

AIR TESTING FOR ISOCYANATES

Isocyanates are a group of chemicals which have been used for industrial purposes for more than 50 years, mainly for manufacturing of polyurethane plastics (PUR). PUR is nowadays found in for example foam, thermoplastics, fibers, adhesives, coatings and lacquers, foils and insulation materials. Isocyanates are extremely toxic. The most critical effect of isocyanate exposure is the risk of developing isocyanate asthma. In many cases, there is also a development of hypersensitivity to air pollution and odors. Other serious effects are decreased lung function and skin allergies. Common symptoms include headache and respiratory problems such as nasal congestion, sniffing, nose bleeding or coughing. In many countries, isocyanates are subject to very low occupational exposure limits due to their hazardous properties.

We perform a wide range of isocyanate analysis in air from mono- and diisocyanate monomers to higher molecular weight isocyanate oligomers and adducts. In addition to our extensive analysis packages, we can perform tailor-made solutions. If you do not find your analyte in one of our packages, do not hesitate to contact us. If our low routine LOQ is not enough, we can push the limit even further and provide extremely low LOQs for diisocyanates.

Routine analysis package	Reporting limit
Isocyanic acid (ICA)	0.300 µg total amount in the sample*
Methyl isocyanate (MIC)	0.005 µg total amount in the sample
Ethyl isocyanate (EIC)	0.005 µg total amount in the sample
Propyl isocyanate (PIC)	0.020 µg total amount in the sample
Phenyl isocyanate (PHI)	0.005 µg total amount in the sample
1.6-Hexamethylene diisocyanate (1.6-HDI)	0.003 µg total amount in the sample
2.4-Toluene diisocyanate (2.4-TDI)	0.003 µg total amount in the sample
2.6-Toluene diisocyanate (2.6-TDI)	0.003 µg total amount in the sample
Isophorone diisocyanate (IPDI)	0.003 µg total amount in the sample
4.4'-Methylenediphenyl diisocyanate (4.4'-MDI)	0.003 µg total amount in the sample

*N.B! Please consult with the laboratory prior to sampling explicitly for ICA. Lower limit of quantification may be applied upon request.

Extended analysis package No 1	Reporting limit
HDI-Biuret	0.003 µg total amount in the sample
HDI-Isocyanurate	0.003 µg total amount in the sample
HDI-Uretidione	0.003 µg total amount in the sample
IPDI-Isocyanurate (trimer)	Currently being evaluated

Extended analysis package No 2	Reporting limit
2.4'-Methylenediphenyl diisocyanate (2.4'-MDI)	0.003 µg total amount in the sample
MDI-3-ring-oligomer	0.003 µg total amount in the sample
MDI-4-ring-oligomer	0.003 µg total amount in the sample

Postal address:
EHS Analytics AB
Box 29
SE-245 21 Staffanstorps
Sweden

Visiting address:
EHS Analytics AB
Spånvägen 23
SE-245 34 Staffanstorps
Sweden

Telephone: +46 (0)704 585 561
E-mail: office@ehs-analytics.com
Homepage: www.ehs-analytics.com
Organization No.: 559245-4648
VAT No.: SE559245464801

Extended analysis package No 3	Reporting limit
H12-MDI (HMDI)	0.003 µg total amount in the sample

Extended analysis package No 4	Reporting limit
m-TMXDI (1.3-Bis(2-isocyanato-2-propyl)benzene)	0.003 µg total amount in the sample

Extended analysis package No 5	Reporting limit
m-XDI (m-xylylene diisocyanate)	0.003 µg total amount in the sample

Extended analysis package No 6	Reporting limit
2.6-DIP (2.6-Diisopropylphenyl isocyanate)	0.003 µg total amount in the sample

Extended analysis package No 7	Reporting limit
1.5-Naphthalene diisocyanate	0.003 µg total amount in the sample

Extended analysis package No 8	Reporting limit
P-TSI (p-Toluenesulfonyl isocyanate)	0.003 µg total amount in the sample

Extended analysis package No 9	Reporting limit
TODI (4.4'-Diisocyanato-3.3'-dimethylbiphenyl)	0.003 µg total amount in the sample

Package information	
Prices	Please contact us for further details
Standard response time	10 working days
Fastest response time	3 working days
Sample type	Air/Work environment
Analysis type	Organic compounds
Sampler	ASSET EZ4-NCO Dry Sampler
Express tariff	100%
ISO-Standard	17734-1
Analysis method	LC-MSMS

APPLICABLE LAW AND LIMITATION OF LIABILITY

Any delivery of products or performance of our services shall be governed by Swedish law, without regard to its choice of law principles. In no event shall EHS Analytics AB be liable for indirect, consequential or similar damages, losses or costs, and the total liability of EHS Analytics AB shall under all circumstances be limited to the amount actually paid by the customer to EHS Analytics AB for the relevant products delivered and/or services rendered to the customer.

Postal address:
 EHS Analytics AB
 Box 29
 SE-245 21 Staffanstorps
 Sweden

Visiting address:
 EHS Analytics AB
 Spånvägen 23
 SE-245 34 Staffanstorps
 Sweden

Telephone: +46 (0)704 585 561
E-mail: office@ehs-analytics.com
Homepage: www.ehs-analytics.com
Organization No.: 559245-4648
VAT No.: SE559245464801