8260 Internal Standard Mix 1

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 03/02/2015 Revision date: : Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Product name : 8260 Internal Standard Mix 1

Product code : AL0-101445

Product group : Trade product

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Laboratory Use

Industrial/Professional use spec : Industrial
For professional use only

Use of the substance/mixture : Certified reference material for laboratory use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Phenova
6390 Joyce Dr. Suite 100
80403 Golden, CO - United States
T 1-866-942-2978 - F 1-866-283-0269
info@phenova.com - www.phenova.com

1.4. Emergency telephone number

Emergency number : ChemTel Assistance (US/Canada) 1-800-255-3924
ChemTel Assistance (International) +1 813-248-0585

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2	H225
Acute Tox. 3 (Oral)	H301
Acute Tox. 3 (Dermal)	H311
STOT SE 1	H370
Aquatic Chronic 3	H412

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

F; R11
T; R23/24/25
T; R39/23/24/25
R52/53

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS02 GHS06 GHS08

Signal word (CLP) : Danger

Hazardous ingredients : methanol

Hazard statements (CLP) : H225 - Highly flammable liquid and vapor

H301+H311 - Toxic if swallowed or in contact with skin
H370 - Causes damage to organs
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed
P260 - Do not breathe dust, fume, gas, mist, spray, vapors
P271 - Use only outdoors or in a well-ventilated area
P270 - Do not eat, drink or smoke when using this product
P273 - Avoid release to the environment
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P308+P313 - IF exposed or concerned: Get medical advice/attention
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up

No labeling applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
methanol (Component)	(CAS No) 67-56-1 (EC no) 200-659-6 (EC index no) 603-001-00-X	99	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT SE 1, H370
Chlorobenzene-d5 (Component)	(CAS No) 3114-55-4 (EC no) 203-628-5 (EC index no) 602-033-00-1	0.25	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
1,4-Dichlorobenzene-d4 (Component)	(CAS No) 3855-82-1 (EC no) 203-400-5 (EC index no) 602-035-00-2	0.25	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Name	Product identifier	Specific concentration limits
methanol (Component)	(CAS No) 67-56-1 (EC no) 200-659-6 (EC index no) 603-001-00-X	(3 =< C < 10) STOT SE 2, H371 (C >= 10) STOT SE 1, H370

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor/physician. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Immediately call a poison center or doctor/physician. Wash with plenty of soap and water. Wash contaminated clothing before reuse.

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Immediately call a poison center or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after skin contact : Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contact with skin.

Symptoms/injuries after ingestion : Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapor.

Explosion hazard : May form flammable/explosive vapor-air mixture.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Avoid breathing dust/fume/gas/mist/vapors/spray.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Use only non-sparking tools.

Hygiene measures : Do not eat, drink or smoke when using this product. Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment.

Storage conditions : Keep in fireproof place. Keep container tightly closed. Keep container tightly closed and in a well-ventilated place. Keep away from any flames or sparking source.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Chlorobenzene-d5 (3114-55-4)		
USA OSHA	OSHA PEL (TWA) (mg/m³)	350 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	75 mppcf

1,4-Dichlorobenzene-d4 (3855-82-1)		
USA OSHA	OSHA PEL (TWA) (mg/m³)	450 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	75 ppm
USA OSHA	OSHA PEL (STEL) (mg/m³)	675 mg/m³
USA OSHA	OSHA PEL (STEL) (ppm)	110 ppm

8.2. Exposure controls

Appropriate engineering controls : Either local exhaust or general room ventilation is usually required.

Personal protective equipment	:	Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles. Safety glasses.

Hand protection	:	Wear chemically resistant protective gloves. Wear suitable gloves resistant to chemical penetration.
Eye protection	:	Chemical goggles or safety glasses. Safety glasses.
Skin and body protection	:	Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.
Respiratory protection	:	Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.
Other information	:	Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Color	:	Colorless.
Odor	:	characteristic.
pH	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Highly flammable liquid and vapor
Relative density	:	No data available
Solubility	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available
Explosion limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established. Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed. Dermal: Toxic in contact with skin.

8260 Internal Standard Mix 1	
ATE CLP (oral)	101.010 mg/kg body weight
ATE CLP (dermal)	303.030 mg/kg body weight

Chlorobenzene-d5 (3114-55-4)	
LD50 oral rat	> 1427 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value; >2000 mg/kg bodyweight; Rat)
LD50 dermal rat	> 2000 mg/kg (Rat; Literature study)
LD50 dermal rabbit	> 2200 mg/kg (Rabbit; Literature study)
LC50 inhalation rat (mg/l)	17 mg/l/4h (Rat)
LC50 inhalation rat (ppm)	3630 ppm/4h (Rat)
ATE CLP (gases)	3630.000 ppmV/4h
ATE CLP (vapors)	17.000 mg/l/4h
ATE CLP (dust, mist)	1.500 mg/l/4h

1,4-Dichlorobenzene-d4 (3855-82-1)	
LD50 oral rat	500 mg/kg
LD50 dermal rat	> 6000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 5 mg/l/4h (Rat)
ATE CLP (oral)	500.000 mg/kg body weight

methanol (67-56-1)	
LD50 oral rat	> 5000 mg/kg (Rat; BASF test; Literature study; 1187-2769 mg/kg bodyweight; Rat; Weight of evidence)
LD50 dermal rabbit	15800 mg/kg (Rabbit; Literature study)
LC50 inhalation rat (mg/l)	85 mg/l/4h (Rat; Literature study)
LC50 inhalation rat (ppm)	64000 ppm/4h (Rat; Literature study)
ATE CLP (oral)	100.000 mg/kg body weight
ATE CLP (dermal)	300.000 mg/kg body weight
ATE CLP (gases)	700.000 ppmV/4h
ATE CLP (vapors)	3.000 mg/l/4h
ATE CLP (dust, mist)	0.500 mg/l/4h

Skin corrosion/irritation : Not classified
Based on available data, the classification criteria are not met

Serious eye damage/irritation : Not classified
Based on available data, the classification criteria are not met

Respiratory or skin sensitization : Not classified
Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified
Based on available data, the classification criteria are not met

Carcinogenicity : Not classified
Based on available data, the classification criteria are not met
May cause cancer

Reproductive toxicity : Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Causes damage to organs.

Specific target organ toxicity (repeated exposure) : Not classified
Based on available data, the classification criteria are not met

Aspiration hazard : Not classified
Based on available data, the classification criteria are not met

Potential Adverse human health effects and symptoms : Toxic if swallowed. Toxic in contact with skin.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Harmful to aquatic life with long lasting effects.

Chlorobenzene-d5 (3114-55-4)	
LC50 fish 1	91 mg/l (96 h; Brachydanio rerio)
EC50 Daphnia 1	47 mg/l (48 h; Ceriodaphnia dubia; pH = 7)
LC50 fish 2	4.7 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 2	0.59 mg/l (48 h; Daphnia magna)
TLM fish 1	45 mg/l (96 h; Poecilia reticulata)
TLM fish 2	20 ppm (96 h; Lepomis macrochirus)

Chlorobenzene-d5 (3114-55-4)	
Threshold limit algae 1	< 6.8 mg/l (136 h; Selenastrum capricornutum; Growth)
Threshold limit algae 2	> 390 mg/l (168 h; Scenedesmus quadricauda; Reproduction)

1,4-Dichlorobenzene-d4 (3855-82-1)	
LC50 fish 1	2.09 mg/l (96 h; Brachydanio rerio)
EC50 Daphnia 1	11 mg/l (48 h; Daphnia magna; Nominal concentration)
EC50 other aquatic organisms 1	28 mg/l (48 h; Scenedesmus subspicatus; Biomass)
LC50 fish 2	1.12 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 2	0.7 mg/l (48 h; Daphnia magna; Measured concentration)
TLM fish 1	880 mg/l 48 h; Salmo gairdneri (Oncorhynchus mykiss)
TLM fish 2	440 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
Threshold limit algae 1	16 mg/l (48 h; Scenedesmus subspicatus; Growth)
Threshold limit algae 2	13 mg/l (48 h; Scenedesmus subspicatus; Biomass)

methanol (67-56-1)	
LC50 fish 1	15400 mg/l (96 h; Lepomis macrochirus; Lethal)
EC50 Daphnia 1	> 10000 mg/l (48 h; Daphnia magna; Lethal)
LC50 fish 2	10800 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 2	24500 mg/l (48 h; Daphnia magna; Locomotor effect)
Threshold limit other aquatic organisms 1	6600 mg/l (16 h; Pseudomonas putida)
Threshold limit algae 1	530 mg/l (192 h; Microcystis aeruginosa)
Threshold limit algae 2	8000 mg/l (168 h; Scenedesmus quadricauda)

12.2. Persistence and degradability

8260 Internal Standard Mix 1	
Persistence and degradability	May cause long-term adverse effects in the environment.

Chlorobenzene-d5 (3114-55-4)	
Persistence and degradability	Not readily biodegradable in water. Non degradable in the soil. Low potential for adsorption in soil.
Biochemical oxygen demand (BOD)	0.03 g O_2 /g substance
Chemical oxygen demand (COD)	0.41 g O_2 /g substance
ThOD	2.06 g O_2 /g substance
BOD (% of ThOD)	0.0145 % ThOD

1,4-Dichlorobenzene-d4 (3855-82-1)	
Persistence and degradability	Readily biodegradable in water. Non degradable in the soil. Adsorbs into the soil.
ThOD	1.52 g O_2 /g substance
BOD (% of ThOD)	0.65 % ThOD

methanol (67-56-1)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.
Biochemical oxygen demand (BOD)	0.6 - 1.12 g O_2 /g substance
Chemical oxygen demand (COD)	1.42 g O_2 /g substance
ThOD	1.5 g O_2 /g substance
BOD (% of ThOD)	0.8 % ThOD

12.3. Bioaccumulative potential

8260 Internal Standard Mix 1	
Bioaccumulative potential	Not established.

Chlorobenzene-d5 (3114-55-4)	
BCF fish 1	447 (Pimephales promelas)
BCF fish 2	3.9 - 40 (Cyprinus carpio; Chronic)
Log Pow	2.8 - 2.98
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

1,4-Dichlorobenzene-d4 (3855-82-1)	
BCF fish 1	100 (Cyprinus carpio; Chronic)
BCF fish 2	214 - 720 (Salmo gairdneri (Oncorhynchus mykiss); Chronic)
BCF other aquatic organisms 1	20 (Bacteria)
Log Pow	3.39 - 3.62 (Experimental value)

methanol (67-56-1)	
BCF fish 1	< 10 (72 h; Leuciscus idus)
BCF fish 2	1 (72 h; Cyprinus carpio; Blood)

methanol (67-56-1)	
Log Pow	-0.77 (Experimental value; Other)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

Chlorobenzene-d5 (3114-55-4)	
Surface tension	0.033 N/m (25 °C)

1,4-Dichlorobenzene-d4 (3855-82-1)	
Surface tension	0.030 N/m (55 °C)

methanol (67-56-1)	
Surface tension	0.023 N/m (20 °C)

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Additional information : Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Avoid release to the environment. Hazardous waste due to toxicity.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 1992

UN-No.(IATA) : 1992

14.2. UN proper shipping name

Proper Shipping Name (ADR) : FLAMMABLE LIQUID, TOXIC, N.O.S.

Proper Shipping Name (IATA) : FLAMMABLE LIQUID, TOXIC, N.O.S.

Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, TOXIC, N.O.S.

Proper Shipping Name (ADN) : FLAMMABLE LIQUID, TOXIC, N.O.S.

Transport document description (ADR) : UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (methanol(67-56-1)), 3 (6.1), II, (D/E)

14.3. Packing group

Class (ADR) : 3

Classification code (ADR) : FT1

Class (IATA) : 3

Class (IMDG) : 3

Class (ADN) : 3

Subsidiary risks (ADR) : 6.1

Hazard labels (ADR) : 3, 6.1

Hazard labels (IATA) : 3, 6.1

14.4. Packing group

Packing group (ADR) : II

Packing group (IATA) : II

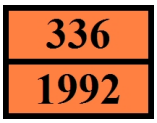
14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 336
Classification code (ADR) : FT1
Orange plates :



Special provision (ADR) : 274
Transport category (ADR) : 2
Tunnel restriction code (ADR) : D/E
Limited quantities (ADR) : 1l
Excepted quantities (ADR) : E2

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
PCA packing instructions (IATA) : 352
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA max net quantity (IATA) : 1L
PCA Excepted quantities (IATA) : E2
ERG code (IATA) : 3HP

14.6.4. Inland waterway transport

Carriage prohibited (ADN) : No

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions
Contains no REACH candidate substance
Contains no REACH Annex XIV substances.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Other information : None.

PHV SDS EU