

**Pipe Free™ Spotting Fluid**

Version 2.1

Revision Date 2016-09-09

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

Product Name : Pipe Free™ Spotting Fluid
Material : 1106563

EC-No.Registration number

Chemical name	CAS-No. EC-No. Index No.	Legal Entity Registration number
Hydrocarbons, C11- C14, n-alkanes, isoalkanes, cyclic, <2% aromatics		Chevron Phillips Chemicals International NV 01-2119456620-43-0010

Company : Chevron Phillips Chemical Company LP
Drilling Specialties Company LLC
10001 Six Pines Drive
The Woodlands, TX 77380

Local : Chevron Phillips Chemicals International N.V.
Airport Plaza (Stockholm Building)
Leonardo Da Vincilaan 19
1831 Diegem
Belgium

SDS Requests: (800) 852-5530
Technical Information: (832) 813-4862
Responsible Party: Product Safety Group
Email:sds@cpchem.com

Emergency telephone:

Health:
866.442.9628 (North America)
1.832.813.4984 (International)
Transport:

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Responsible Department : Product Safety and Toxicology Group
 E-mail address : SDS@CPChem.com
 Website : www.CPChem.com

SECTION 2: Hazards identification
Classification of the substance or mixture
REGULATION (EC) No 1272/2008

Skin corrosion, Category 1C	H314: Causes severe skin burns and eye damage.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Skin sensitization, Category 1	H317: May cause an allergic skin reaction.
Chronic aquatic toxicity, Category 2	H411: Toxic to aquatic life with long lasting effects.

Label elements**Labeling (REGULATION (EC) No 1272/2008)**

Hazard pictograms :



Signal Word : Danger

Hazard Statements	H314	Causes severe skin burns and eye damage.
	H317	May cause an allergic skin reaction.
	H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements	Prevention:	
	P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
	P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
	Response:	
	P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a

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POISON CENTER/doctor.

Hazardous ingredients which must be listed on the label:

- 68990-47-6 Modified Amidoamine

SECTION 3: Composition/information on ingredients

Molecular formula : Mixture

Mixtures**Hazardous ingredients**

Chemical name	CAS-No. EC-No. Index No.	Classification (REGULATION (EC) No 1272/2008)	Concentration [wt%]
Modified Amidoamine	68990-47-6 273-601-0	Skin Corr. 1C; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	30 - 60
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics		Asp. Tox. 1; H304	0 - 30
Dipropylene Glycol Methyl Ether	34590-94-8 252-104-2	Eye Irrit. 2; H319	1 - 2,5
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.	85536-14-7 287-494-3	Acute Tox. 4; H302 Skin Corr. 1C; H314 Eye Dam. 1; H318 Aquatic Chronic 3; H412	1 - 2,5

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

- General advice : Move out of dangerous area. Consult a physician. Show this material safety data sheet to the doctor in attendance.
- If inhaled : If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.
- In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. If on skin, rinse well with water. If on clothes, remove clothes.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital.

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- Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

SECTION 5: Firefighting measures

- Flash point : 75 °C (167 °F)
- Suitable extinguishing media : Carbon dioxide (CO2).
- Unsuitable extinguishing media : High volume water jet.
- Specific hazards during fire fighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.
- Fire and explosion protection : Do not spray on an open flame or any other incandescent material. Keep away from open flames, hot surfaces and sources of ignition.

SECTION 6: Accidental release measures

- Personal precautions : Use personal protective equipment.
- Environmental precautions : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage**Handling**

- Advice on safe handling : Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid

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contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Advice on protection against fire and explosion : Do not spray on an open flame or any other incandescent material. Keep away from open flames, hot surfaces and sources of ignition.

Storage

Requirements for storage areas and containers : No smoking. Keep in a well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

SECTION 8: Exposure controls/personal protection**Ingredients with workplace control parameters****SK**

Zložka	Podstata	Hodnota	Kontrolné parametre	Poznámka
Dipropylene Glycol Methyl Ether	SK OEL	NPEL priemerný	50 ppm, 308 mg/m3	K,
K Znamená, že faktor môže byť ľahko absorbovaný kožou. Niektoré faktory, ktoré ľahko prenikajú kožou, môžu spôsobovať až smrteľné otravy, často bez varovných príznakov (napr. anilín, nitrobenzén, nitroglykol, fenoly a pod.). Pri látkach s významným prienikom cez kožu, či už v podobe kvapalín alebo pár, je osobitne dôležité zabrániť kožnému kontaktu.				

SI

Sestavine	Osnova	Vrednost	Parametri nadzora	Pripomba
Dipropylene Glycol Methyl Ether	SI OEL	MV	50 ppm, 308 mg/m3	EU*, K,
EU* Mejna vrednost, določena z Direktivo Komisije 2000/39/ES z dne 8. junija 2000 o določitvi prvega seznama indikativnih mejnih vrednosti za poklicno izpostavljenost pri izvajanju Direktive Sveta 98/24/ES o varovanju zdravja in zagotavljanju varnosti delavcev pred tveganjem zaradi izpostavljenosti kemičnim dejavnikom pri delu (UL L, št. 142, z dne 16. junija 2000, str. 47).				
K Lastnost lažjega prehajanja snovi v organizem skozi kožo				

SE

Beständsdelar	Grundval	Värde	Kontrollparametrar	Anmärkning
Dipropylene Glycol Methyl Ether	SE AFS	NGV	50 ppm, 308 mg/m3	H,
	SE AFS	KTV	75 ppm, 450 mg/m3	H,

H Ämnet kan lätt upptas genom huden.

RS

Компоненты	Основа	Величина	Параметры контроля	Заметка
Dipropylene Glycol Methyl Ether	RS OEL	GVI	50 ppm, 308 mg/m3	K, EU*,
EU* Substance mentioned in indicative exposure limit values in Directive 2000/39 / EC (first list)				
K This chemical substance can adversely affect the skin.				

RO

Componente	Bază	Valoare	Parametri de control	Notă
Dipropylene Glycol Methyl Ether	RO OEL	TWA	50 ppm, 308 mg/m3	P,
P Substanțele cu indicativul P (piele) pot pătrunde în organism prin piele sau mucoasele intacte. Indicativul P nu se referă la substanțele care au numai o acțiune locală de tip iritativ.				

PT

Componentes	Bases	Valor	Parâmetros de controlo	Nota
Dipropylene Glycol Methyl Ether	PT OEL	VLE-MP	100 ppm,	(1), P, iritação do TRS, afecção do SNC,
	PT OEL	VLE_CD	150 ppm,	(1), P, iritação do TRS, afecção do SNC,
	PT DL 305/2007	oito horas	50 ppm, 308 mg/m3	Cutânea,

(1) Abrangido por legislação nacional específica ou por legislação comunitária não transposta

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afeção do SNC afeção do sistema nervoso central
 Cutânea Uma notação cutânea atribuída ao valor limite de exposição profissional assinala a possibilidade de absorção significativa através de pele.
 irritação do TRS irritação do trato respiratório superior
 P Perigo de absorção cutânea

PL

Składniki	Podstawa	Wartość	Parametry dotyczące kontroli	Uwaga
Dipropylene Glycol Methyl Ether	PL NDS	NDS	240 mg/m3	
	PL NDS	NDSch	480 mg/m3	
	PL NDS	NDS	240 mg/m3	
	PL NDS	NDSch	480 mg/m3	

NO

Komponenter	Grunnlag	Verdi	Kontrollparametere	Nota
Dipropylene Glycol Methyl Ether	FOR-2011-12-06-1358	TWA	50 ppm, 300 mg/m3	E, H,

E EU har en veiledende grenseverdi for stoffet

H En del av stoffene kan i stor grad trenge gjennom huden selv om denne er uskadet, og således tas opp i kroppen.

NL

Bestanddelen	Basis	Waarde	Controleparameters	Opmerking
Dipropylene Glycol Methyl Ether	NL WG	TGG-8 uur	300 mg/m3	

MT

Ingredients	Basis	Value	Control parameters	Note
Dipropylene Glycol Methyl Ether	MT OEL	TWA	50 ppm, 308 mg/m3	Skin,

Skin A skin notation assigned to the OEL identifies the possibility of significant uptake through the skin.

MK

Съставки	Основа	Стойност	Параметри на контрол	Бележка
Dipropylene Glycol Methyl Ether	MK OEL	MV	50 ppm, 308 mg/m3	EU, K,

EU European Union - limit (threshold) value set at the level of European Union

K The properties of easier transport of substances into organism through (via) the skin

LV

Sastāvdaļas	Bāze	Vērtība	Pārvaldības parametri	Piezīme
Dipropylene Glycol Methyl Ether	LV OEL	AER 8 st	50 ppm, 308 mg/m3	Āda,

Āda Āda

LT

Komponentai	Pagrindas, bazė	Vertė	Kontrolės parametrai	Pastaba
Dipropylene Glycol Methyl Ether	LT OEL	IPRD	50 ppm, 300 mg/m3	O,
	LT OEL	TPRD	75 ppm, 450 mg/m3	O,

O Oksiduojanti

IT

Componenti	Base	Valore	Parametri di controllo	Nota
Dipropylene Glycol Methyl Ether	IT OEL	TWA	50 ppm, 308 mg/m3	Pelle,

Pelle La notazione 'Pelle' attribuita ai valori limite di esposizione indica possibilità di assorbimento significativo attraverso la pelle.

IS

Komponenter	Grunnlag	Verdi	Kontrollparametere	Nota
Dipropylene Glycol Methyl Ether	IS OEL	TWA	50 ppm, 300 mg/m3	H,

H Skin notation

IE

Ingredients	Basis	Value	Control parameters	Note
Dipropylene Glycol Methyl Ether	IE OEL	OELV - 8 hrs (TWA)	50 ppm, 308 mg/m3	Sk, IOELV,

IOELV Indicative Occupational Exposure Limit Value

Sk Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body

HU

Komponensek	Bázis	Érték	Ellenőrzési paraméterek	Megjegyzés
Dipropylene Glycol Methyl Ether	HU OEL	AK-érték	308 mg/m3	*, EU1,
	HU OEL	CK-érték	308 mg/m3	*, EU1,

* Európai 'indikatív' határértékek (96/94/EK, 2000/39/EK, 2006/15/EK, 2009/161/EU), amelyeknél nincs csúcskoncentráció megadva. Ezekben az esetekben jelen melléklet 1.3. pontja szerint kell eljárni

EU1 91/322/EGK irányelvben közölt érték

HR

Sastojci	Temelj	Vrijednost	Nadzorni parametri	Bilješka
Dipropylene Glycol Methyl Ether	HR OEL	GVI	50 ppm, 308 mg/m3	K, EU*,
	HR OEL		150 ppm, 900 mg/m3	IR-D, K,

SDS Number:100000100101

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EU* Naznaka da se radi o tvarima za koje su utvrđene indikativne granične vrijednosti izloženosti prema Direktivi 2000/39/ EC (prva lista)
 IR-D iritacija dišnih organa
 K naznaka da tvar može štetno djelovati kroz kožu

GR

Συστατικά	Βάση	Τιμή	Παράμετροι ελέγχου	Σημείωση
Dipropylene Glycol Methyl Ether	GR OEL	TWA	100 ppm, 600 mg/m3	Δ,
	GR OEL	STEL	150 ppm, 900 mg/m3	Δ,

Δ Η ένδειξη 'δέρμα' (Δ), η οποία επισημαίνει ορισμένους χημικούς παράγοντες του πίνακα της παρ. 1 του άρθρου 3, υπονοεί την πιθανή συμβολή στην συνολική έκθεση του εργαζόμενου και της ποσότητας αυτών των χημικών παραγόντων που απορροφάται διαμέσου του δέρματος κατά την άμεση επαφή μαζί τους.

GB

Ingredients	Basis	Value	Control parameters	Note
Dipropylene Glycol Methyl Ether	GB EH40	TWA	50 ppm, 308 mg/m3	Sk, 2,

2 Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used
 Sk Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.

FR

Composants	Base	Valeur	Paramètres de contrôle	Note
Dipropylene Glycol Methyl Ether	FR VLE	VME	50 ppm, 308 mg/m3	*, noir,

* Risque de pénétration percutanée
 noir Valeurs limites réglementaires contraignantes

FI

Aineosat	Peruste	Arvo	Valvontaa koskevat muuttujat	Huomautus
Dipropylene Glycol Methyl Ether	FI OEL	HTP-arvot 8h	50 ppm, 310 mg/m3	iho,

iho Ihon läpi imeytyvien aineiden elimistöön joutuvia määriä ja elimistöön joutuneesta aineesta aiheutuvaa vaaraa ei voida näin ollen arvioida pelkästään ilmapitoisuuksien avulla. Tämän vuoksi näiden aineiden HTP-arvojen yhteyteen on huomautussarakkeeseen otettu ihon läpi imeytymisen osoittamiseksi merkintä 'iho'. Monet aineet, varsinkin voimakkaat hapot tai emäkset, voivat aiheuttaa iholle jouduttuaan ihon ärsyyntymistä tai syöpymistä.

ES

Componentes	Base	Valor	Parámetros de control	Nota
Dipropylene Glycol Methyl Ether	ES VLA	VLA-ED	50 ppm, 308 mg/m3	vía dérmica, VLI,

via dérmica Via dérmica

VLI Agente químico para el que la U.E. estableció en su día un valor límite indicativo. Todos estos agentes químicos figuran al menos en una de las directivas de valores límite indicativos publicadas hasta ahora (ver Anexo C. Bibliografía). Los estados miembros disponen de un tiempo fijado en dichas directivas para su transposición a los valores límites de cada país miembro. Una vez adoptados, estos valores tienen la misma validez que el resto de los valores adoptados por el país.

EE

Komponendid, osad	Alused	Väärtus	Kontrolliparameetrid	Märkused
Dipropylene Glycol Methyl Ether	EE OEL	Piimorm	50 ppm, 308 mg/m3	A,

A Naha kaudu kergesti absorbeeruvad ained

DK

Komponenter	Basis	Værdi	Kontrolparametre	Note
Dipropylene Glycol Methyl Ether	DK OEL	GV	50 ppm, 309 mg/m3	H, E,

E At stoffet har en EF-grænseværdi
 H Betyder, at stoffet kan optages gennem huden.

DE

Inhaltsstoffe	Grundlage	Wert	Zu überwachende Parameter	Bemerkung
Dipropylene Glycol Methyl Ether	DE TRGS 900	AGW	50 ppm, 310 mg/m3	DFG, EU, 11, Dampf und Aerosole

11 Summe aus Dampf und Aerosolen.
 DFG Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission)
 EU Europäische Union (Von der EU wurde ein Luftgrenzwert festgelegt: Abweichungen bei Wert und Spitzenbegrenzung sind möglich.)

CZ

Složky	Základ	Hodnota	Kontrolní parametry	Poznámka
Dipropylene Glycol Methyl Ether	CZ OEL	PEL	270 mg/m3	D,
	CZ OEL	NPK-P	550 mg/m3	D,

D Při expozici se významně uplatňuje pronikání látky kůží

CY

Συστατικά	Βάση	Τιμή	Παράμετροι ελέγχου	Σημείωση
Dipropylene Glycol Methyl Ether	CY OEL	TWA	50 ppm, 308 mg/m3	

CH

Inhaltsstoffe	Grundlage	Wert	Zu überwachende Parameter	Bemerkung

SDS Number:100000100101

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Dipropylene Glycol Methyl Ether	CH SUVA	MAK-Wert	50 ppm, 300 mg/m3	NIOSH,
	CH SUVA	KZGW	50 ppm, 300 mg/m3	NIOSH,

NIOSH National Institute for Occupational Safety and Health

BG

Съставки	Основа	Стойност	Параметри на контрол	Бележка
Dipropylene Glycol Methyl Ether	BG OEL	TWA	50 ppm, 308 mg/m3	-

- Химични агенти, за които са определени гранични стойности във въздуха на работната среда за Европейската общност. Граничните стойности на тези химични агенти във въздуха на работната среда, определени с наредбата, са съобразени със съответните стойности, приети за Европейската общност, като могат да бъдат равни или по-ниски от тях.

BE

Bestanddelen	Basis	Waarde	Controleparameters	Opmerking
Dipropylene Glycol Methyl Ether	BE OEL	TGG 8 hr	50 ppm, 308 mg/m3	D,

D Opname van het agens via de huid, de slijmvliezen of de ogen vormt een belangrijk deel van de totale blootstelling. Deze opname kan het gevolg zijn van zowel direct contact als zijn aanwezigheid in de lucht.

AT

Inhaltsstoffe	Grundlage	Wert	Zu überwachende Parameter	Bemerkung
Dipropylene Glycol Methyl Ether	AT OEL	TMW	50 ppm, 307 mg/m3	H,
	AT OEL	KZW	100 ppm, 614 mg/m3	H,

H Besondere Gefahr der Hautresorption

Engineering measures

Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Personal protective equipment

Respiratory protection : Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as: Full-Face Air-Purifying Respirator for Organic Vapors, Dusts and Mists. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.

Hand protection : The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection : Eye wash bottle with pure water. Tightly fitting safety goggles.

Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate: Complete head face and neck protection. Rubber apron. Footwear protecting

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against chemicals.

Hygiene measures : When using do not eat or drink. When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9: Physical and chemical properties**Information on basic physical and chemical properties****Appearance**

Physical state : Liquid
Color : dark

Safety data

Flash point : 75 °C (167 °F)
Lower explosion limit : No data available
Upper explosion limit : No data available
Molecular formula : Mixture
Molecular weight : Not applicable
Boiling point/boiling range : > 200 °C (> 392 °F)

Density : 1 g/cm³
Water solubility : Insoluble in water, soluble in oil.
Viscosity, kinematic : > 200 cSt
at 40 °C (104 °F)

SECTION 10: Stability and reactivity

Chemical stability : This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Possibility of hazardous reactions

Conditions to avoid : Heat, flames and sparks.
Other data : No decomposition if stored and applied as directed.

SECTION 11: Toxicological information**Pipe Free™ Spotting Fluid**

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg
Method: Calculation method

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Acute inhalation toxicity

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics : LC50: > 5 mg/l
 Exposure time: 8 h
 Species: Rat
 Test atmosphere: vapor
 Method: OECD Test Guideline 403

Acute dermal toxicity

Modified Amidoamine :
 No data available

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics LD50: > 5.000 mg/kg
 Species: Rabbit
 Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. LD50: > 5.000 mg/kg
 Species: Rat

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Skin irritation : Extremely corrosive and destructive to tissue.

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Eye irritation : May cause irreversible eye damage.

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Sensitization : Causes sensitization.

Repeated dose toxicity

Modified Amidoamine : Species: Rat, male and female
 Sex: male and female
 Application Route: oral gavage
 Dose: 0, 10, 30, 100 mg/kg bw
 Exposure time: 13 wk
 Number of exposures: daily
 NOEL: 10 mg/kg
 Method: OECD Test Guideline 408
 Target Organs: Immune system
 No significant adverse effects were reported
 Information given is based on data obtained from similar substances.

Reproductive toxicity

Modified Amidoamine : Species: Rat
 Sex: male
 Application Route: oral gavage
 Dose: 10, 20, 100 mg/kg/d
 Exposure time: 28 d
 Number of exposures: daily
 Method: OECD Guideline 422
 NOAEL Parent: 30 mg/kg
 NOAEL F1: >= 100 mg/kg
 Information given is based on data obtained from similar substances.

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Species: Rat
 Sex: female
 Application Route: oral gavage
 Dose: 10, 20, 100 mg/kg/d
 Exposure time: 42 d
 Number of exposures: daily
 Method: OECD Guideline 422
 NOAEL Parent: 30 mg/kg
 NOAEL F1: ≥ 100 mg/kg
 Information given is based on data obtained from similar substances.

Developmental Toxicity

Modified Amidoamine : Species: Rat
 Application Route: oral gavage
 Dose: 0, 15, 50, 150 mg/kg bw/day
 Number of exposures: Daily
 Test period: GD6-19
 Method: OECD Guideline 414
 NOAEL Teratogenicity: 150 mg/kg
 NOAEL Maternal: 50 mg/kg
 No adverse effects expected
 Information given is based on data obtained from similar substances.

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Aspiration toxicity**

: No aspiration toxicity classification.

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Further information**

: No data available.

SECTION 12: Ecological information**Toxicity to fish**

Modified Amidoamine : LC50: 0,19 mg/l
 Exposure time: 96 h
 Species: Danio rerio (Zebra Fish)
 semi-static test Method: OECD Test Guideline 203
 Information given is based on data obtained from similar substances.

Hydrocarbons, C11-C14, n-
 alkanes, isoalkanes, cyclic,
 <2% aromatics

LL0: 1.000 mg/l
 Exposure time: 96 h
 Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates

Modified Amidoamine : EC50: 0,18 mg/l
 Exposure time: 48 h
 Species: Daphnia magna (Water flea)
 static test Method: OECD Test Guideline 202
 Information given is based on data obtained from similar substances.

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Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics

EL0: 1.000 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)

Toxicity to algae

Modified Amidoamine

: EC50: 0,505 mg/l
Exposure time: 72 h
Species: Pseudokirchneriella subcapitata (green algae)
Growth inhibition Method: OECD Test Guideline 201
Information given is based on data obtained from similar substances.

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics

EL50: 1.000 mg/l
Exposure time: 72 h
Species: Pseudokirchneriella subcapitata (green algae)

Toxicity to bacteria

Modified Amidoamine

: EC50: 175 mg/l
Exposure time: 3 h
Species: Bacteria
Respiration inhibition
Method: OECD Test Guideline 209

Biodegradability

Modified Amidoamine

: aerobic
24 %
Testing period: 28 d
Method: OECD Test Guideline 301D
This material is not expected to be readily biodegradable.
Expected to be inherently biodegradable.
Information given is based on data obtained from similar substances.

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics

: 69 %
This material is expected to be readily biodegradable.

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

: aerobic
Result: Readily biodegradable.
94 %
Testing period: 28 d
Method: OECD Test Guideline 301A

Ecotoxicology Assessment

Acute aquatic toxicity

Modified Amidoamine

: Very toxic to aquatic life.

Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

: This product has no known ecotoxicological effects.

Chronic aquatic toxicity

Modified Amidoamine

: Very toxic to aquatic life with long lasting effects.

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- Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. : Harmful to aquatic life with long lasting effects.
- Results of PBT assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
- Additional ecological information : Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

The information in this SDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

- Product : The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.
- Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)

UN1760, CORROSIVE LIQUIDS, N.O.S., (MODIFIED AMIDOAMINE), 8, III

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

UN1760, CORROSIVE LIQUID, N.O.S., (MODIFIED AMIDOAMINE), 8, III, (75 °C), MARINE POLLUTANT, (MODIFIED AMIDOAMINE)

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

UN1760, CORROSIVE LIQUID, N.O.S., (MODIFIED AMIDOAMINE), 8, III

ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))

UN1760, CORROSIVE LIQUID, N.O.S., (MODIFIED AMIDOAMINE), 8, III, (E), ENVIRONMENTALLY HAZARDOUS, (MODIFIED AMIDOAMINE)

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RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))

UN1760, CORROSIVE LIQUID, N.O.S., (MODIFIED AMIDOAMINE), 8, III, ENVIRONMENTALLY HAZARDOUS, (MODIFIED AMIDOAMINE)

ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)

UN1760, CORROSIVE LIQUID, N.O.S., (MODIFIED AMIDOAMINE), 8, III, ENVIRONMENTALLY HAZARDOUS, (MODIFIED AMIDOAMINE)

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

SECTION 15: Regulatory information**National legislation**

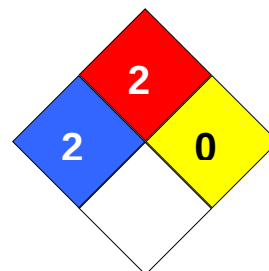
Major Accident Hazard Legislation : 96/82/EC Update:
Not applicable

Notification status

Europe REACH	:	Not in compliance with the inventory
United States of America TSCA	:	Not in compliance with the inventory
Canada DSL	:	Not in compliance with the inventory
Australia AICS	:	Not in compliance with the inventory
New Zealand NZIoC	:	Not in compliance with the inventory
Japan ENCS	:	Not in compliance with the inventory
Korea KECI	:	Not in compliance with the inventory
Philippines PICCS	:	Not in compliance with the inventory
China IECSC	:	Not in compliance with the inventory

SECTION 16: Other information

NFPA Classification : Health Hazard: 2
Fire Hazard: 2
Reactivity Hazard: 0

**Further information**

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Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		

Full text of H-Statements referred to under sections 2 and 3.

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H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.