisobutyl ketone (108-83-8)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Massachusetts - Right To Know List; U.S Pennsylvania - RTK (Right to Know) List	
Phosphoric acid (7664-38-2)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Massachusetts - Right To Know List; U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
Silica: Crystalline, quartz (14808-60-7)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List	
Carbon black (1333-86-4)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List; U.S Pennsylvania - RTK (Right to Know) - Special Hazardous Substances	
Epichlorohydrin (106-89-8)	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List	

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### **SECTION 16: Other information**

Other information : Author: NA.

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause

temporary incapacitation or residual injury.

NFPA fire hazard : 2 - Materials that must be moderately heated or exposed to

relatively high ambient temperatures before ignition can

occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even

under fire conditions.



**HMIS Hazard Rating** 

Health : 2

\* - Chronic (long-term) health effects may result from repeated overexposure

Flammability : 2 Physical : 0

Indication of changes:

Revision 1.0: New SDS Created.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.