

Material Safety Data Sheet

Revision Date: 09/15/10



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I. PRODUCT IDENTIFICATION

Catalog Number / Product Name: 31206, 31206-5XX, & 31306 / SV Internal Standard Mix, 2mg/ml
Revision Number: 7
Intended use: For Laboratory use only

II. HAZARD IDENTIFICATION

Emergency Overview:

Health Hazards: Xn - Harmful
Carcinogen, Category 3

Routes of Entry: Eye contact Skin contact Ingestion Absorption
Inhalation

Target Organs Potentially Affected By Exposure: skin, CVS, eyes, CNS (in animals: lung, liver, salivary and mammary gland tumors)

Chemical Interactions That Change Toxicity: None Known

Medical Conditions Aggravated By Exposure: Respiratory disease including asthma and bronchitis
Skin disease including eczema and sensitization Eye disease

Immediate (Acute) Health Effects by Route of Exposure:

Inhalation Irritation: Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.

Inhalation Toxicity: Harmful! Can cause systemic damage (see "Target Organs") Inhalation may cause severe central nervous system depression (including unconsciousness).

Skin Contact: Contact causes severe skin irritation and possible burns.

Skin Absorption: Harmful if absorbed through the skin. May cause severe irritation and systemic damage.

Eye Contact: Contact with the eyes may cause moderate to severe eye injury. Eye contact may result in tearing and reddening, but not likely to permanently injure eye tissue. Temporary vision impairment (cloudy or blurred vision) is possible.

Ingestion Irritation: Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea.

Ingestion Toxicity: Harmful if swallowed. May cause systemic poisoning.

Long-Term (Chronic) Health Effects:

Carcinogenicity: Contains a probable or known human carcinogen.

Reproductive and Developmental Toxicity: No data available to indicate product or any components present at greater than 0.1% may cause birth defects.

Material Safety Data Sheet

Revision Date: 09/15/10

Inhalation: Upon prolonged and/or repeated exposure, can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache. Harmful! Can cause systemic damage upon prolonged and/or repeated exposure (see "Target Organs")

Skin Absorption: Upon prolonged or repeated exposure, harmful if absorbed through the skin. May cause severe irritation and systemic damage

III. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS #	EINEC #	% Composition
Dichloromethane	75-09-2	200-838-9	98.800000
naphthalene-d8	1146-65-2		0.200000
phenanthrene-d10	1517-22-2		0.200000
1,4-dichlorobenzene-d4	3855-82-1		0.200000
acenaphthene-d10	15067-26-2		0.200000
perylene-d12	1520-96-3		0.200000
chrysene-d12	1719-03-5		0.200000

IV. FIRST-AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately

Eyes: Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician. Continue to flush eyes while awaiting medical attention Serious harm (damage) may result if treatment is delayed.

Skin Contact: Wash with soap and water. Remove contaminated clothing, launder immediately, and discard contaminated leather goods. Get medical attention immediately.

Ingestion: Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this MSDS. Never give anything by mouth to an unconscious person

V. FIRE FIGHTING MEASURES

Extinguishing Media: Use methods suitable to fight surrounding fire.

Fire Fighting Methods and Protection: Use methods for the surrounding fire.

Hazardous Combustion Products: Carbon monoxide, Carbon dioxide

VI. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment: Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section VIII of this MSDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits.

Material Safety Data Sheet

Revision Date: 09/15/10

Methods for Clean-up:

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section VIII at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

VII. HANDLING AND STORAGE

Handling Technical Measures and Precautions: Toxic or severely irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area.

VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

United States:

Chemical Name	CAS No.	IDLH	ACGIH STEL	ACGIH TLV-TWA	OSHA Exposure Limit
Dichloromethane	75-09-2	2300 ppm IDLH		50 ppm TWA	25 ppm TWA; 125 ppm STEL (15 min. TWA)
naphthalene-d8	1146-65-2	ND		No TLV	No PEL established
phenanthrene-d10	1517-22-2	ND		No TLV	No PEL established
1,4-dichlorobenzene-d4	3855-82-1	ND		No TLV	No PEL established
acenaphthene-d10	15067-26-2	ND		No TLV	No PEL established
perylene-d12	1520-96-3	ND		No TLV	No PEL established
chrysene-d12	1719-03-5	ND		No TLV	No PEL established

United Kingdom:

Chemical Name	CAS No.	EINEC No.	WEL-STEEL	WEL-TWA
Dichloromethane	75-09-2	200-838-9	300 ppm STEL; 1060 mg/m3 STEL	100 ppm TWA; 350 mg/m3 TWA
naphthalene-d8	1146-65-2		No data.	No data.
phenanthrene-d10	1517-22-2		No data.	No data.
1,4-dichlorobenzene-d4	3855-82-1		No data.	No data.
acenaphthene-d10	15067-26-2		No data.	No data.
perylene-d12	1520-96-3		No data.	No data.
chrysene-d12	1719-03-5		No data.	No data.

France:

Chemical Name	CAS No.	EINEC No.	VLCTs-STEEL	VME-TWA
Dichloromethane	75-09-2	200-838-9	100 ppm VLCT; 350 mg/m3 VLCT	50 ppm VME; 180 mg/m3 VME
naphthalene-d8	1146-65-2		No data.	No data.
phenanthrene-d10	1517-22-2		No data.	No data.
1,4-dichlorobenzene-d4	3855-82-1		No data.	No data.
acenaphthene-d10	15067-26-2		No data.	No data.
perylene-d12	1520-96-3		No data.	No data.
chrysene-d12	1719-03-5		No data.	No data.

Germany:

Chemical Name	CAS No.	EINEC No.	VELs
Dichloromethane	75-09-2	200-838-9	75 ppm TWA (exposure factor 4); 260 mg/m3 TWA (exposure factor 4)
naphthalene-d8	1146-65-2		No data.
phenanthrene-d10	1517-22-2		No data.
1,4-dichlorobenzene-d4	3855-82-1		No data.
acenaphthene-d10	15067-26-2		No data.
perylene-d12	1520-96-3		No data.
chrysene-d12	1719-03-5		No data.

Personal Protection:

Engineering Measures: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

Respiratory Protection: Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms.

Material Safety Data Sheet

Revision Date: 09/15/10

- Eye Protection:** Wear chemically resistant safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Do not wear contact lenses. Have an eye wash station available.
- Skin Protection:** Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

IX. PHYSICAL AND CHEMICAL PROPERTIES

Appearance, color:	Colorless
Odor:	Strong
pH:	No data available.
Vapor Density:	2.93 (air = 1)
Melting Point:	-96.7 °C
Flash Point:	No data available.
Autoignition Temperature:	556 deg C
Specific Gravity:	1.3254 - 1.3258 g/cm ³ at 20 °C
Evaporation Rate:	No data available.
Odor Threshold:	No data available.
Solubility:	Moderate; 50-99%
VOC % by weight:	No data available.
Molecular Weight:	No data available.

X. STABILITY AND REACTIVITY:

Stability:	Stable under normal conditions.
Conditions to Avoid:	High temperatures Contamination
Materials to Avoid / Chemical Incompatibility:	Caustics (bases) Strong oxidizing agents
Hazardous Decomposition Products:	Carbon dioxide Carbon monoxide

XI. TOXICOLOGICAL INFORMATION:

Component Toxicological Data:

NIOSH:

Chemical Name	CAS No.	LD50/LC50
Methane, dichloro-	75-09-2	Oral LD50 Rat >2000 mg/kg; Inhalation LC50 Rat 76000 mg/m ³ 4 h

Component Carcinogenic Data:

OSHA:

Chemical Name	CAS No.	
Methylene chloride	75-09-2	25 ppm TWA (8 hr.); 125 ppm STEL (15 min.); 12.5 ppm Action Level (see 29 CFR 1910.1051); effective date for respiratory protection for certain employers to achieve the 8-hour TWA PEL is August 31, 1998; the start up date to install engineering controls is December 10, 1998.; (OSHA - 29 CFR 1910 Specifically Regulate

ACGIH:

Chemical Name	CAS No.	
Dichloromethane	75-09-2	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

NIOSH:

Chemical Name	CAS No.	
Methylene chloride	75-09-2	potential occupational carcinogen

Material Safety Data Sheet

Revision Date: 09/15/10

NTP:

Chemical Name CAS No.
No data available.

IARC:

Chemical Name	CAS No.	Group No.
No data.		Group 1
No data.		Group 2A
Dichloromethane	75-09-2	Group 2B

XII. ECOLOGICAL INFORMATION:

Overview: Moderate ecological hazard. This product may be dangerous to plants and/or wildlife. Keep out of waterways.

Mobility: No data

Persistence: No data

Bioaccumulation: No data

Degradability: No data

Ecological Toxicity Data: 0

XIII. DISPOSAL CONSIDERATIONS:

Waste Description of Spent Product: Spent or discarded material is a hazardous waste.

Disposal Methods: Incinerate spent or discarded material a permitted hazardous waste facility.

Waste Disposal of Packaging: Comply with all Local, State, Federal, and Provincial Environmental Regulations.

XIV. TRANSPORTATION INFORMATION:

United States:

DOT Proper Shipping Name: Dichloromethane

UN Number: UN1593

Hazard Class: 6.1

Packing Group: III

International:

IATA Proper Shipping Name: Dichloromethane

UN Number: UN1593

Hazard Class: 6.1

Packing Group: III

Marine Pollutant: Yes

XV. REGULATORY INFORMATION:

United States:

Chemical Name	CAS#	CERCLA	SARA 313	SARA EHS 313	TSCA
Dichloromethane	75-09-2	X	X	-	X
naphthalene-d8	1146-65-2	-	-	-	-
phenanthrene-d10	1517-22-2	-	-	-	-
1,4-dichlorobenzene-d4	3855-82-1	-	-	-	-
acenaphthene-d10	15067-26-2	-	-	-	-
perylene-d12	1520-96-3	-	-	-	-
chrysene-d12	1719-03-5	-	-	-	-

The following chemicals are listed on CA Prop 65:

Chemical Name	CAS #	Regulation
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Material Safety Data Sheet

Revision Date: 09/15/10

Dichloromethane (Methylene chloride)
Dichloromethane

75-09-2

Prop 65 Cancer

State Right To Know Listing:

Chemical Name	CAS#	New Jersey	Massachusetts	Pennsylvania	California
Dichloromethane	75-09-2	X	X	X	X
naphthalene-d8	1146-65-2	-	-	-	-
phenanthrene-d10	1517-22-2	-	-	-	-
1,4-dichlorobenzene-d4	3855-82-1	-	-	-	-
acenaphthene-d10	15067-26-2	-	-	-	-
perylene-d12	1520-96-3	-	-	-	-
chrysene-d12	1719-03-5	-	-	-	-

EU Directives Classification:

Hazard Symbols



Risk Phrases: R40: Possible risk of irreversible effects

Safety Phrases: S36/37/39: Wear suitable protective clothing, gloves and eye/face protection

XVI: ADDITIONAL INFORMATION

Prior Version Date: 07/02/08

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