

# **Material Safety Data Sheet**

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# **SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:** 3M<sup>TM</sup> Heavy Drip-Chek<sup>TM</sup> Sealer, P.N. 08531

**MANUFACTURER:** 3M

**DIVISION:** Automotive Aftermarket

ADDRESS: 3M Center, St. Paul, MN 55144-1000

## EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

**Issue Date:** 11/16/11 **Supercedes Date:** 01/07/08

**Document Group:** 10-5259-6

**Product Use:** 

Intended Use: Automotive Specific Use: Sealant

# **SECTION 2: INGREDIENTS**

<u>Ingredient</u>	<b>C.A.S. No.</b>	% by Wt
TOLUENE	108-88-3	30 - 60
ACRYLONITRILE-BUTADIENE POLYMER	9003-18-3	10 - 30
N-AMYL ACETATE	628-63-7	7 - 13
PHENOLIC POLYMER - NJTSRN 04499600-6305	Trade Secret	5 - 10
2-METHYLBUTYL ACETATE	624-41-9	3 - 7
PHENOLIC RESIN	Trade Secret	3 - 7
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE	112945-52-5	3 - 7
SALICYLIC ACID	69-72-7	1 - 5
TITANIUM DIOXIDE	13463-67-7	0.5 - 1.5
ZINC OXIDE	1314-13-2	0.5 - 1.5
P-TERT-BUTYLPHENOL	98-54-4	0.1 - 1
XYLENE	1330-20-7	0.1 - 1
ETHYLBENZENE	100-41-4	< 0.2
BENZENE	71-43-2	< 0.06
FORMALDEHYDE	50-00-0	< 0.03
ACRYLONITRILE	107-13-1	< 0.002

# **SECTION 3: HAZARDS IDENTIFICATION**

### 3.1 EMERGENCY OVERVIEW

Odor, Color, Grade: Solvent odor; Gray viscous liquid

General Physical Form: Liquid

Immediate health, physical, and environmental hazards: Flammable liquid and vapor. Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back. May cause severe skin irritation. May cause allergic skin reaction. May cause target organ effects. Contains a chemical or chemicals which can cause birth defects or other reproductive harm. Contains a chemical or chemicals which can cause cancer.

### 3.2 POTENTIAL HEALTH EFFECTS

### **Eye Contact:**

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

#### Skin Contact:

Severe Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

#### **Inhalation:**

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Prolonged or repeated exposure may cause:

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

May be absorbed following inhalation and cause target organ effects.

## **Ingestion:**

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May be absorbed following ingestion and cause target organ effects.

# **Target Organ Effects:**

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Prolonged or repeated exposure may cause:

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

Ocular Effects: Signs/symptoms may include blurred or significantly impaired vision.

Olfactory Effects: Signs/symptoms may include decreased ability to detect odors and/or complete loss of smell.

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

### Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

<u>Ingredient</u> <u>C.A.S. No.</u> <u>Class Description</u> <u>Regulation</u>

ACRYLONITRILE	107-13-1	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
ACRYLONITRILE	107-13-1	Anticipated human carcinogen	National Toxicology Program Carcinogens
ACRYLONITRILE	107-13-1	Cancer hazard	OSHA Carcinogens
BENZENE	71-43-2	Grp. 1: Carcinogenic to	International Agency for Research on Cancer
		humans	
BENZENE	71-43-2	Known human carcinogen	National Toxicology Program Carcinogens
BENZENE	71-43-2	Cancer hazard	OSHA Carcinogens
ETHYLBENZENE	100-41-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
FORMALDEHYDE	50-00-0	Grp. 1: Carcinogenic to	International Agency for Research on Cancer
		humans	
FORMALDEHYDE	50-00-0	Anticipated human carcinogen	National Toxicology Program Carcinogens
FORMALDEHYDE	50-00-0	Cancer hazard	OSHA Carcinogens

# **SECTION 4: FIRST AID MEASURES**

## 4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

**Eye Contact:** Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

**Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

**Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention.

**If Swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

# **SECTION 5: FIRE FIGHTING MEASURES**

### 5.1 FLAMMABLE PROPERTIES

**Autoignition temperature** No Data Available

Flash Point 40 °F [Test Method: Tagliabue Closed Cup]

Flammable Limits(LEL) 1.00 % volume Flammable Limits(UEL) 7.00 % volume

## 5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

## 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** Flammable liquid and vapor. Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

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# **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard.

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

For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Collect the resulting residue containing solution. Place in a metal container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

### Clean-up methods

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill. Contain spill. Cover spill area with a fire-extinguishing foam. An aqueous film forming foam (AFFF) is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS. Seal the container.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

# **SECTION 7: HANDLING AND STORAGE**

## 7.1 HANDLING

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Ground containers securely when transferring contents. Wear low static or properly grounded shoes. Avoid skin contact. Avoid static discharge. Avoid eye contact with vapors, mists, or spray. Keep out of the reach of children. Do not breathe vapors. Avoid contact with oxidizing agents.

#### 7.2 STORAGE

Store away from acids. Store away from heat. Store out of direct sunlight. Keep container in well-ventilated area. Keep container tightly closed. Store away from areas where product may come into contact with food or pharmaceuticals. Store away from oxidizing agents.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

# 8.1 ENGINEERING CONTROLS

Provide appropriate local exhaust ventilation on open containers. Use in an enclosed process area is recommended. Provide ventilated enclosure for heat curing. Curing enclosures must be exhausted to outdoors or to a suitable emission control device. Do not use in a confined area or areas with little or no air movement. For additional health and precautionary information, including air monitoring methodology, contact 3M. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment.

## **8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)**

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#### 8.2.1 Eye/Face Protection

Avoid eye contact with vapors, mists, or spray.

The following eye protection(s) are recommended: Safety Glasses with side shields

Indirect Vented Goggles

#### 8.2.2 Skin Protection

Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Gloves made from the following material(s) are recommended: Polyvinyl Alcohol (PVA)

your respirator manufacturer for selection of appropriate types of respirators.

Polymer laminate

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# 8.2.3 Respiratory Protection

Do not breathe vapors.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges and P95 particulate prefilters . Select and use respiratory protection to prevent an inhalation exposure based on the results of an exposure assessment. Consult with

### 8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

## 8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	<b>Authority</b>	<b>Type</b>	<u>Limit</u>	Additional Information
2-METHYLBUTYL ACETATE	ACGIH	TWA	50 ppm	
2-METHYLBUTYL ACETATE	ACGIH	STEL	100 ppm	
ACRYLONITRILE	ACGIH	TWA	2 ppm	Skin Notation*
ACRYLONITRILE	OSHA	TWA	2 ppm	Skin Notation*; 29 CFR 1910.1045
ACRYLONITRILE	OSHA	STEL	10 ppm	Skin Notation*; 29 CFR 1910.1045
BENZENE	ACGIH	TWA	0.5 ppm	Skin Notation*
BENZENE	ACGIH	STEL	2.5 ppm	Skin Notation*
BENZENE	OSHA	TWA	1 ppm	29 CFR 1910.1028
BENZENE	OSHA	STEL	5 ppm	29 CFR 1910.1028
BENZENE	OSHA	TWA	10 ppm	
BENZENE	OSHA	CEIL	25 ppm	
ETHYLBENZENE	ACGIH	TWA	20 ppm	
ETHYLBENZENE	CMRG	TWA	25 ppm	
ETHYLBENZENE	CMRG	STEL	75 ppm	
ETHYLBENZENE	OSHA	TWA	435 mg/m3	
FORMALDEHYDE	ACGIH	CEIL	0.3 ppm	Sensitizer
FORMALDEHYDE	CMRG	TWA	0.5 ppm	
FORMALDEHYDE	OSHA	TWA	0.75 ppm	29 CFR 1910.1048
FORMALDEHYDE	OSHA	STEL	2 ppm	29 CFR 1910.1048
N-AMYL ACETATE	ACGIH	TWA	50 ppm	
N-AMYL ACETATE	ACGIH	STEL	100 ppm	
N-AMYL ACETATE	OSHA	TWA	525 mg/m3	
SILICA, AMORPHOUS	OSHA	TWA concentration	0.8  mg/m3	
SILICA, AMORPHOUS	OSHA	TWA	20 millions of	
			particles/cu. ft.	
TITANIUM DIOXIDE	ACGIH	TWA	10 mg/m3	
TITANIUM DIOXIDE	CMRG	TWA, as respirable	5 mg/m3	
		dust		
TITANIUM DIOXIDE	OSHA	TWA, as total dust	15 mg/m3	
TOLUENE	ACGIH	TWA	20 ppm	

TOLUENE	CMRG	STEL	75 ppm	Skin Notation*
TOLUENE	OSHA	TWA	200 ppm	
TOLUENE	OSHA	CEIL	300 ppm	
XYLENE	ACGIH	TWA	100 ppm	
XYLENE	ACGIH	STEL	150 ppm	
XYLENE	CMRG	TWA	50 ppm	
XYLENE	CMRG	STEL	75 ppm	
XYLENE	OSHA	TWA	435 mg/m3	
ZINC OXIDE	ACGIH	TWA, respirable	2 mg/m3	
		fraction		
ZINC OXIDE	ACGIH	STEL, respirable	10 mg/m3	
		fraction		
ZINC OXIDE	OSHA	TWA, as fume	5 mg/m3	
ZINC OXIDE	OSHA	TWA, respirable	5 mg/m3	
		fraction		
ZINC OXIDE	OSHA	TWA, as total dust	15 mg/m3	

<sup>\*</sup> Substance(s) refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

### SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Odor, Color, Grade: Solvent odor; Gray viscous liquid

General Physical Form: Liquid

**Autoignition temperature** No Data Available

Flash Point 40 °F [Test Method: Tagliabue Closed Cup]

Flammable Limits(LEL) 1.00 % volume Flammable Limits(UEL) 7.00 % volume

**Boiling Point** 232 °F [*Details:* Toluene]

**Density** 0.97 g/ml

Vapor Density 4.0 [Ref Std: AIR=1]

Vapor Pressure 25.19 mmHg [@ 68 °F]

Specific Gravity 0.97 [Ref Std: WATER=1]

pH Not ApplicableMelting point No Data Available

Solubility in Water Nil

**Evaporation rate** 6.00 [*Ref Std*: ETHER=1]

Hazardous Air Pollutants53.9 % weight [Test Method: Calculated]Hazardous Air Pollutants4.37 lb HAPS/gal [Test Method: Calculated]

Volatile Organic Compounds5.40 lb/gal [Test Method: calculated SCAQMD rule 443.1]Volatile Organic Compounds646 g/l [Test Method: calculated SCAQMD rule 443.1]Volatile Organic Compounds66.6 % weight [Test Method: calculated per CARB title 2]

**Kow - Oct/Water partition coef Percent volatile**No Data Available
66.6 % weight

VOC Less H2O & Exempt Solvents 646 g/l [Test Method: calculated SCAQMD rule 443.1]

Viscosity Approximately 100000 centipoise [@ 73.4 °F]

Solids Content 33.9 % weight

# **SECTION 10: STABILITY AND REACTIVITY**

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

Sparks and/or flames

10.2 Materials to avoid

Strong oxidizing agents

Hazardous Polymerization: Hazardous polymerization will not occur.

# **Hazardous Decomposition or By-Products**

SubstanceConditionCarbon monoxideNot SpecifiedCarbon dioxideNot SpecifiedToxic Vapor, Gas, ParticulateNot Specified

# **SECTION 11: TOXICOLOGICAL INFORMATION**

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

# **SECTION 12: ECOLOGICAL INFORMATION**

# ECOTOXICOLOGICAL INFORMATION

Not determined.

### CHEMICAL FATE INFORMATION

Not determined.

# **SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable), D018 (Benzene)

Since regulations vary, consult applicable regulations or authorities before disposal.

# **SECTION 14:TRANSPORT INFORMATION**

**ID Number(s):** 

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41-0003-6740-3, 41-3701-2172-9, 60-9800-2709-2, 60-9800-3751-3, 62-2153-2609-1

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

# **SECTION 15: REGULATORY INFORMATION**

### US FEDERAL REGULATIONS

Contact 3M for more information.

### 311/312 Hazard Categories:

Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

Ingredient	C.A.S. No	<u>% by Wt</u>
TOLUENE	108-88-3	30 - 60
ZINC OXIDE (ZINC COMPOUNDS)	1314-13-2	0.5 - 1.5
ETHYL BENZENE	100-41-4	< 0.2

This material contains a chemical which requires export notification under TSCA Section 12[b]:

<u>Ingredient (Category if applicable)</u>	C.A.S. No	Regulation	<u>Status</u>
XYLENE (Benzene, 1,4-dimethyl-)	1330-20-7	Toxic Substances Control Act (TSCA) 4 Test	Applicable
		Rule Chemicals	

# STATE REGULATIONS

Contact 3M for more information.

### **CALIFORNIA PROPOSITION 65**

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>
ACRYLONITRILE	107-13-1	**Carcinogen
BENZENE	71-43-2	*Male reproductive toxin
BENZENE	71-43-2	**Carcinogen
BENZENE	71-43-2	*Developmental Toxin
ETHYLBENZENE	100-41-4	**Carcinogen
FORMALDEHYDE	50-00-0	**Carcinogen
TOLUENE	108-88-3	*Female reproductive toxin
TOLUENE	108-88-3	*Developmental Toxin

<sup>\*</sup> WARNING: contains a chemical or chemicals which can cause birth defects or other reproductive harm.

## **CHEMICAL INVENTORIES**

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

## INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

# **SECTION 16: OTHER INFORMATION**

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<sup>\*\*</sup> WARNING: contains a chemical which can cause cancer.

#### NFPA Hazard Classification

Health: 2 Flammability: 3 Reactivity: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

### **Revision Changes:**

Section 1: Product name was modified.

Section 1: Product use information was modified.

Section 16: Disclaimer (second paragraph) was modified.

Section 3: Immediate skin hazard(s) was modified.

Section 3: Potential effects from skin contact information was modified.

Section 3: Potential effects from inhalation information was modified.

Section 7: Handling information was modified.

Section 7: Storage information was modified.

Section 8: Engineering controls information was modified.

Section 8: Respiratory protection information was modified.

Section 10: Hazardous decomposition or by-products table was modified.

Section 13: Waste disposal method information was modified.

Section 8: Eye/face protection information was modified.

Section 8: Skin protection - recommended gloves information was modified.

Section 8: Respiratory protection - recommended respirators information was modified.

Section 3: Immediate other hazard(s) was modified.

Section 14: Transportation legal text was modified.

Section 3: Other health effects information was modified.

Page Heading: Product name was modified.

Section 15: Inventories information was modified.

Section 9: Density information was modified.

Section 9: Vapor density value was modified.

Section 9: Vapor pressure value was modified.

Section 9: Boiling point information was modified.

Section 5: Flammable limits (UE) information was modified.

Section 5: Flammable limits (LEL) information was modified.

Section 5: Autoignition temperature information was modified.

Section 5: Flash point information was modified.

Section 9: Property description for required properties was modified.

Section 9: Property description for optional properties was modified.

Section 9: Specific gravity information was modified.

Section 9: pH information was modified.

Section 9: Melting point information was modified.

Section 9: Solubility in water text was modified.

Section 8: Respiratory protection - recommended respirators guide was modified.

Section 9: Flash point information was modified.

Section 9: Flammable limits (LEL) information was modified.

Section 9: Flammable limits (UEL) information was modified.

Section 9: Autoignition temperature information was modified.

Section 14: ID Number(s) Template 1 was modified.

Section 2: Ingredient table was modified.

Section 15: EPCRA 313 information was modified.

Section 8: Exposure guidelines ingredient information was modified.

Section 15: TSCA section 12[b] information was modified.

Section 3: Carcinogenicity table was modified.

Section 15: California proposition 65 ingredient information was modified.

Section 6: 6.2. Environmental precautions heading was added.

Section 6: 6.1. Personal precautions, protective equipment and emergency procedures heading was added.

Section 10.1 Conditions to avoid heading was added.

Section 10.2 Materials to avoid heading was added.

Section 16: Web address was added.

Section 6: Personal precautions information was added.

Section 6: Environmental procedures information was added.

Section 6: Methods for cleaning up information was added.

Section 10: Materials to avoid physical property was added.

Section 10: Conditions to avoid physical property was added.

Section 1: Address was added.

Copyright was added.

Company logo was added.

Section 6: Clean-up methods heading was added.

Telephone header was added.

Company Telephone was added.

Section 1: Emergency phone information was added.

Section 1: Emergency phone information was deleted.

Company Logo was deleted.

Copyright was deleted.

Section 16: Web address heading was deleted.

Section 6: Release measures information was deleted.

Section 6: Release measures heading was deleted.

Section 10: Materials and conditions to avoid physical property was deleted.

Section 1: Address line 1 was deleted.

Section 1: Address line 2 was deleted.

Section 8: Exposure guidelines legend was deleted.

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