Fiche de Données de Sécurité
PETRONAS Durance Chain Lubricant SPRAY ML 200

Fiche signalétique du 30/10/2020, révision 3

RUBRIQUE 1: Identification de la substance/du mélange et de la société/l'entreprise

1.1. Identificateur de produit

Identification du mélange:

Dénomination commerciale: PETRONAS Durance Chain Lubricant SPRAY ML 200

Code commercial: 8577

1.2. Utilisations identifiées pertinentes de la substance ou du mélange et utilisations déconseillées

Usage recommandé :

Lubrifiant pour chaînes

1.3. Renseignements concernant le fournisseur de la fiche de données de sécurité

Fournisseur:

Arexons S.p.A.

via Antica di Cassano, 23, 20063

Cernusco sul Naviglio (MI), Italy

Arexons S.p.A.

Tel. +39 (0)2/924361 - Fax +39 (0)2/92436306

Personne chargée de la fiche de données de sécurité:

arexons@arexons.it

1.4. Numéro d'appel d'urgence

Arexons S.p.A.

Tel. +39 (0)2/924361 - Fax +39 (0)2/92436306

Centro Antiveleni di Pavia IRCCS- Fondazione Maugeri tel. +39 (0)382 24444 (h24; it, en)

Centre Antipoisons Belge 070 245 245 (7 jours sur 7, 24 heures sur 24)

centres Anti-poison Français: numéro ORFILA (INRS) : + 33 (0)1 45 42 59 59

Antigifcentrum Brussel: 80025500 (7 jours sur 7, 24 heures sur 24)

RUBRIQUE 2: Identification des dangers

2.1. Classification de la substance ou du mélange

Critères Règlement CE 1272/2008 (CLP) :

- Danger, Aerosols 1, Aérosol extrêmement inflammable. Récipient sous pression: peut éclater sous l'effet de la chaleur.
- Attention, Skin Irrit. 2, Provoque une irritation cutanée.
- Attention, Eye Irrit. 2, Provoque une sévère irritation des yeux.
- Attention, STOT SE 3, Peut provoquer somnolence ou vertiges.
- Aquatic Chronic 2, Toxique pour les organismes aquatiques, entraîne des effets néfastes à long terme.

Effets physico-chimiques nocifs sur la santé humaine et l'environnement :

Aucun autre danger

2.2. Éléments d'étiquetage

Pictogrammes de danger:

Danger

Mentions de danger:

H222, H229 Aérosol extrêmement inflammable. Récipient sous pression: peut éclater sous l'effet de la chaleur.

H315 Provoque une irritation cutanée.

H319 Provoque une sévère irritation des yeux.

H336 Peut provoquer somnolence ou vertiges.
H411 Toxique pour les organismes aquatiques, entraîne des effets néfastes à long terme.

Conseils de prudence:

P101 En cas de consultation d'un médecin, garder à disposition le récipient ou l'étiquette.
P102 Tenir hors de portée des enfants.
P103 Lire attentivement et bien respecter toutes les instructions.
P210 Tenir à l'écart de la chaleur, des surfaces chaudes, des étincelles, des flammes nues et de toute autre source d'inflammation. Ne pas fumer.
P211 Ne pas vaporiser sur une flamme nue ou sur toute autre source d'ignition.
P251 Ne pas perforer, ni brûler, même après usage.
P271 Utiliser seulement en plein air ou dans un endroit bien ventilé.
P273 Éviter le rejet dans l'environnement.
P280 Porter des gants de protection/des vêtements de protection/un équipement de protection des yeux/du visage.
P312 Appeler un CENTRE ANTIPOISON en cas de malaise.
P405 Garder sous clef.
P410+P412 Protéger du rayonnement solaire. Ne pas exposer à une température supérieure à 50 °C/122 °F.
P501 Éliminer le contenu/récipient conformément à la réglementation.

Dispositions spéciales:

Aucune

Contient

C6 hydrocarbons isoalcane < 5% n- Hexane
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Dispositions particulières conformément à l'Annexe XVII de REACH et ses amendements successifs:

Aucune

2.3. Autres dangers

Substances vPvB: Aucune - Substances PBT: Aucune

Autres dangers:

Aucun autre danger

RUBRIQUE 3: Composition/informations sur les composants

3.1 Substances

N.A.

3.2. Mélanges

Composants dangereux aux termes du Règlement CLP et classification relative :

>= 50% - < 60% Hydrocarbures en C3-4; gaz de pétrole

REACH No.: 01-2119486557-22, Numéro Index: 649-199-00-1, CAS: 68476-40-4, EC: 270-681-9
2.2/1A Flam. Gas 1A H220
2.5/L Press Gas (Liq.) H280
DECLK (CLP)*

>= 15% - < 20% C6 hydrocarbons isoalcane < 5% n- Hexane

REACH No.: 01-2119484651-34, CAS: 64742-49-0, EC: 931-254-9
2.6/2 Flam. Liq. 2 H225
3.10/1 Asp. Tox. 1 H304
3.2/2 Skin Irrit. 2 H315
3.8/3 STOT SE 3 H336
4.1/C2 Aquatic Chronic 2 H411

>= 7% - < 10% Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics

REACH No.: 01-2119463258-33, CAS: 64742-48-9, EC: 919-857-5
2.6/3 Flam. Liq. 3 H226
3.10/1 Asp. Tox. 1 H304
3.8/3 STOT SE 3 H336
EUH066
DECLP (CLP)*

>= 0.25% - < 0.5% Phenol, isopropylated, phosphate (3:1)
REACH No.: 01-2119535109-41, CAS: 68937-41-7, EC: 273-066-3
3.7/2 Repr. 2 H361fd
3.9/2 STOT RE 2 H373
4.1/C1 Aquatic Chronic 1 H410 M=10.

*DECLK (CLP): Substance classée conformément à la note K de l'annexe VI du Règlement (CE) 1272/2008. La classification comme cancérogène ou mutagène peut ne pas s'appliquer s'il peut être établi que la substance contient moins de 0,1 % poids/poids de 1,3-butadiène (no Einecs 203-450-8). Si la substance n'est pas classée comme cancérogène ou mutagène, il convient d'appliquer pour le moins les conseils de prudence (P102-)P210-P403. La présente note ne s'applique qu'à certaines substances complexes dérivées du pétrole, visées dans la partie 3.
*DECLP (CLP): Substance classée conformément à la note P de l'annexe VI du Règlement (CE) 1272/2008. La classification comme cancérogène ou mutagène peut ne pas s'appliquer s'il peut être établi que la substance contient moins de 0,1 % poids/poids de benzène (no Einecs 200-753-7). Si la substance n'est pas classée comme cancérogène ou mutagène, il convient d'appliquer pour le moins les conseils de prudence (P102-)P260-P262-P301 + P310-P331. La présente note ne s'applique qu'à certaines substances complexes dérivées du pétrole, visées dans la partie 3.

RUBRIQUE 4: Premiers secours

4.1. Description des premiers secours
En cas de contact avec la peau :
Enlever immédiatement les vêtements contaminés.
Laver immédiatement avec beaucoup d'eau et éventuellement du savon les parties du corps ayant été en contact avec le produit, même en cas de doute.
Laver entièrement le corps (douche ou bain).
Enlever immédiatement les vêtements contaminés et les éliminer de manière sûre.
En cas de contact avec la peau, laver immédiatement à l'eau abondante et au savon.
En cas de contact avec les yeux :
En cas de contact avec les yeux, les rincer à l'eau pendant un intervalle de temps adéquat et en tenant les paupières ouvertes, puis consulter immédiatement un ophtalmologue.
Protéger l'œil indemne.
En cas d'ingestion :
Ne faire vomir en aucun cas. CONSULTER IMMEDIATEMENT UN MEDECIN.
En cas d'inhalation :
Transporter la victime à l'extérieur et la maintenir au chaud et au repos.
4.2. Principaux symptômes et effets, aigus et différés
Aucun
4.3. Indication des éventuels soins médicaux immédiats et traitements particuliers nécessaires
En cas d'incident ou de malaise, consulter immédiatement un médecin (lui montrer, si possible, les instructions pour l'utilisation ou la fiche de sécurité).
Traitement :
Aucun

RUBRIQUE 5: Mesures de lutte contre l'incendie

5.1. Moyens d'extinction

Moyen d'extinction approprié:
Moyen d'extinction non recommandé:

5.2. Dangers particuliers résultant de la substance ou du mélange
Ne pas inhaler les gaz produits par l'explosion et la combustion.
La combustion produit de la fumée lourde.

5.3. Conseils aux pompiers
Utiliser des appareils respiratoires adaptés.
Recueillir séparément l'eau contaminée utilisée pour éteindre l'incendie. Ne pas la déverser dans le réseau des eaux usées.
Si cela est faisable d'un point de vue de la sécurité, déplacer de la zone de danger immédiat les conteneurs non endommagés.

RUBRIQUE 6: Mesures à prendre en cas de dispersion accidentelle

6.1. Précautions individuelles, équipement de protection et procédures d'urgence
Porter les dispositifs de protection individuelle.
Éliminer toute source d'allumage.
Emmener les personnes en lieu sûr.
Consulter les mesures de protection exposées aux points 7 et 8.

6.2. Précautions pour la protection de l'environnement
Empêcher la pénétration dans le sol/sous-sol. Empêcher l'écoulement dans les eaux superficielles ou dans le réseau des eaux usées.
Retenir l'eau de lavage contaminée et l'éliminer.
En cas de fuite de gaz ou de pénétration dans les cours d'eau, le sol ou le système d'évacuation d'eau, informer les autorités responsables.
Matériel adapté à la collecte : matériel absorbant, organique, sable.

6.3. Méthodes et matériel de confinement et de nettoyage
Laver à l'eau abondante.

6.4. Référence à d'autres rubriques
Voir également les paragraphes 8 et 13.

RUBRIQUE 7: Manipulation et stockage

7.1. Précautions à prendre pour une manipulation sans danger
Éviter le contact avec la peau et les yeux, l'inhalation de vapeurs et brouillards.
Ne pas utiliser de conteneurs vides avant qu'ils n'aient été nettoyés.
Avant les opérations de transfert, s'assurer que les conteneurs ne contiennent pas de matériaux incompatibles résiduels.
Voir également le paragraphe 8 pour les dispositifs de protection recommandés.

Les vêtements contaminés doivent être remplacés avant d'accéder aux zones de repas.
Ne pas manger et ne pas boire pendant le travail.

7.2. Conditions d'un stockage sûr, y compris d'éventuelles incompatibilités
Stocker à des températures inférieures à 50°C. Conserver à une distance éloignée de flammes libres et de sources de chaleur. Eviter l'exposition directe au soleil.
Conserver à une distance éloignée de flammes libres, d'étincelles et de sources de chaleur.
Eviter l'exposition directe au soleil.
Tenir loin de la nourriture, des boissons et aliments pour animaux.
Aucune en particulier.
Indication pour les locaux:
Frais et bien aérés.

7.3. Utilisation(s) finale(s) particulière(s)
Aucune utilisation particulière

RUBRIQUE 8: Contrôles de l'exposition/protection individuelle

8.1. Paramètres de contrôle

Hydrocarbures en C3-4; gaz de pétrole - CAS: 68476-40-4
MAK - TWA: 2400 mg/m3, 1000 ppm
TLV TWA - 1900 mg/m3, 800 ppm
C6 hydrocarbons isoalcane < 5% n- Hexane - CAS: 64742-49-0
ACGIH - TWA: 1200 mg/m3, 353 ppm
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics - CAS: 64742-48-9
ACGIH - TWA: 1200 mg/m3, 197 ppm

Valeurs limites d'exposition DNEL
C6 hydrocarbons isoalcane < 5% n- Hexane - CAS: 64742-49-0
Travailleur professionnel: 1508 ppm - Exposition: Inhalation humaine - Fréquence: Long terme, effets systémiques - Remarques: (idrocarburi C6 isoalcani < 5% n-Esano)
Travailleur professionnel: 13964 mg/kg - Exposition: Cutanée humaine - Fréquence: Long terme, effets systémiques
Travailleur professionnel: 323 ppm - Exposition: Inhalation humaine - Fréquence: Long terme, effets systémiques
Travailleur professionnel: 1377 mg/kg - Exposition: Cutanée humaine - Fréquence: Long terme, effets systémiques
Travailleur professionnel: 1301 mg/kg - Exposition: Orale humaine - Fréquence: Long terme, effets systémiques
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics - CAS: 64742-48-9
Travailleur professionnel: 208 mg/kg - Exposition: Cutanée humaine - Fréquence: Long terme, effets systémiques
Travailleur professionnel: 871 mg/m3 - Exposition: Inhalation humaine - Fréquence: Long terme, effets systémiques
Consommateur: 125 mg/kg - Exposition: Cutanée humaine - Fréquence: Long terme, effets systémiques
Consommateur: 185 mg/m3 - Exposition: Inhalation humaine - Fréquence: Long terme, effets systémiques
Consommateur: 125 mg/kg - Exposition: Orale humaine - Fréquence: Long terme, effets systémiques
Phenol, isopropylated, phosphate (3:1) - CAS: 68937-41-7
Consommateur: 0.04 mg/kg - Exposition: Orale humaine - Fréquence: Long terme, effets locaux
Travailleur professionnel: 0.145 mg/m3 - Exposition: Inhalation humaine - Fréquence: Long terme, effets locaux
Travailleur professionnel: 0.417 mg/kg - Consommateur: 0.208 mg/kg - Exposition: Cutanée humaine - Fréquence: Long terme, effets locaux

Valeurs limites d'exposition PNEC
Phenol, isopropylated, phosphate (3:1) - CAS: 68937-41-7
Cible: Eau douce - valeur: 0.00031 mg/l
Cible: Eau marine - valeur: 0.000031 mg/l
Cible: Sédiments d'eau douce - valeur: 0.185 mg/kg
Cible: 09 - valeur: 100 mg/l

8.2. Contrôles de l'exposition

Protection des yeux:
Utiliser des visières de sécurité fermées, ne pas utiliser de lentilles oculaires.

Protection de la peau:
Porter des vêtements qui garantissent une protection totale pour la peau, par ex. en coton, caoutchouc, PVC ou viton.

Protection des mains:
Utiliser des gants de protection qui garantissent une protection totale, par ex. en PVC, néoprène ou caoutchouc.

Protection respiratoire:
Utiliser un dispositif de protection des voies respiratoires adéquat.

Risques thermiques :
Aucun

Contrôles de l'exposition environnementale :
Aucun
Contrôles techniques appropriés
Aucun

RUBRIQUE 9: Propriétés physiques et chimiques

9.1. Informations sur les propriétés physiques et chimiques essentielles

Propriétés	valeur	Méthode :	Remarques
Aspect et couleur:	Aerosol	--	--
Odeur:	caractéristique	--	--
Seuil d'odeur :	N.A.	--	--
pH :	N.A.	--	--
Point de fusion/ congélation:	N.A.	--	--
Point d'ébullition initial et intervalle d'ébullition:	N.A.	--	--
Point éclair:	N.A.	--	--
Vitesse d'évaporation :	N.A.	--	--
Inflammabilité (solide, gaz):	N.A.	--	--
Limite supérieure/ inférieure d'inflammabilité ou d'explosion :	N.A.	--	--
Pression de vapeur:	N.A.	--	--
Densité des vapeurs:	N.A.	--	--
Densité relative:	N.A.	--	--
Hydrosolubilité:	N.A.	--	--
Solubilité dans l'huile :	N.A.	--	--
Coefficient de partage (n-octanol/eau):	N.A.	--	--
Température d'auto-inflammabilité :	N.A.	--	--
Température de décomposition:	N.A.	--	--
Viscosité:	N.A.	--	--
Propriétés explosives:	N.A.	--	--

Propriétés comburantes:	N.A.	--	--

9.2. Autres informations

Propriétés	valeur	Méthode :	Remarques
Miscibilité:	N.A.	--	--
Liposolubilité:	N.A.	--	--
Conductibilité:	N.A.	--	--
Propriétés caractéristiques des groupes de substances	N.A.	--	--

NA=non applicable

RUBRIQUE 10: Stabilité et réactivité

10.1. Réactivité
Stable en conditions normales
10.2. Stabilité chimique
Stable en conditions normales
10.3. Possibilité de réactions dangereuses
Aucun
10.4. Conditions à éviter
Stable dans des conditions normales.
10.5. Matières incompatibles
Éviter tout contact avec des matières comburantes. Le produit peut prendre feu.
10.6. Produits de décomposition dangereux
Aucun.

RUBRIQUE 11: Informations toxicologiques

11.1. Informations sur les effets toxicologiques
Informations toxicologiques sur le produit :
PETRONAS Durance Chain Lubricant SPRAY ML 200
a) toxicité aiguë
Non classé
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
b) corrosion cutanée/irritation cutanée
Le produit est classé: Skin Irrit. 2 H315
c) lésions oculaires graves/irritation oculaire
Le produit est classé: Eye Irrit. 2 H319
d) sensibilisation respiratoire ou cutanée
Non classé
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
e) mutagénicité sur les cellules germinales
Non classé
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
f) cancérogénicité
Non classé
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
g) toxicité pour la reproduction
Non classé
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.

h) toxicité spécifique pour certains organes cibles — exposition unique
Le produit est classé: STOT SE 3 H336
i) toxicité spécifique pour certains organes cibles – exposition répétée
Non classé
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
j) danger par aspiration
Non classé
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.

Informations toxicologiques sur les substances principales se trouvant dans le produit :

C6 hydrocarbons isoalcane < 5% n- Hexane - CAS: 64742-49-0
a) toxicité aiguë:
Test: LC50 - Voie: Inhalation - Espèces: Rat > 20 mg/l - Durée: 4h
Test: LD50 - Voie: Orale - Espèces: Rat > 5000 mg/kg
Test: LC50 - Voie: Peau - Espèces: Lapin > 3000 mg/kg
Test: LC50 - Voie: Inhalation - Espèces: Rat > 20 mg/l - Durée: 4h - Source: OECD 403 - Remarques: (idrocarburi C6 isoalcani < 5% n-Esano)
Test: LD50 - Voie: Orale - Espèces: Rat > 5000 ml/kg - Source: OCSE 401 - Remarques: (idrocarburi C6 isoalcani < 5% n-Esano)
Test: LD50 - Voie: Peau - Espèces: Lapin > 5 ml/kg - Source: Read across - Remarques: (idrocarburi C6 isoalcani < 5% n-Esano)

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics - CAS: 64742-48-9
a) toxicité aiguë:
Test: LC50 - Voie: Inhalation - Espèces: Rat > 5000 mg/m3 - Durée: 4h - Source: ECHA BP - SUPPLIER SDS
Test: LD50 - Voie: Orale - Espèces: Rat > 5000 mg/kg - Source: ECHA BP - SUPPLIER SDS
Test: LD50 - Voie: Peau - Espèces: Lapin > 5000 mg/kg - Source: ECHA BP - SUPPLIER SDS
h) toxicité spécifique pour certains organes cibles — exposition unique:
Test: oecd 12 Positif - Source: SUPPLIER SDS - Pas de donnée disponible pour le produit
i) toxicité spécifique pour certains organes cibles – exposition répétée:
Test: oecd 7 Négatif - Source: SUPPLIER SDS
Test: NOAEL - Voie: Orale - Espèces: Rat > 1000 mg/kg - Source: ECHA BP
Test: NOAEL - Voie: Inhalation - Espèces: Rat 200 ppm - Source: ECHA BP
Test: NOAEC - Voie: Inhalation - Espèces: Rat > 275 mg/m3 - Source: ECHA BP
j) danger par aspiration:
Test: oecd 14 - Voie: Orale - Source: SUPPLIER SDS

Phenol, isopropylated, phosphate (3:1) - CAS: 68937-41-7
a) toxicité aiguë:
Test: LD50 - Voie: Orale - Espèces: Rat > 5000 mg/kg
Test: LD50 - Voie: Peau - Espèces: Lapin > 10000 mg/kg
Test: LD50 - Voie: Inhalation - Espèces: Rat > 200 mg/l

RUBRIQUE 12: Informations écologiques

12.1. Toxicité

Utiliser le produit rationnellement en évitant de le disperser dans la nature.
Hydrocarbures en C3-4; gaz de pétrole - CAS: 68476-40-4
a) Toxicité aquatique aiguë:
Point final: LC50 - Espèces: Daphnie = 14.22 mg/l - Durée h: 48

C6 hydrocarbons isoalcane < 5% n- Hexane - CAS: 64742-49-0
a) Toxicité aquatique aiguë:
Point final: EC50 - Espèces: Algues = 13.56 mg/l - Durée h: 72 - Remarques: (QSAR)
Point final: LC50 - Espèces: Poissons > 1 mg/l - Remarques: (idrocarburi C6 isoalcani < 5% n-Esano) Read across

Point final: EC50 - Espèces: Daphnie = 37.9 mg/l - Durée h: 48 - Remarques: (Hydrocarbures, C6 isoalcani < 5% n-Esano) QSAR

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics - CAS: 64742-48-9

a) Toxicité aquatique aiguë:

Point final: EL0 - Espèces: Daphnie 1000 mg/l - Durée h: 48

Point final: EL50 - Espèces: Algues > 1000 mg/l - Durée h: 72

Point final: LL50 - Espèces: Poissons > 1000 mg/l - Durée h: 96

Point final: NOELR - Espèces: Algues 100 mg/l - Durée h: 72

Phenol, isopropylated, phosphate (3:1) - CAS: 68937-41-7

a) Toxicité aquatique aiguë:

Point final: LC50 - Espèces: Poissons 10.8 mg/l - Durée h: 96

Point final: EC50 - Espèces: Daphnie 2.44 mg/l - Durée h: 48

b) Toxicité aquatique chronique:

Point final: NOEC - Espèces: Poissons 0.0031 mg/l - Durée h: 792 - Remarques: 33 d

Point final: NOEC - Espèces: Daphnie 0.041 mg/l - Durée h: 504 - Remarques: 21 d

12.2. Persistance et dégradabilité

Aucun

Phenol, isopropylated, phosphate (3:1) - CAS: 68937-41-7

Biodégradabilité: Pas rapidement dégradable - Durée h: 28gg - %: 17.9

12.3. Potentiel de bioaccumulation

N.A.

12.4. Mobilité dans le sol

N.A.

12.5. Résultats des évaluations PBT et vPvB

Substances vPvB: Aucune - Substances PBT: Aucune

12.6. Autres effets néfastes

Aucun

RUBRIQUE 13: Considérations relatives à l'élimination

13.1. Méthodes de traitement des déchets

Récupérer si possible. Envoyer à des usines de traitement autorisées ou à l'incinération dans des conditions contrôlées. Opérer en respectant les dispositions locales et nationales en vigueur.

RUBRIQUE 14: Informations relatives au transport

14.1. Numéro ONU

ADR-UN Number:	1950
IATA-UN Number:	1950
IMDG-UN Number:	1950

14.2. Désignation officielle de transport de l'ONU

ADR-Shipping Name:	AÉROSOLS inflammables (c6 hydrocarbons isoalcane < 5% n-hexane, phenol, isopropylated, phosphate (3:1))
ADR-Nom d'expédition:	AEROSOLS
IATA-Shipping Name:	AÉROSOLS inflammables (c6 hydrocarbons isoalcane < 5% n-hexane, phenol, isopropylated, phosphate (3:1))
IMDG-Shipping Name:	AÉROSOLS inflammables (c6 hydrocarbons isoalcane < 5% n-hexane, phenol, isopropylated, phosphate (3:1))

14.3. Classe(s) de danger pour le transport

ADR-Class:	2

ADR - Numéro d'identification du danger : -

IATA-Class: 2
IATA-Label: 2.1
IMDG-Class: 2

14.4. Groupe d'emballage

ADR-Packing Group: -
IATA-Packing group: -
IMDG-Packing group: -

14.5. Dangers pour l'environnement

ADR-Polluant environnemental: Oui
IMDG-Marine pollutant: Marine Pollutant

14.6. Précautions particulières à prendre par l'utilisateur

ADR-Subsidiary hazards: See SP63
ADR-S.P.: 190 327 344 625
ADR-Catégorie de transport (Code de restriction en tunnels): 2 (D)
IATA-Passenger Aircraft: 203
IATA-Subsidiary hazards: See SP63
IATA-Cargo Aircraft: 203
IATA-S.P.: A145 A167 A802
IATA-ERG: 10L
IMDG-EmS: F-D, S-U
IMDG-Subsidiary hazards: See SP63
IMDG-Stowage and handling: SW1 SW22
IMDG-Segregation: SG69

14.7. Transport en vrac conformément à l'annexe II de la convention Marpol et au recueil IBC

N.A.
Limited Quantity: 1 L
Exempted Quantity: E0

RUBRIQUE 15: Informations relatives à la réglementation

15.1. Réglementations/législation particulières à la substance ou au mélange en matière de sécurité, de santé et d'environnement

Dir. 98/24/CE (Risques dérivant d'agents chimiques pendant le travail)
Dir. 2000/39/CE (Limites d'exposition professionnelle)
Règlement (CE) n° 1907/2006 (REACH)
Règlement (CE) n° 1272/2008 (CLP)
Règlement (CE) n° 790/2009 (ATP 1 CLP) et (EU) n° 758/2013
Règlement (UE) 2015/830
Règlement (EU) n° 286/2011 (ATP 2 CLP)
Règlement (EU) n° 618/2012 (ATP 3 CLP)
Règlement (EU) n° 487/2013 (ATP 4 CLP)
Règlement (EU) n° 944/2013 (ATP 5 CLP)
Règlement (EU) n° 605/2014 (ATP 6 CLP)
Règlement (EU) n° 2015/1221 (ATP 7 CLP)
Règlement (EU) n° 2016/918 (ATP 8 CLP)
Règlement (EU) n° 2016/1179 (ATP 9 CLP)
Règlement (EU) n° 2017/776 (ATP 10 CLP)
Règlement (EU) n° 2018/669 (ATP 11 CLP)
Règlement (EU) n° 2018/1480 (ATP 13 CLP)
Règlement (EU) n° 2019/521 (ATP 12 CLP)

Restrictions liées au produit ou aux substances contenues conformément à l'Annexe XVII de la Réglementation (CE) 1907/2006 (REACH) et ses modifications successives:

Restrictions liées au produit:

Restriction 3
Restriction 40

Restrictions liées aux substances contenues:
Aucune restriction.

Composés Organiques Volatils - COV = 76.95 %
Composés Organiques Volatils - COV = 769.50 g/Kg
Composés Organiques Volatils - COV = 502.48 g/l
Se référer aux normes suivantes lorsqu'elles sont applicables:
Directive 2012/18/UE (Seveso III)
Règlement (CE) no 648/2004 (détergents).
Dir. 2004/42/CE (Directive COV)

Dispositions relatives aux directive EU 2012/18 (Seveso III):
Catégorie Seveso III conformément à l'Annexe 1, partie 1
le produit appartient à la catégorie: P3a, E2

15.2. Évaluation de la sécurité chimique
Aucune évaluation de la sécurité chimique n'a été effectuée pour le mélange
Substances pour lesquelles une évaluation de la sécurité chimique a été effectuée :
Aucune

RUBRIQUE 16: Autres informations

Texte des phrases cités à la section 3:
H220 Gaz extrêmement inflammable.
H280 Contient un gaz sous pression; peut exploser sous l'effet de la chaleur.
H225 Liquide et vapeurs très inflammables.
H304 Peut être mortel en cas d'ingestion et de pénétration dans les voies respiratoires.
H315 Provoque une irritation cutanée.
H336 Peut provoquer somnolence ou vertiges.
H411 Toxique pour les organismes aquatiques, entraîne des effets néfastes à long terme.
H226 Liquide et vapeurs inflammables.
EUH066 L'exposition répétée peut provoquer dessèchement ou gerçures de la peau.
H361fd Susceptible de nuire à la fertilité. Susceptible de nuire au foetus.
H373 Risque présumé d'effets graves pour les organes à la suite d'expositions répétées ou d'une exposition prolongée.
H410 Très toxique pour les organismes aquatiques, entraîne des effets néfastes à long terme.

Classe de danger et catégorie de danger	Code	Description
Flam. Gas 1A	2.2/1A	Gaz inflammable, Catégorie 1A
Aerosols 1	2.3/1	Aérosol, Catégorie 1
Press Gas (Liq.)	2.5/L	Gaz sous pression (Gaz liquéfié)
Flam. Liq. 2	2.6/2	Liquide inflammable, Catégorie 2
Flam. Liq. 3	2.6/3	Liquide inflammable, Catégorie 3
Asp. Tox. 1	3.10/1	Danger par aspiration, Catégorie 1
Skin Irrit. 2	3.2/2	Irritation cutanée, Catégorie 2
Eye Irrit. 2	3.3/2	Irritation oculaire, Catégorie 2
Repr. 2	3.7/2	Toxicité pour la reproduction, Catégorie 2

STOT SE 3	3.8/3	Toxicité spécifique pour certains organes cibles —Exposition unique STOT un., Catégorie 3
STOT RE 2	3.9/2	Toxicité spécifique pour certains organes cibles —Exposition répétée STOT rép., Catégorie 2
Aquatic Chronic 1	4.1/C1	Danger chronique (à long terme) pour le milieu aquatique, Catégorie 1
Aquatic Chronic 2	4.1/C2	Danger chronique (à long terme) pour le milieu aquatique, Catégorie 2

Paragraphes modifiés de la révision précédente:

RUBRIQUE 2: Identification des dangers
RUBRIQUE 3: Composition/informations sur les composants
RUBRIQUE 8: Contrôles de l'exposition/protection individuelle
RUBRIQUE 9: Propriétés physiques et chimiques
RUBRIQUE 11: Informations toxicologiques
RUBRIQUE 12: Informations écologiques
RUBRIQUE 14: Informations relatives au transport
RUBRIQUE 15: Informations relatives à la réglementation
RUBRIQUE 16: Autres informations

Classification et procédure utilisées pour établir la classification des mélanges conformément au règlement (CE) 1272/2008 [CLP]:

Classification conformément au règlement (CE) n° 1272/2008	**Méthode de classification**
Aerosols 1, H222, H229	D'après les données d'essais
Skin Irrit. 2, H315	Méthode de calcul
Eye Irrit. 2, H319	Méthode de calcul
STOT SE 3, H336	Méthode de calcul
Aquatic Chronic 2, H411	Méthode de calcul

Ce document a été préparé par une personne compétente qui a été formée de façon appropriée.
Principales sources bibliographiques:

ECDIN - Réseau d'information et Informations chimiques sur l'environnement - Centre de recherche commun, Commission de la Communauté Européenne
PROPRIÉTÉS DANGEREUSES DES MATÉRIAUX INDUSTRIELS DE SAX - Huitième Edition - Van Nostrand Reinold

Les informations contenues se basent sur nos connaissances à la date reportée ci-dessus. Elles se réfèrent uniquement au produit indiqué et ne constituent pas de garantie d'une qualité particulière.
L'utilisateur doit s'assurer de la conformité et du caractère complet de ces informations par rapport à l'utilisation spécifique qu'il doit en faire.
Cette fiche annule et remplace toute édition précédente.

ADR: Accord européen relatif au transport international des marchandises dangereuses par route.

CAS:	Service des résumés analytiques de chimie (division de la Société Chimique Américaine).
CLP:	Classification, Etiquetage, Emballage.
DNEL:	Niveau dérivé sans effet.
EINECS:	Inventaire européen des substances chimiques commerciales existantes.
ETA:	Estimation de la toxicité aiguë, ETA
ETAmélange:	Estimation de la toxicité aiguë (Mélanges)
GefStoffVO:	Ordonnance sur les substances dangereuses, Allemagne.
GHS:	Système général harmonisé de classification et d'étiquetage des produits chimiques.
IATA:	Association internationale du transport aérien.
IATA-DGR:	Réglementation pour le transport des marchandises dangereuses par l'"Association internationale du transport aérien" (IATA).
ICAO:	Organisation de l'aviation civile internationale.
ICAO-TI:	Instructions techniques par l'"Organisation de l'aviation civile internationale" (OACI).
IMDG:	Code maritime international des marchandises dangereuses.
INCI:	Nomenclature internationale des ingrédients cosmétiques.
KSt:	Coefficient d'explosion.
LC50:	Concentration létale pour 50 pour cent de la population testée.
LD50:	Dose létale pour 50 pour cent de la population testée.
NA:	Non applicable
PNEC:	Concentration prévue sans effets.
RID:	Réglement concernant le transport international ferroviaire des marchandises dangereuses.
STEL:	Limite d'exposition à court terme.
STOT:	Toxicité spécifique pour certains organes cibles.
TLV:	Valeur de seuil limite.
TWA:	Moyenne pondérée dans le temps
WGK:	Classe allemande de danger pour l'eau.

Exposure Scenario, 17/07/2019

Substance identity	
Chemical name	IDROCARBURI C3-C4, Miscela (propano,butano,isobutano< 0,1% 1,3-Butadiene)
CAS No.	68476-40-4
EINECS No.	270-681-9

Table of contents

1. **ES 1** Use at industrial site

1. ES 1 Use at industrial site

1.1 TITLE SECTION

Exposure Scenario name	Use as a propellant
Date - Version	17/07/2019 - 1.0
Life Cycle Stage	Use at industrial site
Main user group	Industrial uses
Sector(s) of use	Industrial uses (SU3)

Environment Contributing Scenario

CS1 Covered by	ERC4

Worker Contributing Scenario

CS2 Propellant	PROC1 - PROC2 - PROC3 - PROC8b - PROC9 - PROC12

1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario: Covered by (ERC4)

Environmental release categories	Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4)

1.2. CS2: Worker Contributing Scenario: Propellant (PROC1, PROC2, PROC3, PROC8b, PROC9, PROC12)

Process Categories	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Use of blowing agents in manufacture of foam (PROC1, PROC2, PROC3, PROC8b, PROC9, PROC12)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

> 10 kPa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Keep drains in watertight containers while awaiting dismantling or subsequent recycling
Use in contained systems
Ensure operatives are trained to minimise exposures.
Ensure that direct skin contact is avoided.
Clear transfer lines prior to de-coupling.
Provide a good standard of controlled ventilation (10 to 15 air changes per hour).
Drain down and flush system prior to equipment break-in or maintenance.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable respiratory protection.

Other conditions affecting worker exposure

Temperature: Assumes use at not more than 20 °C above ambient temperature.

1.3 Exposure estimation and reference to its source

N/A

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure Scenario, 19/09/2019

Substance identity	
Chemical name	ISOESANO NAZ.LE
CAS No.	64742-49-0
EINECS No.	931-254-9

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1. **ES 1** Use at industrial site
2. **ES 2** Widespread use by professional workers
3. **ES 3** Consumer use; Various products (PC9b, PC9a, PC3, PC4, PC8)
4. **ES 4** Use at industrial site
5. **ES 5** Widespread use by professional workers

1. ES 1 Use at industrial site

1.1 TITLE SECTION

Exposure Scenario name	Use in cleaning agents
Date - Version	19/09/2019 - 1.0
Life Cycle Stage	Use at industrial site
Main user group	Industrial uses
Sector(s) of use	Industrial uses (SU3)

Environment Contributing Scenario	
CS1 Covered by	ERC4
Worker Contributing Scenario	
CS2 Industrial	PROC1 - PROC2 - PROC3 - PROC4 - PROC7 - PROC8a - PROC8b - PROC10 - PROC13

1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario: Covered by (ERC4)

Environmental release categories	Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4)

Amount used, frequency and duration of use (or from service life)

Amounts used:

Annual site tonnage 100 t(onnes)/year

Maximum allowable site tonnage (MSafe): 15800000 kg/day

Release type: Continuous release

Emission days: 20 days per year

Technical and organisational conditions and measures

Control measures to prevent releases

Treat air emission to provide the required removal efficiency of (%):	Air - minimum efficiency of: 70 %
Prevent discharge of undissolved substance to or recover from onsite wastewater.	

Conditions and measures related to sewage treatment plant

STP type:

Municipal Sewage Treatment Plant

Water - minimum efficiency of: = 96.6 %

STP effluent (m^3/day): 2000

Conditions and measures related to treatment of waste (including article waste)

Waste treatment

External treatment and disposal of waste should comply with applicable local and/or national regulations.

Other conditions affecting environmental exposure

Local marine water dilution factor: 100

Local freshwater dilution factor: 10

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Do not apply industrial sludge to natural soils.

1.2. CS2: Worker Contributing Scenario: Industrial (PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC10, PROC13)

Process Categories	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Industrial spraying - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Roller application or brushing - Treatment of articles by dipping and pouring (PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC10, PROC13)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Remove spills immediately

Handle substance within a closed system.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear chemically resistant gloves (tested to EN374) in combination with specific activity training.

Other conditions affecting worker exposure

Temperature: Assumes use at not more than 20 °C above ambient temperature.

1.3 Exposure estimation and reference to its source

1.3. CS1: Environment Contributing Scenario: Covered by (ERC4)

Release route	Release rate	Release estimation method
Air	1 %	N/A
Water	3 %	N/A
soil	0 %	N/A

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

2. ES 2 Widespread use by professional workers

2.1 TITLE SECTION

Exposure Scenario name	Use in cleaning agents
Date - Version	19/09/2019 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)

Environment Contributing Scenario

CS1 Covered by	ERC8a - ERC8d

Worker Contributing Scenario

CS2 General use from professional operators	PROC1 - PROC2 - PROC3 - PROC4 - PROC8a - PROC8b - PROC10 - PROC11 - PROC13

2.2 Conditions of use affecting exposure

2.2. CS1: Environment Contributing Scenario: Covered by (ERC8a, ERC8d)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8a, ERC8d)

Amount used, frequency and duration of use (or from service life)

Amounts used:
Annual site tonnage 0.0006 t(onnes)/year

Maximum allowable site tonnage (MSafe): 8.46 kg/day

Release type: Continuous release

Emission days: 365 days per year

Technical and organisational conditions and measures

Control measures to prevent releases
Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.
Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Conditions and measures related to sewage treatment plant

STP type:
Municipal Sewage Treatment Plant
Water - minimum efficiency of: = 96.9 %
STP effluent (m^3/day): 2000

Conditions and measures related to treatment of waste (including article waste)

Waste treatment
External treatment and disposal of waste should comply with applicable local and/or national regulations.

Other conditions affecting environmental exposure

Local marine water dilution factor: 100
Local freshwater dilution factor: 10

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:
Do not apply industrial sludge to natural soils.

2.2. CS2: Worker Contributing Scenario: General use from professional operators (PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC10, PROC11, PROC13)

Process Categories	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Roller application or brushing - Non industrial spraying - Treatment of articles by dipping and pouring (PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC10, PROC11, PROC13)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Remove spills immediately
Ensure operatives are trained to minimise exposures.
Handle substance within a closed system.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374 and sleeves. For further specification, refer to section 8 of the SDS

2.3 Exposure estimation and reference to its source

2.3. CS1: Environment Contributing Scenario: Covered by (ERC8a, ERC8d)

Release route	Release rate	Release estimation method
Air	0.02 %	N/A
Water	1 %	N/A
soil	0 %	N/A

2.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

3. ES 3 Consumer use; Various products (PC9b, PC9a, PC3, PC4, PC8)

3.1 TITLE SECTION

Exposure Scenario name	Cleaning agent
Date - Version	19/09/2019 - 1.0
Life Cycle Stage	Consumer use
Main user group	Consumer uses
Sector(s) of use	Consumer uses (SU21)
Product Categories	Fillers, putties, plasters, modelling clay (PC9b) - Coatings and paints, thinners, paint removers (PC9a) - Air care products (PC3) - Anti-freeze and de-icing products (PC4) - Biocidal products (PC8) - Lubricants, greases, release products (PC24) - Washing and cleaning products (PC35) - Welding and soldering products, flux products (PC38)

Environment Contributing Scenario

CS1 Covered by	ERC8a - ERC8d

Consumer Contributing Scenario

CS2 Consumer	PC9b - PC9a - PC3 - PC4 - PC8 - PC24 - PC35 - PC38
CS3 Consumer	PC3
CS4 Consumer	PC3
CS5 Consumer	PC3
CS6 Consumer	PC3
CS7 Consumer	PC4
CS8 Consumer	PC4
CS9 Consumer	PC4
CS10 Consumer	PC8
CS11 Consumer	PC8
CS12 Consumer	PC8
CS13 Consumer	PC9a
CS14 Consumer	PC24
CS15 Consumer	PC24
CS16 Consumer	PC35
CS17 Consumer	PC35
CS18 Consumer	PC35
CS19 Consumer	PC38

3.2 Conditions of use affecting exposure

3.2. CS1: Environment Contributing Scenario: Covered by (ERC8a, ERC8d)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8a, ERC8d)

Amount used, frequency and duration of use (or from service life)

Amounts used:
Annual site tonnage 0.034 t(onnes)/year

Maximum allowable site tonnage (MSafe): 392 kg/day

Release type: Continuous release

Emission days: 365 days per year

Conditions and measures related to treatment of waste (including article waste)

Waste treatment
External treatment and disposal of waste should comply with applicable local and/or national regulations.

Other conditions affecting environmental exposure

Local marine water dilution factor: 100
Local freshwater dilution factor: 10

3.2. CS2: Consumer Contributing Scenario: Consumer (PC9b, PC9a, PC3, PC4, PC8, PC24, PC35, PC38)

Product Categories	Fillers, putties, plasters, modelling clay - Coatings and paints, thinners, paint removers - Air care products - Anti-freeze and de-icing products - Biocidal products - Lubricants, greases, release products - Washing and cleaning products - Welding and soldering products, flux products (PC9b, PC9a, PC3, PC4, PC8, PC24, PC35, PC38)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
> 100 hPa

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 13.8 g

Duration:
Covers exposure up to 640 min/day

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³

3.2. CS3: Consumer Contributing Scenario: Consumer (PC3)

Product Categories	Air care products (PC3)

Product (article) characteristics

Concentration of substance in product:
Covers concentrations up to 30 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 0.1 g

Duration:
Covers exposure up to 15 min/day
Frequency:
Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Ventilation rate: Covers use under typical household ventilation.

3.2. CS4: Consumer Contributing Scenario: Consumer (PC3)

Product Categories	Air care products (PC3)

Product (article) characteristics

Concentration of substance in product:
Covers concentrations up to 50 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 5 g

Duration:
Covers exposure up to 15 min/day
Frequency:
Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Ventilation rate: Covers use under typical household ventilation.

3.2. CS5: Consumer Contributing Scenario: Consumer (PC3)

Product Categories	Air care products (PC3)

Product (article) characteristics

Concentration of substance in product:
Covers concentrations up to 10 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 0.48 g

Duration:
Covers exposure up to 640 min/day
Frequency:
Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Ventilation rate: Covers use under typical household ventilation.

3.2. CS6: Consumer Contributing Scenario: Consumer (PC3)

Product Categories	Air care products (PC3)

Product (article) characteristics

Concentration of substance in product:
Covers concentrations up to 50 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 0.48 g

Duration:
Covers exposure up to 640 min/day
Frequency:
Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Ventilation rate: Covers use under typical household ventilation.

3.2. CS7: Consumer Contributing Scenario: Consumer (PC4)

Product Categories	Anti-freeze and de-icing products (PC4)

Product (article) characteristics

Concentration of substance in product:
Covers concentrations up to 1 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 0.5 g

Duration:
Covers exposure up to 1.2 min/day
Frequency:
Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 34 m³
Ventilation rate: Covers use under typical household ventilation.

3.2. CS8: Consumer Contributing Scenario: Consumer (PC4)

Product Categories	Anti-freeze and de-icing products (PC4)

Product (article) characteristics

Concentration of substance in product:
Covers concentrations up to 10 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 2 g

Duration:
Covers exposure up to 10.2 min/day
Frequency:
Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 34 m³
Ventilation rate: Covers use under typical household ventilation.

3.2. CS9: Consumer Contributing Scenario: Consumer (PC4)

Product Categories	Anti-freeze and de-icing products (PC4)

Product (article) characteristics

Concentration of substance in product:
Covers concentrations up to 50 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 4 g

Duration:
Covers exposure up to 15 min/day
Frequency:
Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 34 m³
Ventilation rate: Covers use under typical household ventilation.

3.2. CS10: Consumer Contributing Scenario: Consumer (PC8)

Product Categories	Biocidal products (PC8)

Product (article) characteristics

Concentration of substance in product:
Covers concentrations up to 5 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 15 g

Duration:
Covers exposure up to 30 min/day
Frequency:
Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Ventilation rate: Covers use under typical household ventilation.

3.2. CS11: Consumer Contributing Scenario: Consumer (PC8)

Product Categories	Biocidal products (PC8)

Product (article) characteristics

Concentration of substance in product:
Covers concentrations up to 5 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 27 g

Duration:
Covers exposure up to 19.8 min/day
Frequency:
Covers exposure up to 128 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Ventilation rate: Covers use under typical household ventilation.

3.2. CS12: Consumer Contributing Scenario: Consumer (PC8)

Product Categories	Biocidal products (PC8)

Product (article) characteristics

Concentration of substance in product:
Covers concentrations up to 15 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 35 g

Duration:
Covers exposure up to 10.2 min/day
Frequency:
Covers exposure up to 128 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Ventilation rate: Covers use under typical household ventilation.

3.2. CS13: Consumer Contributing Scenario: Consumer (PC9a)

Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Product (article) characteristics

Concentration of substance in product:
Covers concentrations up to 50 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 491 g

Duration:
Covers exposure up to 120 min/day
Frequency:
Covers exposure up to 3 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Ventilation rate: Covers use under typical household ventilation.

3.2. CS14: Consumer Contributing Scenario: Consumer (PC24)

Product Categories	Lubricants, greases, release products (PC24)

Product (article) characteristics

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 2.2 g

Frequency:
Covers exposure up to 4 days per year

3.2. CS15: Consumer Contributing Scenario: Consumer (PC24)

Product Categories	Lubricants, greases, release products (PC24)

Product (article) characteristics

Concentration of substance in product:
Covers concentrations up to 50 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 73 g

Duration:
Covers exposure up to 10.2 min/day
Frequency:
Covers exposure up to 6 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Ventilation rate: Covers use under typical household ventilation.

3.2. CS16: Consumer Contributing Scenario: Consumer (PC35)

Product Categories	Washing and cleaning products (PC35)

Product (article) characteristics

Concentration of substance in product:
Covers concentrations up to 5 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 15 g

Duration:
Covers exposure up to 30 min/day

Frequency:
Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Ventilation rate: Covers use under typical household ventilation.

3.2. CS17: Consumer Contributing Scenario: Consumer (PC35)

Product Categories	Washing and cleaning products (PC35)

Product (article) characteristics

Concentration of substance in product:
Covers concentrations up to 5 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 27 g

Duration:
Covers exposure up to 19.8 min/day

Frequency:
Covers exposure up to 128 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Ventilation rate: Covers use under typical household ventilation.

3.2. CS18: Consumer Contributing Scenario: Consumer (PC35)

Product Categories	Washing and cleaning products (PC35)

Product (article) characteristics

Concentration of substance in product:
Covers concentrations up to 15 %

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use 35 g

Duration:
Covers exposure up to 10.2 min/day

Frequency:
Covers exposure up to 128 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³
Ventilation rate: Covers use under typical household ventilation.

3.2. CS19: Consumer Contributing Scenario: Consumer (PC38)

Product Categories	Welding and soldering products, flux products (PC38)

Product (article) characteristics

Concentration of substance in product:

Covers concentrations up to 20 %

Amount used, frequency and duration of use/exposure

Amounts used:

Amount per use 12 g

Duration:

Covers exposure up to 60 min/day

Frequency:

Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Room size: Covers use in room size of 20 m³

Ventilation rate: Covers use under typical household ventilation.

3.3 Exposure estimation and reference to its source

3.3. CS1: Environment Contributing Scenario: Covered by (ERC8a, ERC8d)

Release route	Release rate	Release estimation method
Air	0.95 %	N/A
Water	0.025 %	N/A
soil	0.025 %	N/A

3.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

4. ES 4 Use at industrial site

4.1 TITLE SECTION

Exposure Scenario name	Metal working fluids / rolling oils
Date - Version	19/09/2019 - 1.0
Life Cycle Stage	Use at industrial site
Main user group	Industrial uses
Sector(s) of use	Industrial uses (SU3)

Environment Contributing Scenario

CS1 Covered by	ERC4

Worker Contributing Scenario

CS2 Industrial	PROC5 - PROC1 - PROC2 - PROC3 - PROC4 - PROC7 - PROC8a - PROC8b - PROC9 - PROC10 - PROC13 - PROC17

4.2 Conditions of use affecting exposure

4.2. CS1: Environment Contributing Scenario: Covered by (ERC4)

Environmental release categories	Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4)

Product (article) characteristics

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use (or from service life)

Amounts used:

Annual site tonnage 20 t(onnes)/year

Maximum allowable site tonnage (MSafe): 74100 kg/day

Release type: Continuous release

Emission days: 20 days per year

Technical and organisational conditions and measures

Control measures to prevent releases

Treat air emission to provide the required removal efficiency of (%):	Air - minimum efficiency of: 70 %
Prevent discharge of undissolved substance to or recover from onsite wastewater. Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination. Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.	

Conditions and measures related to sewage treatment plant

STP type:

Municipal Sewage Treatment Plant

Water - minimum efficiency of: = 96 %

STP effluent (m^3/day): 2000

Conditions and measures related to treatment of waste (including article waste)

Waste treatment

External treatment and disposal of waste should comply with applicable local and/or national regulations.

Other conditions affecting environmental exposure

Local marine water dilution factor: 100

Local freshwater dilution factor: 10

4.2. CS2: Worker Contributing Scenario: Industrial (PROC5, PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17)

Process Categories	Mixing or blending in batch processes - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Industrial spraying - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Roller application or brushing - Treatment of articles by dipping and pouring - Lubrication at high energy conditions in metal working operations (PROC5, PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

> 100 hPa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Remove spills immediately
Use in contained systems
Avoid direct eye contact with product, also via contamination on hands.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear chemically resistant gloves (tested to EN374) in combination with specific activity training.

Other conditions affecting worker exposure

Temperature: Assumes use at not more than 20 °C above ambient temperature.

4.3 Exposure estimation and reference to its source

4.3. CS1: Environment Contributing Scenario: Covered by (ERC4)

Release route	Release rate	Release estimation method
Air	0.02 %	N/A
Water	3 %	N/A
soil	0 %	N/A

4.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

5. ES 5 Widespread use by professional workers

5.1 TITLE SECTION

Exposure Scenario name	Metal working fluids / rolling oils
Date - Version	19/09/2019 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)

Environment Contributing Scenario

CS1 Covered by	ERC8a - ERC8d

Worker Contributing Scenario

CS2 General use from professional operators	PROC5 - PROC1 - PROC2 - PROC3 - PROC8a - PROC8b - PROC9 - PROC10 - PROC11 - PROC13 - PROC17

5.2 Conditions of use affecting exposure

5.2. CS1: Environment Contributing Scenario: Covered by (ERC8a, ERC8d)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8a, ERC8d)

Product (article) characteristics

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use (or from service life)

Amounts used:

Annual site tonnage 0.00015 t(onnes)/year

Maximum allowable site tonnage (MSafe): 2.11 kg/day

Release type: Continuous release

Emission days: 365 days per year

Technical and organisational conditions and measures

Control measures to prevent releases

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.
Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Conditions and measures related to sewage treatment plant

STP type:

Municipal Sewage Treatment Plant
Water - minimum efficiency of: = 96.9 %

STP effluent (m^3/day): 2000

Conditions and measures related to treatment of waste (including article waste)

Waste treatment

External treatment and disposal of waste should comply with applicable local and/or national regulations.

Other conditions affecting environmental exposure

Local marine water dilution factor: 100
Local freshwater dilution factor: 10

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Sludge is disposed or recovered.

5.2. CS2: Worker Contributing Scenario: General use from professional operators (PROC5, PROC1, PROC2, PROC3, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17)

Process Categories	Mixing or blending in batch processes - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Roller application or brushing - Non industrial spraying - Treatment of articles by dipping and pouring - Lubrication at high energy conditions in metal working operations (PROC5, PROC1, PROC2, PROC3, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

> 100 hPa

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Technical and organisational conditions and measures

Technical and organisational measures

Remove spills immediately
Use in contained systems
Avoid direct eye contact with product, also via contamination on hands.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374 and sleeves. For further specification, refer to section 8 of the SDS

Other conditions affecting worker exposure

Temperature: Assumes use at not more than 20 °C above ambient temperature.

5.3 Exposure estimation and reference to its source

5.3. CS1: Environment Contributing Scenario: Covered by (ERC8a, ERC8d)

Release route	Release rate	Release estimation method
Air	0.6 %	N/A
Water	0.05 %	N/A
soil	0.05 %	N/A

5.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure Scenario, 08/07/2019

Substance identity	
Chemical name	Hydrocarbons C9-C11 cyclics-iso-alkanes <2% aromatics, declass. ex Notes "P"
CAS No.	64742-48-9
EINECS No.	919-857-5

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1. ES 1 Formulation or re-packing; Solvent-based process

1.1 TITLE SECTION

Exposure Scenario name	Formulation and (re) packaging of substances and mixtures
Date - Version	28/06/2019 - 1.0
Life Cycle Stage	Formulation or re-packing
Main user group	Industrial uses
Sector(s) of use	Industrial uses (SU3) - Formulation [mixing] of preparations and/or re-packaging (SU10)

Environment Contributing Scenario	
CS1 Wet formulation	ERC2
Worker Contributing Scenario	
CS2 General exposures	PROC5 - PROC1 - PROC2 - PROC3 - PROC4 - PROC8a - PROC8b - PROC9 - PROC14 - PROC15

1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario: Wet formulation (ERC2)

Environmental release categories	Formulation into mixture (ERC2)

Product (article) characteristics

Physical form of product:

Liquid

1.2. CS2: Worker Contributing Scenario: General exposures (PROC5, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC14, PROC15)

Process Categories	Mixing or blending in batch processes - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Tabletting, compression, extrusion, pelletisation, granulation - Use as laboratory reagent (PROC5, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC14, PROC15)

Product (article) characteristics

Physical form of product:

Liquid

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Other conditions affecting worker exposure

Temperature: Assumes use at not more than 20 °C above ambient temperature. 20°C

1.3 Exposure estimation and reference to its source

N/A

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

2. ES 2 Use at industrial site

2.1 TITLE SECTION

Exposure Scenario name	Lubricating agent
Date - Version	28/06/2019 - 1.0
Life Cycle Stage	Use at industrial site
Main user group	Industrial uses
Sector(s) of use	Industrial uses (SU3)

Environment Contributing Scenario

CS1 Solvent-based process	ERC4 - ERC7

Worker Contributing Scenario

CS2 General measures applicable to all activities	PROC1 - PROC2 - PROC3 - PROC4 - PROC7 - PROC8a - PROC8b - PROC9 - PROC10 - PROC13 - PROC17 - PROC18

2.2 Conditions of use affecting exposure

2.2. CS1: Environment Contributing Scenario: Solvent-based process (ERC4, ERC7)

Environmental release categories	Use of non-reactive processing aid at industrial site (no inclusion into or onto article) - Use of functional fluid at industrial site (ERC4, ERC7)

2.2. CS2: Worker Contributing Scenario: General measures applicable to all activities (PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17, PROC18)

Process Categories	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Industrial spraying - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Roller application or brushing - Treatment of articles by dipping and pouring - Lubrication at high energy conditions in metal working operations - General greasing/lubrication at high kinetic energy conditions (PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17, PROC18)

Product (article) characteristics

Physical form of product:

Liquid

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.

Other conditions affecting worker exposure

Temperature: Assumes use at not more than 20 °C above ambient temperature.

2.3 Exposure estimation and reference to its source

N/A

2.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

3. ES 3 Use at industrial site

3.1 TITLE SECTION

Exposure Scenario name	Lubricants - Industrial use
Date - Version	28/06/2019 - 1.0
Life Cycle Stage	Use at industrial site
Main user group	Industrial uses
Sector(s) of use	Industrial uses (SU3)

Environment Contributing Scenario

CS1 Solvent-based process	ERC4 - ERC7

Worker Contributing Scenario

CS2 Lubricants	PROC1 - PROC2 - PROC3 - PROC4 - PROC7 - PROC8a - PROC8b - PROC9 - PROC10 - PROC13 - PROC17 - PROC18

3.2 Conditions of use affecting exposure

3.2. CS1: Environment Contributing Scenario: Solvent-based process (ERC4, ERC7)

Environmental release categories	Use of non-reactive processing aid at industrial site (no inclusion into or onto article) - Use of functional fluid at industrial site (ERC4, ERC7)

Product (article) characteristics

Physical form of product:

Liquid

3.2. CS2: Worker Contributing Scenario: Lubricants (PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17, PROC18)

Process Categories	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Industrial spraying - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Roller application or brushing - Treatment of articles by dipping and pouring - Lubrication at high energy conditions in metal working operations - General greasing/lubrication at high kinetic energy conditions (PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17, PROC18)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Use in contained systems

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.

Other conditions affecting worker exposure

Temperature: Assumes use at not more than 20 °C above ambient temperature.

3.3 Exposure estimation and reference to its source

N/A

3.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

4. ES 4 Widespread use by professional workers

4.1 TITLE SECTION

Exposure Scenario name	Lubricants - Industrial use
Date - Version	28/06/2019 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)

Environment Contributing Scenario	
CS1 Solvent-based process	ERC9a - ERC9b
Worker Contributing Scenario	
CS2 Lubricants	PROC20 - PROC1 - PROC2 - PROC3 - PROC8a - PROC8b - PROC9 - PROC10 - PROC11 - PROC13 - PROC17 - PROC18

4.2 Conditions of use affecting exposure

4.2. CS1: Environment Contributing Scenario: Solvent-based process (ERC9a, ERC9b)	
Environmental release categories	Widespread use of functional fluid (indoor) - Widespread use of functional fluid (outdoor) (ERC9a, ERC9b)
4.2. CS2: Worker Contributing Scenario: Lubricants (PROC20, PROC1, PROC2, PROC3, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18)	
Process Categories	Use of functional fluids in small devices - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Roller application or brushing - Non industrial spraying - Treatment of articles by dipping and pouring - Lubrication at high energy conditions in metal working operations - General greasing/lubrication at high kinetic energy conditions (PROC20, PROC1, PROC2, PROC3, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

4.3 Exposure estimation and reference to its source

N/A

4.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

5. ES 5 Widespread use by professional workers

5.1 TITLE SECTION

Exposure Scenario name	Lubricants (high power)
Date - Version	28/06/2019 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)

Environment Contributing Scenario

CS1 Solvent-based process	ERC8a - ERC8d

Worker Contributing Scenario

CS2 Lubricants	PROC20 - PROC1 - PROC2 - PROC3 - PROC4 - PROC8a - PROC8b - PROC9 - PROC10 - PROC11 - PROC13 - PROC17 - PROC18

5.2 Conditions of use affecting exposure

5.2. CS1: Environment Contributing Scenario: Solvent-based process (ERC8a, ERC8d)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8a, ERC8d)

Product (article) characteristics

Physical form of product:

Liquid

5.2. CS2: Worker Contributing Scenario: Lubricants (PROC20, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18)

Process Categories	Use of functional fluids in small devices - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Chemical production where opportunity for exposure arises - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Roller application or brushing - Non industrial spraying - Treatment of articles by dipping and pouring - Lubrication at high energy conditions in metal working operations - General greasing/lubrication at high kinetic energy conditions (PROC20, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear suitable gloves tested to EN374.

5.3 Exposure estimation and reference to its source

N/A

5.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

6. ES 6 Consumer use; Various products (PC1, PC24, PC31)

6.1 TITLE SECTION

Exposure Scenario name	Lubricants (low release)
Date - Version	28/06/2019 - 1.0
Life Cycle Stage	Consumer use
Main user group	Consumer uses
Sector(s) of use	Consumer uses (SU21)
Product Categories	Adhesives, sealants (PC1) - Lubricants, greases, release products (PC24) - Polishes and wax blends (PC31)
Environment Contributing Scenario	
CS1 Solvent-based process	ERC9a - ERC9b
Consumer Contributing Scenario	
CS2 Lubricants	

6.2 Conditions of use affecting exposure

6.2. CS1: Environment Contributing Scenario: Solvent-based process (ERC9a, ERC9b)

Environmental release categories	Widespread use of functional fluid (indoor) - Widespread use of functional fluid (outdoor) (ERC9a, ERC9b)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure < 0,5 kPa at STP

6.2. CS2: Consumer Contributing Scenario: Lubricants

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Frequency:

Covers exposure up to 1 events per day

Other conditions affecting consumers exposure

Temperature: Covers use at ambient temperatures.

6.3 Exposure estimation and reference to its source

N/A

6.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

7. ES 7 Consumer use; Various products (PC1, PC24, PC31)

7.1 TITLE SECTION

Exposure Scenario name	Lubricants (low release)
Date - Version	01/07/2019 - 1.0
Life Cycle Stage	Consumer use
Main user group	Consumer uses
Sector(s) of use	Consumer uses (SU21)
Product Categories	Adhesives, sealants (PC1) - Lubricants, greases, release products (PC24) - Polishes and wax blends (PC31)

Environment Contributing Scenario

CS1 Solvent-based process	ERC9a - ERC9b

Consumer Contributing Scenario

CS2 Lubricants	PC24
CS3 Lubricants	PC1
CS4 Lubricants	PC31 - PC23_1, PC31_1 - PC23_2, PC31_2

7.2 Conditions of use affecting exposure

7.2. CS1: Environment Contributing Scenario: Solvent-based process (ERC9a, ERC9b)

Environmental release categories	Widespread use of functional fluid (indoor) - Widespread use of functional fluid (outdoor) (ERC9a, ERC9b)

7.2. CS2: Consumer Contributing Scenario: Lubricants (PC24)

Product Categories	Lubricants, greases, release products (PC24)

Product (article) characteristics

Physical form of product:

Liquid, vapour pressure < 0,5 kPa at STP

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Frequency:

Covers exposure up to 1 uses per day

Frequency:

Covers exposure up to 4 days per year

Other conditions affecting consumers exposure

Indoor use

Room size: Covers use in a one car garage (>34 m^3) under typical ventilation.

Temperature: Covers use at ambient temperatures.

Ventilation rate: Covers use under typical household ventilation.

7.2. CS3: Consumer Contributing Scenario: Lubricants (PC1)

Product Categories	Adhesives, sealants (PC1)

Product (article) characteristics

Physical form of product:
Liquid, vapour pressure < 0,5 kPa at STP

Concentration of substance in product:
Covers concentrations up to 30 %

Amount used, frequency and duration of use/exposure

Frequency:
Covers use up to 1 uses per day

Frequency:
Covers exposure up to 365 days per year

Other conditions affecting consumers exposure

Indoor use
Room size: Covers use in room size of 20 m³
Temperature: Covers use at ambient temperatures.
Ventilation rate: Covers use under typical household ventilation.

7.2. CS4: Consumer Contributing Scenario: Lubricants (PC31)

Product Categories	Polishes and wax blends (PC31)
Product (Sub-)Categories	Polishes, wax/cream (floor, furniture, shoes) - Polishes, spray (furniture, shoes) (PC23_1, PC31_1, PC23_2, PC31_2)

Product (article) characteristics

Physical form of product:
Liquid, vapour pressure < 0,5 kPa at STP

Concentration of substance in product:
Covers concentrations up to 50 %

Amount used, frequency and duration of use/exposure

Frequency:
Covers exposure up to 1 uses per day

Frequency:
Covers exposure up to 29 days per year

Other conditions affecting consumers exposure

Indoor use
Room size: Covers use in room size of 20 m³

7.3 Exposure estimation and reference to its source

N/A

7.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:
Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

8. ES 8 Consumer use; Adhesives, sealants (PC1)

8.1 TITLE SECTION

Exposure Scenario name	Lubricants (high release)
Date - Version	01/07/2019 - 1.0
Life Cycle Stage	Consumer use
Main user group	Consumer uses
Sector(s) of use	Consumer uses (SU21)
Product Categories	Adhesives, sealants (PC1)
Environment Contributing Scenario	
CS1 Waste management	ERC8a
Consumer Contributing Scenario	
CS2 Lubricants	PC1

8.2 Conditions of use affecting exposure

8.2. CS1: Environment Contributing Scenario: Waste management (ERC8a)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a)

8.2. CS2: Consumer Contributing Scenario: Lubricants (PC1)

Product Categories	Adhesives, sealants (PC1)

Product (article) characteristics

Physical form of product:

Liquid

8.3 Exposure estimation and reference to its source

N/A

8.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

9. ES 9 Consumer use; Various products (PC39, PC28)

9.1 TITLE SECTION

Exposure Scenario name	Cosumer other uses
Date - Version	01/07/2019 - 1.0
Life Cycle Stage	Consumer use
Main user group	Consumer uses
Sector(s) of use	Consumer uses (SU21)
Product Categories	Cosmetics, personal care products (PC39) - Perfumes, fragrances (PC28)

Environment Contributing Scenario

CS1 Processing of organic liquids	ERC8a - ERC8d

Consumer Contributing Scenario

CS2 Consumer	PC39 - PC28

9.2 Conditions of use affecting exposure

9.2. CS1: Environment Contributing Scenario: Processing of organic liquids (ERC8a, ERC8d)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8a, ERC8d)

9.2. CS2: Consumer Contributing Scenario: Consumer (PC39, PC28)

Product Categories	Cosmetics, personal care products - Perfumes, fragrances (PC39, PC28)

Product (article) characteristics

Physical form of product:

Liquid

9.3 Exposure estimation and reference to its source

N/A

9.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.